

The Piano Competency Model Based on Knowledge Management for Piano Teaching Practicum Course at Shanxi Vocational College of Art in the People's Republic of China

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Abstract

The purpose of this research is 1) To study on the piano competency model based on knowledge management for piano teaching practicum course at Shanxi vocational college of art, The People's Republic of China

The research method of this study is qualitative methods. the key informants were educator experts They were selected by inclusion criteria the research instrument for the data collection were interview form

The research results were found as follows; 1) through interviews with field experts and group discussions, it becomes evident that the concept of the Piano Competency Model has been transformed into a comprehensive Piano Teaching Practicum Course. Additionally, a flow chart is developed, highlighting the multifaceted nature of skills and attributes essential for piano educators. The model emphasizes the necessity for piano teachers to possess multidimensional abilities, encompassing not only teaching skills and knowledge, but also attitudes, basic characteristics, and a strong focus on motivation and innovation.

In conclusion, the synergy between knowledge management and the piano competency model serves as an instrumental bridge, translating theoretical constructs into tangible teaching practices, and ensuring that the Piano Teaching Practicum Course remains dynamic and responsive to the evolving demands of music education.

Keywords: Piano Competency Model; Knowledge Management; Piano Teaching Practicum Course

Introduction

The piano teaching practicum course at Shanxi Vocational College of Art in the People's Republic of China has implemented a comprehensive piano competency model based on knowledge management. This innovative approach integrates traditional pedagogy with modern techniques to enhance the skills and expertise of piano instructors. By incorporating knowledge management principles, the program aims to optimize the transfer of essential piano teaching competencies, fostering a dynamic learning environment that prepares students for the diverse challenges of modern music education (Fan, 2007 : 11- 12).

Piano major is a major offered by current art vocational colleges, and it is also an important survival skill for piano students to seek positions in the society in the future. There are a lot of students, a lot of time invested, and the learning cost is very large. In the current piano education in vocational colleges, piano education has always followed the education model of the last century (Liu, 2019 : 92-96), while ignoring the practical facts of the current social changes, the characteristics of the great employment pressure and the weak piano

foundation of piano students in vocational colleges. With the continuous changes of the current society, the employment pressure of piano students in the society is increasing, which makes vocational colleges need to change their own teaching methods and educational objectives when training students, so that students can better adapt to the employment needs of the society in the future (Ge, 2009).

Piano competency Model means of 3 keywords as skill, knowledge and attribute, which need to be applied for preparation the future teacher. In this paper that researcher will participatory action and workshop on program of piano teaching forum in order to knowledge management and resolve the skill problem for the future teacher (Dai, 2021).

From the above, it is pointed out the importance of research in the piano competency model based on knowledge management for piano teaching practicum course. The paragraph discusses the implementation of a piano competency model at Shanxi Vocational College of Art in China, integrating traditional and modern teaching methods to enhance piano instructors' skills. It highlights the necessity for adapting piano education to meet contemporary societal changes and increased employment pressures. The model focuses on skills, knowledge, and attributes crucial for future teachers. Additionally, it outlines plans for participatory action and workshops to address skill-related challenges within the piano teaching forum.

Research objectives

To study on the piano competency model based on knowledge management for piano teaching practicum course at Shanxi vocational college of art, The People's Republic of China

Literature Review

Competency

competencies are the knowledge, skills, abilities, and characteristics of an employee as described by a pattern of behavior based on the requirements of the position. The ability of an individual to meet the performance requirements of a position is a state or a combination of qualities with the three characteristics of being coachable, observable and measurable. Clearly, competency theory provides a new perspective on talent identification. It differs from the traditional talent evaluation in that it no longer focuses only on the unilateral evaluation of talent quality, but the quality of talent, that is, the quality of talent and responsibility together as the object of talent evaluation, effectively realizing the objectivity and credibility of the evaluation, highlighting the evaluation of talent - "competence" is the core content. The competency model established on the basis of the competency theory has become a new talent evaluation tool and has been widely applied (White, 1915).

Piano Competency

Piano competency refers to the combination of skills, knowledge, and attributes necessary to effectively play the piano and teach it to others. It encompasses technical proficiency, theoretical understanding, musical interpretation, pedagogical skills, and the ability to communicate musical concepts effectively. A piano competency model provides a framework for developing and accessing these essential elements in both students and instructors (Ge, 2009).

The attributes necessary to effectively play the piano and teach include: 1) Musicality: Having a deep understanding of musical expression, interpretation, and phrasing, 2) Patience: Being able to work through challenges in practice and convey concepts patiently to students, 3) Communication: Articulating musical concepts clearly and effectively to students, 4) Adaptability: Being able to adjust teaching methods to suit each student's learning style, 5) Empathy: Understanding and empathizing with students' struggles and providing support accordingly, 6) Organization: Structuring lessons effectively to maximize learning outcomes, 7) Passion: Demonstrating enthusiasm for music and teaching, inspiring students to excel (Dai, 2021).

competency model

The main tasks that need to be solved to construct the piano competency model include information collection, causal association analysis, importance determination, and consistency testing. The basic steps in constructing the piano competency model are: establishing an expert group of key teachers, examining and collecting the tacit knowledge of piano experts about piano competency; the manager examines and organizes the collected knowledge and discusses it with the key teachers; the endorsed knowledge model matches and enhances the existing knowledge and competency of the second-year students of the Keyboard Department of the Shanxi Vocational College of the Arts; opening a music store to disseminate the knowledge; applying for the application of the tacit knowledge; developing a lesson plans; 15 course experiments after passing the exam; and evaluating the results of the course experiments; and finally, we analyzed and shared the results of the experiments (Han, 2006).

Piano Teaching Practicum Course

Teaching consists of the teacher's teaching and the student's learning. Educators in the former Soviet Union defined "teaching" as a process that includes the activities of the teacher (teaching) and the activities of the students (learning). Teaching and learning are two aspects of the same process, which are inseparably linked to each other. However, the practice of teaching and learning consists of two kinds of teaching and learning activities, and therefore teaching and learning form two theories, namely teaching theory and learning theory (Han, 2006).

Thus, teaching is a bilateral activity between educators and students, teaching and learning through course content. Through this activity, students can acquire systematic knowledge and skills, develop intellectual, physical and creative abilities, and form a scientific worldview and moral character

The researcher argues that while teaching and learning are two aspects of the teaching and learning process, learning is more important than both. In other words, the essence of teaching should be learning, not teaching. What is teaching? It is the teacher imparting his personal experience and subjective opinions to the students, who are passive learners. What is learning? It is the teaching of students according to their actual situation, allowing them to use certain methods to master the laws of knowledge, teaching students according to their own talents, and allowing students to learn actively. In this process, the educator plays the role of a director, a tour guide, a facilitator, a cheerleader, or even a judge. The ultimate goal is to guide students to learn to learn actively, to master the general rules of knowledge, and to learn to apply it. This is the ultimate goal of teaching (Han, 2006).

The course is the planning and design of educational objectives, teaching content, and teaching activities, and is the sum of the multifaceted implementation process of the teaching program and syllabus. In a broad sense, a curriculum is the sum of the educational content and processes chosen by a school to achieve its training objectives, including a variety of subjects and purposeful and planned educational activities. narrow curriculum refers to a particular subject (Mi, 2017 : 297–333).

A good piano teaching curriculum cannot only achieve the goal of school education, but also provide standards for school management and evaluation, as well as achieve the purpose of education and cultivate the overall development of ability.

Taking Shanxi Arts Vocational College as an example, the current piano curriculum system has set up a large number of ear, music, harmony and piano playing practice courses. There are also some piano competition practice courses, which do not differ much in content compared to the competency training program (Ying, 2007).

The researcher believes that it is important to improve students' piano playing skills, but not to blindly pursue skills and skills, which will lead to students just spend a lot of time practicing in school, but gain little in the aesthetic, thinking, emotional and humanistic achievement of the necessary qualities and abilities, and even graduate will only play some work. At the same time, students should master the basic teaching methods of piano learning and deepen the understanding of teaching practice, which will greatly improve the employability of students. There are some scholars who put forward similar views on the need for students to master the basic teaching methods of the importance of piano learning. Zhang Ran argues that the lack of guidance on the technical theories of piano playing will make students not appreciate the complete structure of knowledge and skills of piano playing each detail of the piano playing session without basic effective concepts, lack of practical working ability", and "incompetence in graduate teaching (Zhang, 2006).

Modern piano teaching programs need to break the deadlock of previous course instruction, allowing students to step out of fixed course content and enrich, strengthen, and develop as they receive valuable instruction and hands-on practice.

As future popularizers of music education, students not only need to be able to perform repertoire of a certain level, but also need to step out of fixed course content and recognize the richness of pedagogical and practical training that enriches, strengthens, and matures them.

Research Methodology

This study used a mixed method of qualitative research 1) Through the analysis of the relevant literature, 2) Fully understand the teaching status of piano teachers from interviews with piano teachers from four representative universities in China;

Research tools: interview form Create questionnaires for use in expert interviews. Examine the survey and expert interview questionnaires for quality.

Key informants: Associate Professor Zhao Wen, a successful university teacher with innovative spirit, active thinking and able to constantly try new teaching methods and strategies, was selected as the backbone teacher for the interview. In addition, four other university piano teachers from different regions and schools were interviewed separately.

Data collection: Collect data by interviewing key informants, 2) Ms. Nie Rui graduated from Hunan Jishou University with a bachelor's degree. Her music education

program was also the first school in China to offer a piano pedagogy course. Many years of teaching experience. 3) Yingna Zhao is a professor at Yunnan Art University. She taught the course to understand the lack of piano knowledge, which enabled her to clearly grasp the degree of piano teaching methods.

Data analysis: The data from the interview will be analyzed by using content analysis.

Research Conceptual Framework

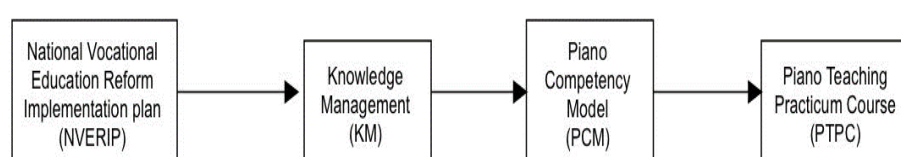


Figure 1: Conceptual Framework

Research Results

piano competency experts round table discussion Knowledge Management.

Through the interview of experts in the field and group discussion, the Piano Competency Model concept into Piano Teaching Practicum Course and flow chart, shows the piano teachers should have multidimensional ability to build, including teaching skills, knowledge, attitude, basic characteristics and the emphasis on motivation and innovation. This framework not only emphasizes the dual emphasis of teachers on technology and knowledge, but also highlights the key role of optimistic attitude, coping ability, teaching evaluation, self-regulation and innovative thinking in improving teaching quality and students' learning motivation. Through this model, piano teachers can comprehensively improve their own teaching competency, so as to promote students' learning results and their own career development. Moreover, the application of the course significantly improved the students' teaching skills and piano performance.

The details of principle method of Knowledge Management for transcription, description and utilization.

TACIT=interviewing who skillful	EXPLICIT=sort writing on academic form into transcription,description
Their skillful intellectual property as music,dance ,knowledge hiding	Principle,method,ways of making,playing ,learning
Practice,experiences,showing ,how to approval	Theory, re-recognative of learning step
Intelligence became from consideration, improvisation	Became from brains intellectual by analyze,synthesis,utilization,apply
Its own privacy, own identity tactic	It's the rules,steping,method which warranty by council,CGP.,protocol

The piano competency experts round table discussion on knowledge management serves as a pivotal platform for synthesizing, refining, and disseminating vital insights within the realm of piano instruction. This collaborative gathering, comprised of seasoned educators, virtuosos, and industry leaders, is instrumental in advancing the field of piano pedagogy through the effective sharing of tacit knowledge and best practices.

Within this forum, experts engage in the exchange of tacit knowledge, drawing from their extensive experience and expertise in piano instruction. This collective wisdom, when shared and integrated, contributes to the development of a comprehensive knowledge management framework that encapsulates a diverse array of pedagogical techniques, repertoire selection, teaching methodologies, and performance strategies.

Moreover, this round table discussion facilitates the identification and analysis of emerging trends and innovations within piano instruction, ensuring that the competency model remains dynamic and responsive to evolving educational needs. Furthermore, it provides a valuable opportunity for experts to discuss and strategize the implementation of knowledge management systems, including digital repositories, collaborative platforms, and mentorship programs, aimed at preserving and disseminating invaluable pedagogical insights.

The formation process of the Piano Competency Model in the Piano Teaching Practicum Course


The formation process of the Piano Competency Model in the Piano Teaching Practicum Course involves a multifaceted approach integrating traditional pedagogy with modern methodologies. This model aims to enhance the capabilities of piano instructors by amalgamating essential skills, knowledge, and attributes necessary for effective piano instruction. The construction of this model necessitates careful consideration of several fundamental tasks.

The initial step comprises information collection, where data is gathered from various sources to understand the diverse facets involved in piano teaching. This may encompass curricular requirements, pedagogical techniques, and industry standards, among other crucial aspects. Subsequently, causal association analysis is conducted to discern the interrelationships between different competencies and their impact on the overall piano instruction process. This analysis enables the identification of key areas that need to be addressed within the competency model.

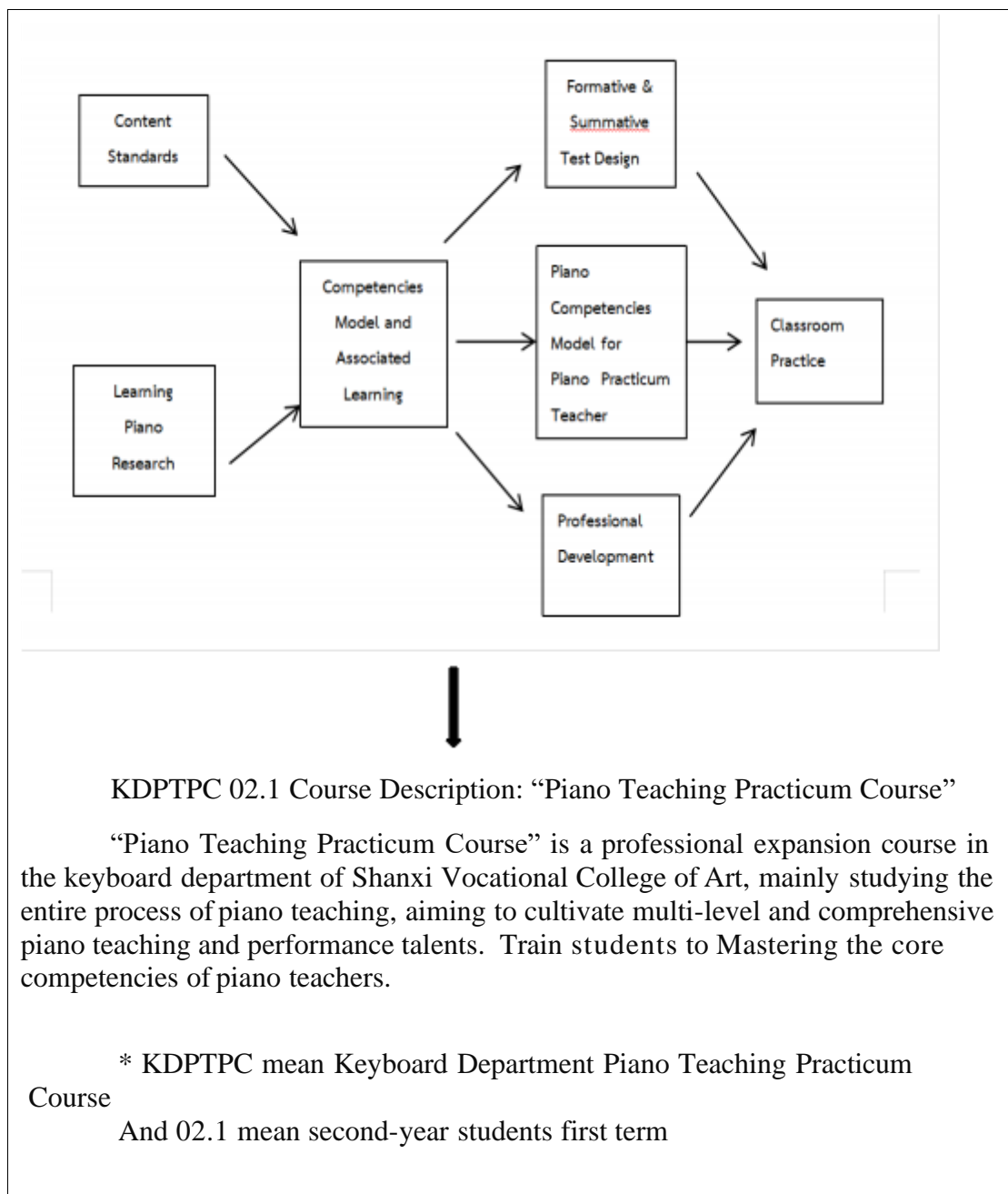
Table 1: Concept diagram of the Piano Teaching Practicum Course

Designing the Piano Competency Model for Piano Teaching Practicum course		
Probe into the existing Problems in piano course	Adopt keywords from the competency model to provide	
1.Piano teaching places excessive emphasis on students' playing skills. 2. Students lack understanding and practice of the role, status, teaching skills, children's psychology, teaching steps, and teaching techniques of teachers. 3. Piano teaching lacks the core competencies of piano teachers and the implementation methods of the teaching process.	Major	Minor
	Skill, Knowledge, Attributes, Underlying Characteristics, Motive, Trait, Initiative thinking	Teacher Competencies Model as Core Behaviors, Functional, Social Role Competencies

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Bring the important theories of four manuals into the new course 	Piano Competency Model Designing New Course Aspects Course Description Course Syllabus Lesson Plan Expert approval agreement and verify Piano competency model teaching Summary Test
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Transform the concept of piano competency into a Piano Teaching Practicum Course, according from the conceptual process of piano competency model underlying the design of each steps images as following below.



At the heart of this course lies hands-on experience. Through direct engagement with real students under the guidance of experienced mentors, participants gain invaluable insights into the art of teaching. They learn to tailor lessons to individual needs, provide constructive feedback, and foster a supportive rapport that inspires musical growth. Beyond technical proficiency, the course emphasizes the importance of cultivating a passion for music within each student. Participants explore creative teaching approaches, innovative lesson planning techniques, and ways to instill a lifelong love of music in their pupils.

Moreover, the practicum course encourages self-reflection and continuous improvement. By receiving feedback from both mentors and peers, aspiring teachers can refine their methods, adapt to different learning styles, and develop a teaching philosophy that resonates with their unique strengths and values. the Piano Teaching Practicum Course is not merely a training ground for future piano instructors; it is a transformative space where passion meets practice, theory merges with reality, and a new generation of inspiring educators emerges. Through dedication, perseverance, and a commitment to excellence, participants of this course embark on a rewarding journey towards becoming proficient, empathetic, and impactful piano teachers who shape the future of music education.

Following this, importance determination occurs, where the significance of each competency is assessed regarding its influence on the overall proficiency of piano instructors. Consistency testing is then undertaken to ensure that the identified competencies align cohesively with the objectives of the piano teaching practicum course and are coherent with the broader educational context.

Integral to the formation process is the establishment of an expert group comprising key teachers well-versed in piano instruction. Their invaluable insights and experience play a pivotal role in shaping the competency model. The tacit knowledge of piano experts is systematically examined and collected, providing a rich foundation for constructing a comprehensive competency framework.

Table 3: Piano Competency into a Piano Teaching Practicum Course

Piano Competency Model framework steps	KM: Keywords of Learning Unit
1.Piano teacher: Core behaviors-Functional Competency	1) The basic competencies and condition of piano teacher; 2) Piano Enlightenment Teaching Ability; 3) Content and methods of classroom teaching;
2. Skill = piano's students and teacher	4) Music elements 5) The basic of playing methods of piano;
3.Knowledg: Teacher role and skillful through students	6) How to teach the first lesson well 7) How to write a teaching plan 8) The combination and use of children's piano textbooks;
4.Attributes: Hope optimism	9) Classroom practice between teacher and children; 10) Cope with various issues;
5.Underlying Characteristic: Teacher Expectation	11) Guidance and independent processing of works; 12) Piano teaching evaluation; 13) Basic principles of classroom teaching; 14) Motive -Self regulation, more and more practice; 15) Initiative Thinking: Diverse designing.

This collected knowledge is meticulously organized and discussed with the key teachers to refine and enhance the existing competency model. Furthermore, the process entails matching and enriching the endorsed knowledge model with the second-year students' existing knowledge and competencies at the Keyboard Department of the Shanxi Vocational College of the Arts.

Upon the endorsement of the knowledge model, dissemination becomes paramount. Opening a music store to share the knowledge, applying the tacit knowledge, and developing lesson plans set the stage for practical implementation. Subsequent to these steps, 15 course experiments are conducted, providing a real-world testing ground for the newly formulated competency model.

Evaluation of the results yielded from the course experiments follows suit, enabling a comprehensive assessment of the model's efficacy. Finally, the analysis and sharing of the

experiment outcomes serve as a critical feedback loop, ensuring continuous refinement and improvement of the Piano Competency Model.

In conclusion, the intricate formation process of the Piano Competency Model navigates through a series of meticulous tasks, underlining the significance of collaboration, empirical testing, and iterative refinement. By harmonizing traditional wisdom with contemporary insights, this model endeavors to cultivate a new generation of proficient and adept piano instructors equipped to meet the demands of modern music education.

Discussion

Research objectives was to study on the piano competency model based on knowledge management for piano teaching practicum course at Shanxi vocational college of art, The People's Republic of China. When analyzing the research conclusions and findings found that, there are deficiencies in current teaching methods and course content, which directly affects the improvement of students' learning effect and teaching competency. By improving the teaching process, not only can improve the quality of teaching, but also can increase students' interest and motivation in learning. This improvement is the basis for achieving the research purpose, which directly improves students' piano skills and teaching ability by updating the teaching content and methods (Zhang, 2006).

The study found that students and teachers were positive about the improved teaching methods and course content. This positive attitude is the key to the success of the teaching reform, because it directly affects the acceptance and participation of the learning process. A positive, supportive learning environment can stimulate students' potential and promote their skills development, which is fully consistent with the research objectives of improving students' piano skills and teaching skills (Qu, 2019 : 1-4).

The study emphasizes the importance of improving teachers' ability in knowledge management. Teachers are the key to the teaching process, and their knowledge, skills and teaching methods directly influence students' learning outcomes. By improving teachers' competency, knowledge can be imparted more effectively and students' skills are promoted, which directly supports the research purpose (Han, 2006).

Through the new course design based on Knowledge Management and Piano Competency Model, the research effectively solves the existing teaching problems and improves the students' teaching competency and professional skills. This targeted course design not only solves the problems in the current teaching, but also provides more practical opportunities for students, thus directly improving their piano skills and teaching competency, and realizing the research purpose (Dai, 2007).

Wang (2004), Application of knowledge management tools and strategies plays a key role in improving teaching quality and learning effectiveness. Through these tools, teachers can organize and transfer knowledge more effectively, while students can also acquire and apply such knowledge more effectively. The application of this method directly supports the research purpose of improving students' piano skills and teaching ability.

Conclusion

To create on Piano Competency experts round table discussion Knowledge Management Through the interview of experts in the field and group discussion, the Piano Competency Model concept into Piano Teaching Practicum Course and flow chart, shows the piano teachers should have multidimensional ability to build, including teaching skills, knowledge, attitude, basic characteristics and the emphasis on motivation and innovation. This framework not only emphasizes the dual emphasis of teachers on technology and knowledge, but also highlights the key role of optimistic attitude, coping ability, teaching evaluation, self-regulation and innovative thinking in improving teaching quality and students' learning motivation. Through this model, piano teachers can comprehensively improve their own teaching competency, so as to promote students' learning results and their own career development. Moreover, the application of the course significantly improved the students' teaching skills and piano performance.

Recommendations

1. General Recommendations

This paper discusses for Strengthen the development of music and the cultivation of innovative thinking. In deepening the discussion on the need to improve teaching methods, we must consider the complexity and diversity of piano education. Traditional teaching methods often focus on the cultivation of technical ability, and may ignore the development of musicality and the cultivation of innovative thinking. Along with improving technical skills, the ability to express music, convey emotion and creatively solve problems. This method encourages teachers to explore new teaching methods to stimulate students' creativity and cooperation spirit, and then to provide students with a richer and more dynamic learning experience.

2. Recommendation for future research

Recommendation for Continue to conduct a comprehensive study on the Piano Teaching Practicum Courses. Communicate with piano teachers and five experts from Shanxi Vocational College of Arts to understand their piano teaching methods. Investigate and interview the keyboard department students of Shanxi Vocational College of Arts to understand their learning needs, goals and challenges. This will help to tailor the guidelines to the specific needs of the learners.

In conclusion, improving the piano teaching method is very necessary, because it helps to improve the quality of music education and cultivate more comprehensive and creative musicians and music educators. We can achieve this goal by continuing a comprehensive study on the piano teaching practice course, strengthening the development of musicality and the cultivation of innovative thinking, and extending the length of the course. This will help to promote innovation and progress in the field of music education, to provide students with a more meaningful music learning experience, so that they will eventually become high-quality workers and technical skills.

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