

## Developing A Piano Teaching Model for Music Majors in Chinese Higher Education and Improving Student's Piano Playing Skills

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### Abstract

*China's economic and social development, cultural industry progress, and improved living standards have led to a diversified society for piano professionals and applied talents. This study aimed to analyze the piano teaching mode in higher schools. Explore the existing piano teaching modes at home and abroad, and analyze the characteristics, advantages, and shortcomings of different teaching modes and evaluate the new piano teaching mode and verify its effect of improving students' piano playing application ability. The current study clarified the related implications under the initial dimensions for a follow-up particular analysis by examining the syllabi of piano teaching models from five universities' music programs using the Research & Development (R&D) theoretical framework. The study examines and contrasts relevant research on domestic piano instruction models through a survey of the literature. This stage seeks to categorize and condense the findings of previous research, comprehend the theoretical underpinnings and real-world application of applied talent training models both domestically and internationally, and offer a theoretical framework and point of reference for this investigation. This study employs various research tools, including literature analysis, structured questionnaires, observation forms, and checklists, to collect comprehensive data to address the research questions. It explored that teaching methods: at present, China's higher education piano teaching methods are diverse, emphasis on skills training, ignoring the cultivation of music literacy. In the process of teaching, teachers tend to focus on demonstration, and students have fewer opportunities to practice, which leads to the lack of students' innovative ability. The Curriculum: China's higher education piano teaching is based on professional courses, and a small number of elective courses in the curriculum to assist. As a result, the content of the curriculum is relatively single and lacks the cultivation of students' comprehensive ability. The Evaluation system: China's higher education piano teaching is mainly based on performance examination, which overly emphasizes technical indicators and neglects musical expression and creativity. In addition, the evaluation standard is too uniform, making it difficult to meet students' individual needs.*

**Keywords:** Piano Teaching Model, Teaching Objective, Teaching Content, Teaching Method, Assessment and Evaluation, Music.

### INTRODUCTION

With the requirements of China's economic and social development, the continuous progress of the cultural industry, people's material and cultural living standards continue to improve, the society of the piano professional and applied talents appeared diversified, multi-level demand, piano education model in China is gradually receiving more and more attention. In 2006, the Ministry of Education issued the "Piano Course Teaching Guidelines", which detailed the objectives and content of piano teaching in higher education and proposed Flexner Abraham (1925) claimed that piano teaching in higher education should cultivate students' "comprehensive use of the piano ability". As an important part of the training of piano teachers, Gassest O. Jose (1992) the reform and innovation of the teaching mode of piano in higher education has become an urgent task, and piano students in higher education must be prepared to adapt to the needs of the extensive music and culture market.

According to the promulgation and implementation of the Art Curriculum Standards for Compulsory Education (2022 Edition), China has made a new breakthrough in the revision of the curriculum standards for compulsory education: Helen Timbley (2009) the art curriculum is based on the main lines of music and fine arts, with enhanced practicality and comprehensiveness. Therefore, in China, music majors in private colleges and universities play an important role in the field of music education, and the future music basic education applied talents they cultivate have a wide range of employment prospects and practical application ability in

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the society. Kong Fanmin, Ph.D., Associate Professor of Peking University, points out in his book "Empirical Research on Applied Undergraduate Talent Cultivation" that each stage of the development of applied undergraduate education is closely related to China's prevailing socio-economic development and demand for talents, the status quo of the development of higher education in China, and China's education policy orientation. It is also the result of the continuous exploration, reform and practice of local undergraduate colleges and universities in China. Jing Degang (2009) explained that China's economic development mode from the crude to intensive transformation, economic growth mainly relies on scientific and technological progress, with the continuous improvement of productivity not only need for advanced research talents also need many application-oriented and skill-oriented talents. Accompanied by Bangbon et al. (2024) and Zhang Junmei (2021) the diversification of the type of education generated by the massification of higher education, in some traditional universities to research universities at the same time, applied undergraduate colleges and universities and vocational colleges and universities came into being. Applied undergraduate colleges and universities have played a decisive role in the massification of higher education in China Feng Daming, 2008. The development of applied talents of piano majors in colleges and universities has become an important part of China's music education. Applied university has become the new orientation of local universities to carry out the innovation and transformation of the piano teaching mode. Piano major itself is a profession that should focus on emphasizing practical ability, and it should keep abreast of the times on the traditional teaching mode.

## RESEARCH OBJECTIVES

To study and analyze the piano teaching mode in higher schools. Explore the existing piano teaching modes at home and abroad, and analyze the characteristics, advantages, and shortcomings of different teaching modes.

To evaluate the new piano teaching mode and verify its effect of improving students' piano playing application ability.

## Conceptual Framework

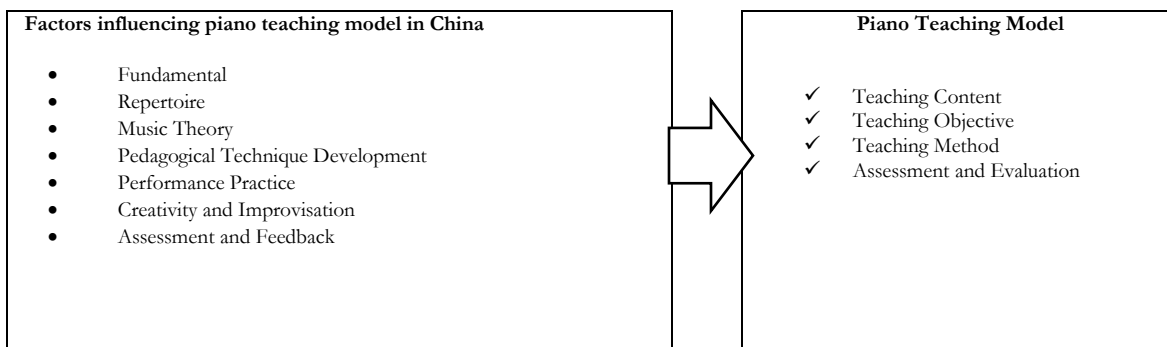


Figure 1: Conceptual framework

## CONTEXT AND LITERATURE REVIEW

### The Cultivation Mode of Applied Talents for Music Majors in China

The demand for applied talents in the music industry is increasing, leading to the development of various cultivation methods in China. The Shanghai Conservatory of Music's "Comprehensive Quality Cultivation Model for Musical Talents" Liu Haifeng (2009) focuses on students' comprehensive quality, artistic expression, creativity, and teamwork abilities through various performances and projects. The Beijing Modern Conservatory of Music's "Industry-University-Research Combined Music Talent Cultivation Model" combines music education with the music industry, providing students with practical opportunities through cooperation. The Central Conservatory of Music's "International Talent Training Model" focuses on students' international outlook and cross-cultural communication skills through international music exchange programs. However,

these models face challenges in implementation, such as a lack of faculty strength and practice opportunities. To improve and optimize the training mode Xin Di (2002) for music professionals applied talents, measures such as strengthening practical teaching, cooperating with the industry, improving teachers' strength, and implementing school-enterprise cooperation can effectively solve Zhao Qingnian (2009) these problems and improve the cultivation quality of applied talents majoring in music. In conclusion, domestic research on applied talent cultivation has made some progress, but there are still some problems and deficiencies. This study aims to make a step toward innovation and an in-depth training mode for music majors, strengthen the practical exploration, and improve the quality and effect of the applied talent training mode.

### **Foreign Music Education Applied Talents Training Model**

The music education system in foreign countries LIU Yun, HAO Rongrong and ZHANG Shuzhen (2009) is crucial for the development of applied talents in music majors. This system includes various levels of educational institutions, such as music colleges, schools, and learning centers. In France, the curriculum focuses on national music, with classical national music accounting for over 90% of the curriculum. Li Xin (1990) explored that French higher music education emphasizes practical aspects of music professional internships and artistic creation, with flexible teaching methods and group cooperative teaching. Russia's music education system is highly regarded, with the Russian School of Piano being the birthplace of higher music education. The school emphasizes singing, WU Qiaoyun, JI Hongbing (2022) interpreting the sound of the piano and requiring the piano to have an emotional expression of the human voice. The Royal College of Music in the UK and Berklee College of Music in the United States focus on personalized development and comprehensive training in music performance, composition, and teaching. The Hans Eisler School of Music Wen Rui, Liu Shijiang, Xiong Jianping (2008) in Germany focuses on developing creativity and independent thinking, encouraging interdisciplinary learning and cooperation.

### **Xin Di's Applied Piano Pedagogy**

Xin Di (2000) applied piano pedagogy has gained significant recognition in China's popular piano education. Introduced in 2015, it focuses on students' future development and cultivates their creative and application abilities. Traditional piano teaching methods are ideal for mass training but not suitable for mass learning. Xin Di (2002) approach aims to improve the public's comprehensive musical quality, allowing piano learners to enjoy the happiness and art of music. The teaching method uses imitation and improvisation to guide students, Robert M. Hutchins (1993) expanding their thinking and practical abilities. This approach is a good start for applied piano education in China, as it addresses the drawbacks of elitist teaching and makes piano education more accessible to the public. Wang Zhiyuan (2017) informed that the method has gained widespread attention in the domestic music field and has developed thousands of teachers, some of whom have also promoted it abroad. Currently, Xin Di's applied piano pedagogy is moving towards internationalization and has become a major achievement in modern music education in China.

### **Key Elements of Xin Di's Applied Piano Pedagogy**

Xin Di's applied piano pedagogy is based on the teaching strategy of "eight first, eight second," which combines traditional piano teaching with theory-practice combination. This strategy focuses on the auditory sense, then the acoustic sensibility, and aims to train students' sense of music in the auditory sense. Xin Di also advocates the use of games as a means of teaching and learning, as they can make learners participate in a pleasant mood. The teaching materials for piano group lessons should be suitable for China's national conditions, Pan Maoyuan (2017) combining basic piano knowledge and application, solo and repertoire ensemble, simple and five-line scores, initial and fixed keys, music theory knowledge, sight-singing and ear-training, keyboard harmony and transposition, piano singing and improvisation, basic theories of composition and melodic development, improvisation, polyphony, harmony, and melodic analysis and arranging. Xin Di's teaching method is based on the "four studies": Pedagogy [J] (2017) happiness, interest, quick learning, and creativity. Happiness refers to the interaction of piano teaching in games or activities; interest involves Xie Xuefeng (2000) discovering students' interests and using piano practice to guide them; quick learning involves teaching piano playing skills in a short period of time; and creativity involves giving full play to students' initiative, allowing them to master the use of left and right hands and create their own teaching methods.

## **Problem Statements**

Domestic primary universities often focus on piano teaching or academic training, with some schools adjusting their teaching methods and curriculum to focus on students' traditional music knowledge and research. However, this traditional and one-dimensional teaching approach lacks practical application ability, leading to students lacking core competitiveness and motivation to refine their professional music skills. The traditional piano teaching mode cannot adapt to the current situation of piano education, Liu Xianjun (2018) as it must be combined with practical teaching to explore more popular, suitable teaching methods and implement diversified teaching methods. With the increasing demand for music talents, cultivating piano professionals with practical application ability has become an urgent task. Applied talents, different from academic talents, focus on the use of skills and mastery of theoretical knowledge to solve problems in practice. Universities should focus on application ability, innovation ability, and practical ability as the core, PAN Maoyuan & DONG Liping (2009) deepening the piano teaching mode, tapping the musical potential of every student, and cultivating primary and middle school music teachers with specific keyboard foundations. However, there is still room for improvement in training applied students in piano majors in colleges and universities. In recent years, competition for enrollment has led to a lack of students from professional music colleges and higher teacher training colleges, requiring better professional skills and a stronger music foundation.

Therefore, the author tries to combine the traditional piano teaching mode with the practice-oriented applied piano pedagogy to explore the innovation of the cultivation mode of applied students majoring in piano in colleges and universities Li Ce (2002). Through students' participation and practice of applied piano pedagogy, they can comprehensively improve their music skills and performance ability. This study, Pan Lusheng (2002) hopefully, can provide valuable reference and experience for the teaching reform of music majors in colleges and universities, promote the innovation of the training mode of applied talents in piano majors, cultivate more piano professionals with practical ability and innovative thinking, and contribute to the development of the training mode of music education in China.

## **METHODS**

The current study used the Research & Development (R&D) theoretical framework, analyzing the syllabi of piano teaching models from five universities' music programs to clarify the corresponding connotations under the original dimensions for subsequent specific analysis. Through literature review, the study analyzes and compares related research on domestic piano teaching models. This step aims to sort out and summarize existing research results, understand the theoretical foundation and practical experience of applied talent training models at home and abroad, and provide a theoretical basis and reference for this study.

### **Study Tools**

#### **Overview and Design of Tools**

This study employs various research tools, including literature analysis, structured questionnaires, observation forms, and checklists, to collect comprehensive data to address the research questions.

**Literature Analysis:** To study and analyze the teaching models of five higher education institutions. Literature analysis is used to obtain documents and syllabi related to the cases. Qualitative analysis methods are applied to organize and analyze the collected data, revealing the strengths and weaknesses of course objectives, content, design, and evaluation features through induction, classification, and comparison. The results are presented and interpreted to answer the research questions.

**Structured Questionnaire:** The questionnaire consists of four sections with a total of 12 questions. It covers students' basic information, course evaluation, teaching method evaluation, and willingness to recommend the course. Each question is a closed-ended question.

**Observation Forms and Checklists:** The researcher will observe students' learning outcomes through pre-tests and post-tests. Observation Forms include three main categories of indicators: music performance, basic skills, and practical teaching. Checklists are used to assess students' piano performance skills.

**Reliability and Validity Testing**, the summarizes and analyzes the piano teaching syllabi of five domestic higher education institutions to identify the strengths and weaknesses of the current piano teaching models in China. Based on the existing syllabi and teaching models at Wuhu University, a new piano teaching model was innovatively developed. To ensure the effectiveness of the research tools, the researcher set 12 questions related to teaching objectives, feasibility, and the enhancement of playing techniques based on the new teaching model before formally experimenting. Three professors specializing in piano from the Musicology field were selected to verify and evaluate the new teaching model through the Item-Objective Congruence (IOC) process. According to the IOC formula, the IOC value is  $IOC = \frac{\sum R}{N}$ .

## Data Collection

### Literature Data Collection

In this study, the researcher used the literature research method to directly communicate with professors teaching piano courses at five domestic universities and obtain teaching syllabi. By utilizing methods such as induction, classification, and comparison, the characteristics and patterns of domestic piano teaching were identified. Additionally, the researcher collected, filtered, organized, and analyzed literature from existing databases via the Internet to obtain foreign teaching syllabi and related information and theoretical foundations. The study also explored, collected, analyzed, and compared many original archival materials from the history of domestic and foreign schools, including documents on talent cultivation and social services, to investigate the practice of applied talent cultivation models and piano teaching methods.

### Questionnaire Data Collection

In this study, the researcher used a questionnaire method to collect students' opinions and evaluations of the innovative piano teaching model. Before the survey, a well-structured questionnaire was designed, including students' personal information and their evaluations of the piano teaching model. The questionnaire included basic background information such as grade and gender, as well as subjective evaluations of the teaching methods, such as teaching effectiveness and learning motivation. The questions were reasonably designed to comprehensively understand students' views and evaluations of the innovative piano teaching model. The questionnaires were distributed to piano students at Wuhu University participating in the experiment, with an explanation of the survey's purpose and significance. To ensure the validity and reliability of the questionnaire, it was collected anonymously to protect students' privacy and authenticity. Students were given sufficient time to complete the questionnaire to ensure they could carefully consider and provide accurate answers. Finally, the researcher conducted a quantitative analysis of the collected questionnaire data and performed a thorough research analysis to further improve and optimize the applied talent cultivation program.

### Data Analysis

The data analysis methods in this study include both qualitative and quantitative research. To ensure the accuracy and reliability of the data analysis, we used inductive qualitative data analysis and SPSS statistical software for quantitative data analysis.

**Quantitative Data:** First, descriptive statistical analysis was conducted on the questionnaire data, including calculating basic statistics such as mean, median, and standard deviation. Second, t-tests and ANOVA were used to analyze the performance differences in piano skills tests among different groups of students. Finally, regression analysis was used to explore the relationship between students' learning attitudes and learning outcomes under the guidance of the teaching model.

**Qualitative Analysis:** The researcher employed thematic analysis and content analysis methods. First, all teaching syllabi were summarized and categorized, focusing on teaching objectives, content, methods, and evaluation. These categories were then compared and analyzed to identify specific issues in the practice of domestic and international teaching models.

**Data Visualization:** The study will use pie charts, tables, and other methods to present the analysis results, making it easier for readers to understand and compare the performance of different groups of students on

various indicators.

**Reliability and Validity:** To ensure data reliability, we calculated the Cronbach's Alpha coefficient of the questionnaire, which was 0.85, indicating high internal consistency. For validity, we invited three experts to review the questionnaire content and verified the construct validity of the new teaching model through factor analysis.

**Limitations:** This study's data analysis methods mainly rely on self-reported data, which may be subject to social desirability bias. Additionally, the sample size is limited, and the generalizability of the results may be restricted by the specific background of the study participants.

## FINDINGS

### Currently Status of Piano Teaching Model

**Teaching Methods:** at present, China's higher education piano teaching methods are diverse, emphasis on skills training, ignoring the cultivation of music literacy. In the process of teaching, teachers tend to focus on demonstration, and students have fewer opportunities to practice, which leads to the lack of students' innovative ability.

**Curriculum:** China's higher education piano teaching is based on professional courses, and a small number of elective courses in the curriculum to assist. As a result, the content of the curriculum is relatively single and lacks the cultivation of students' comprehensive ability.

**Evaluation System:** China's higher education piano teaching is mainly based on performance examination, which overly emphasizes technical indicators and neglects musical expression and creativity. In addition, the evaluation standard is too uniform, making it difficult to meet students' individual needs.

### Piano Teaching Models in Higher Education Institutions at Home and Abroad

#### Teaching Objectives

Most key informants stated that there were three teaching objectives that is knowledge, ability, and quality. Knowledge objectives to enable students to understand the structure and development of the piano evolution process, Huang Qi (2009) a brief history of the development of piano art, the genre of piano music works; ability objectives to enable students to master the basic methods of piano performance and performance skills, learn to independently analyze and handle and accurately performance of piano music works; quality objectives to enable students to master the basic principles of piano music performance and piano music aesthetics, excellent piano music culture of emotions and values, and to develop good aesthetic interest and aesthetic ability. The quality objectives enable students to master the basic principles of piano music performance and piano music aesthetics, the emotions, and values in the excellent piano music culture, and to cultivate students' good aesthetic interest and aesthetic ability

#### Teaching Content

The teaching content of two local colleges and universities focuses on basic piano theory, playing methods, musical structure analysis, comprehensive piano performance skills, playing skills in ensembles, and piano performance and aesthetics. Key informants emphasize the importance of understanding piano music culture, fostering students' aesthetic interest, and understanding the actuality of basic music education through internships and apprenticeships. WU Qiaoyun, JI Hongbing (2022) explained that the content also covers basic piano playing techniques, such as posture, hand shape, and pedal use. Students also learn to analyze musical structures, master the use of pedals, and collaborate with others in ensembles. The goal is to cultivate students' aesthetic interests and abilities.

#### Teaching Methods

From the viewpoint of teaching method, at present, most of the local colleges and universities represented by Ningbo Early Childhood Normal Higher and Specialized Colleges in piano teaching follow or imitate the

teaching mode of piano majors in higher music colleges to formulate the relevant system, for example, Wang Zhiyuan (2017) adopting one-to-one or one-to-many teaching methods in the same grade. The "one-to-one" teaching method is very scientific and necessary for the cultivation of advanced performance talents. On the other hand, Pan Maoyuan (2017) the "one to many" teaching method is suitable for the cultivation of the ability of the general piano students of teacher training. These two teaching methods have been widely used by music majors of ordinary colleges and universities in the province in recent years and have produced good teaching effects and played a positive role in the cultivation of music professionals.

### Assessment and Evaluation

Course evaluation involves various assessment methods, including formative and summative evaluation, on-site and written comments, Zhao Qingnian (2009) self-assessment, and mutual assessment of teachers and students. Formative evaluation records students' learning process, attitude, and method, while summative evaluation evaluates final grades. Evaluation requirements include correct and standardized playing methods and mutual teaching assessment among students.

### Comparative Results of Piano Teaching Modes in Colleges and Universities Between China and Foreign Countries

Table 1: Comparative results of piano teaching modes in colleges and universities between China and Foreign Countries

Factors	Chinese universities	Foreign universities	Summary
Teaching Objective	Emphasis on students' mastery of the basic methods, performance techniques, musical literacy, appreciation.	The Music Performance major are focusing on musical literacy and understanding of musical works.	<b>China:</b> emphasis on technique, lack of musicianship and application skills. <b>Foreign:</b> breakdown of specialisms and focus on application skills.
Teaching content	The teaching materials and contents of the classes are relatively fixed, with some minor adjustments every year, but they are not as innovative as they could be, and still focus on the teaching of traditional playing techniques, but in recent years, they have increased their training in improvisation.	The teaching content is set dynamically by the lecturer, there is no uniform standardized textbook, the teacher distributes class syllabus and recommends authoritative theoretical references according to his/her own experience and artistic interests, so that the content of the lectures is constantly updated with new changes, new knowledge, and new achievements of the industry.	<b>National:</b> lessons are fixed in content, less innovative, less training in improvisation skills. <b>Foreign:</b> the content is flexible, innovative, and interesting, and the students actively embrace knowledge.
Teaching method	Combination of one-on-one and small group teaching	Combination of small group, and one-to-one classes	China & Foreign: Combination of small group, and one-to-one classes
Assessment Method	From the assessment frequency, most colleges and universities include at least mid-term and the beginning of the end of each semester, for example, a four-year academic system, at least eight exams. From the point of view of the content of the examination, the examination repertoire and content in recent years introduced a random sampling mechanism, but still within a certain range, and mostly performance based.	There are only two examinations: the mid-term examination and the final examination. The repertoire and content of the examination are relatively unspecified, with a greater tendency to examine the overall quality of the student and his or her level of understanding of the musical instrument, and to add some ensemble subjects according to different sub-specialties.	National: the assessment is more fixed, performance-based, and there are two exams per semester in the four-year system. Foreign: only two exams, and the content is free, measuring comprehensive ability.

Domestic colleges and universities focus on mastering basic piano playing techniques and music literacy, while foreign institutions have different teaching objectives for music performance. Domestic universities adopt fixed teaching materials and content, with some minor adjustments every year. They have increased improvisation training, while foreign colleges and universities set teaching content dynamically by lecturers, using syllabuses and authoritative theoretical references. Teaching methods include one-on-one lectures and small-class teaching, while foreign colleges and universities use group classes. Assessment frequency is higher in domestic universities, with at least eight exams per semester, while foreign colleges and universities focus on two exams. Assessment content is more performance-based, while foreign colleges and universities assess overall student quality and understanding of musical instruments.

## Development of New Teaching Models

### Design of New Teaching Models

Design principles: this teaching model follows the three principles of subjectivity and autonomy, activity and quality, creativity, and quality.

**Subjectivity and Autonomy:** In the context of educational reform, music education in China is gradually changing from the traditional "teacher-led" model to the "student-led" model. The core of this transformation is that students become the masters of the classroom, taking the initiative and the right to create. Under the new model, the teacher is transformed from a transmitter of knowledge to a guide and counsellor who guides students in their learning. The role of teachers is crucial in this process. They need to guide students to discover the beauty of music and cultivate their musical tastes so as to stimulate their sense of creativity.

**Activity and Quality:** Activity means that teaching should improve students' practical hands-on ability, so that they can feel the charm of music in a variety of rich experiences, while quality means that they should have the spirit of research and be able to study the music works seriously on the ground.

**Creativity and Truth-Seeking:** music as an art discipline, each student must have their own creative thinking, teachers in addition to handing over the basic music playing skills to students, to guide students to carry out a series of music creation activities, in the rich activities to let students touch the depths of their hearts, so that they can feel the beauty of the music, the beauty of art. The so-called truth-seeking is that we focus on the identification of the truth of music while developing students' multi-directional and musical reverse creative thinking skills.

**Table 2: Establishing the New Piano Teaching Model Syllabus: Basic Course Information**

<b>Course Name:</b> Applied Piano Performance	<b>Course Type:</b> Theory + Practice
<b>Department Offering the Course:</b> Wuhu University	<b>Course Credits:</b> 10
<b>Course Nature:</b> Core Professional Course	<b>Reference Hours:</b> 32
<b>Grade Level:</b> Sophomore year	<b>Prerequisite Course:</b> Basic Piano
<b>Proposed Textbooks:</b> <ul style="list-style-type: none"> <li>- "Hanon: The Virtuoso Pianist in Sixty Exercises" by Hanon</li> <li>- "Czerny: The Art of Finger Dexterity, Op. 821" by Czerny</li> <li>- "Basic Piano Course 2" edited by Han Linshen, Li Xiaoping, et al.</li> <li>- "Easy Piano Tutorial for Applied Piano—Learn to Play Children's Songs" by Xin Di</li> <li>- "Piano Grading Tutorial for Higher Music (Teacher Training) Colleges" edited by Yang Ming</li> </ul>	
<b>Course Description:</b> This course builds on the Basic Piano course and aims to improve students' piano performance skills. It emphasizes the personalized development of students, cultivating their professional skills in applied piano performance. It trains students in fundamental performance skills, improvisation, accompaniment abilities, and practical teaching skills, laying a solid foundation for becoming qualified piano teachers in the future.	

The table above presents the basic information about the course, including the course name, course type, offering department, course credits, course nature, reference hours, grade level, prerequisite course, proposed textbooks, and course description.

**Course Objectives:** Firstly, Zhong Binglin, Zhao Yingsheng and Hong Yu (2009) to encourage students to participate actively and fully in the classroom activities, and to systematically master the basic piano accompaniment methods and performance techniques. Secondly, Liu Haifeng (2009) in combination with the



characteristics of music education majors, comprehensive course content is carried out to cultivate students' independent learning ability, and students will actively explore the content of the textbook to improve their artistic expression and artistic cultivation. Thirdly, Cui Yuyang (2021) in China's music education, "one essence, many generalities, one emphasis, many supplements" should be the focus of the current piano teaching in music majors. During study, students should be given more opportunities for practice and application, so that they can be competent in primary and secondary school music education after graduation, as well as adapt to the needs of other music education teacher market and lay a solid foundation for better development of students.

## Teaching Requirements

This teaching model establishes a grading standard for piano professional courses, with six levels over three academic years. PAN Maoyuan and DONG Liping (2009) informed that each semester corresponds to one level, reaching two levels per academic year. Students must reach Level 6 by the end of the three academic years. Each semester, students' performance levels must improve and not decline. Students who meet the semester requirements will pass the course. By the end of the sixth semester, students must reach Level 6 to participate in the graduation concert. This study focuses on experimenting with first-semester sophomore students, so the following table outlines the course content plan and teaching requirements for Level 3. (See Table 3: Course Content Plan and Teaching Requirements).

**Table 3 Course Content Plan and Teaching Requirements**

Teaching Unit	Teaching Content	weeks	Class Hours
Unit 1	Basic Piano Skills Training (Scales Practice within 3 Sharps and 3 Flats)	4	8
Unit 2	Piano Repertoire Practice and Harmony Accompaniment Practice	4	8
Unit 3	Piano Accompaniment Techniques and Teaching Theory	4	8
Unit 4	Piano Teaching Practice and Summary	4	8

As shown in this semester's teaching plan is divided into four units: Basic Piano Skills Training, Piano Repertoire Practice and Harmony Accompaniment Practice, Piano Accompaniment Techniques and Teaching Theory, and Piano Teaching Practice and Summary. These four units span a 16-week course, with each unit lasting 4 weeks. There are 2 class hours per week, making a total of 32 class hours.

## Teaching Methods

### Highlighting The Status of Students' Main Body and Creating A Good Atmosphere For Students' Participation

A relaxed classroom atmosphere helps students absorb knowledge better and overcome confidence issues. Teachers should guide students through tasks, Zhang Junmei (2021) improving their abilities and practical abilities. For example, teaching specific playing skills involves explaining the importance of practice, providing feedback, organizing practice, and commenting on exercises and examples to help students improve. This approach not only enhances learning but also enhances practical skills.

### Respect the individual differences of students, create a variety of piano classroom for students

Piano teachers should respect individual differences and adopt a differentiated teaching approach to better meet students' needs and improve teaching effectiveness Li Ce (2002). This can be achieved by dividing students into groups with a strong, comprehensive ability leader and creating micro-teaching videos for different levels. This personalized teaching approach not only improves students' understanding and mastery of knowledge but also enhances the quality of teachers' teaching.

## **Reasonable Arrangement of Classroom Content and Creation of Classroom Performance Opportunities for Students**

In the new era, YANG Mengbei and WANG Shaoyuan (2020) college piano teachers must adapt to new teaching methods, abandon traditional thinking, and provide students with diverse content. They should divide the classroom into three parts: pre-study, student sharing, and final Q&A. The pre-study session encourages independent thinking, while the student-sharing session encourages independent learning and expression. The Q&A session corrects misunderstandings and introduces relevant knowledge, allowing students to gain a deeper understanding and mastery of the subject.

## **Developing Micro-Teaching Resources and Consolidating the Foundation of the New Mode of Teaching**

Microteaching is a new teaching method that aims to help students perform independent learning activities outside the classroom. Teachers must develop comprehensive and reliable LIU Yun, HAO Rongrong and ZHANG Shuzhen (2009) micro-teaching resources that focus on students' needs and achievements. They should combine teaching content and objectives, seize important and difficult points, and adjust teaching difficulty accordingly. This approach helps students understand and master the content, improving their learning experience.

## **Implement the Task of Summarizing After the Lesson and Set Up a Knowledge Sorting Session for Students**

In China, Li Xin (1990) informed that teachers often neglect pre-course preparation and post-course summarization, leading to unsatisfactory teaching results and limited student learning efficiency. College piano teachers should focus on after-class summarization, which includes students' self-summaries and knowledge summaries. Self-summaries involve summarizing new knowledge, reviewing mastered knowledge, and reflecting on classroom performance to identify shortcomings for future learning.

## **Evaluation Requirements**

Formative evaluation ZHOU Haitao (2008) involves observing students' learning process, attitude, and effect, while summative evaluation assesses final grades from exams. This course evaluates students' piano proficiency, including performance and teaching practice. Objective evaluation considers students' learning attitude, professional foundation, and performance on exams.

## **Analysis of Experimental Test Results**

**Table 4 Comparison between Pre-test and Post-Test results of Experimental group**

	Paired (M±SD)		Mean difference (Pre-test-Post-test)	t	p
	Pre-test	Post-test			
Usual score	76.76±8.60	83.29±5.74	-6.53	-4.283	0.001
Music performance score	76.35±7.87	81.59±7.17	-5.24	-2.892	0.011
Basic skills test score	77.88±8.80	82.47±9.01	-4.59	-3.923	0.001
Practical teaching score	76.18±9.12	82.47±5.30	-6.29	-3.358	0.004
Final score	76.80±7.43	82.18±5.64	-5.37	-4.554	0.000
Total score	76.78±7.49	82.74±5.52	-5.95	-5.025	0.000

\* p<0.05 \*\* p<0.01

From Table 4 there is a significant difference between the Pre-test and Post-test usual scores (t=-4.283, p=0.001) in the experimental group. The average value of the Pre-test usual score (76.76) is significantly lower than that of the Post-test usual score average (83.29). There is a significant difference between the Pre-test and Post-test music performance scores (t=-2.892, p=0.011). The average value of the Pre-test music performance score (76.35) is significantly lower than the post-test average music performance score (81.59). There is a

significant difference between the Pre-test and Post-test basic skills scores ( $t=-3.923$ ,  $p=0.001$ ). The average value of the Pre-test basic skills score (77.88) is significantly lower than the post-test average basic skills score (82.47). There is a significant difference between the Pre-test practical teaching score and the Post-test practical teaching score ( $t=-3.358$ ,  $p=0.004$ ). The average value of the Pre-test practical teaching score (76.18) is significantly lower than the post-test average practical teaching score (82.47). There is a significant difference between the Pre-test final score and the Post-test final score ( $t=-4.554$ ,  $p=0.000$ ). The average value of the Pre-test final score (76.80) is significantly lower than that of the Post-test final score average (82.18). There is a significant difference between the Pre-test and Post-test total scores ( $t=-5.025$ ,  $p=0.000$ ). The average Pre-test total score (76.78) is significantly lower than the Post-test total score average (82.74).

**Table 5 Pre-test and Post-test Results of the Control Group**

	Paired (M±SD)		Mean difference (Pre-test-Post-test)	t	p
	Pre-test	Post-test			
Usual score	77.75±9.07	78.00±7.07	-0.25	-0.086	0.933
Music performance score	74.81±9.13	75.69±7.42	-0.88	-0.355	0.728
Basic skills test score	75.13±9.00	75.63±8.32	-0.50	-0.189	0.853
Practical teaching score	76.00±9.52	77.13±7.75	-1.13	-0.461	0.651
Final score	75.31±8.17	76.15±6.36	-0.83	-0.442	0.665
Total score	76.53±6.57	77.07±6.01	-0.54	-0.275	0.787

\*  $p<0.05$  \*\*  $p<0.01$

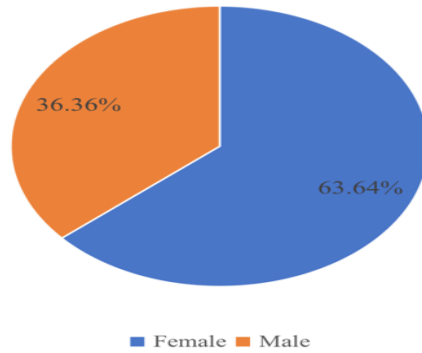
From Table 5 there is no significant difference between the six pre- and post-test indicators ( $p>0.05$ ) of the control group. Based on the analysis of the final test data, the pre-test and post-test results of the 1-17 experimental group students who accepted the new teaching model have shown significant improvement. Students whose scores were not exposed to the new teaching model did not show significant change. Therefore, the new teaching model can enhance students' piano application ability. Questionnaire Survey Analysis The questionnaire survey method is a standardized procedure commonly used in modern research, especially in survey studies. To more intuitively and objectively understand whether the new teaching model proposed in this study is effective during its implementation and to identify any existing issues, a questionnaire survey was planned for the 33 students from the 2022 cohort who participated in the course under this model. A total of 33 questionnaires were distributed, and 33 valid questionnaires were collected, resulting in a 100% response rate.

### The Structure of the Questionnaire is Shown in Table 6

**Table 6 The Structure of the Questionnaire**

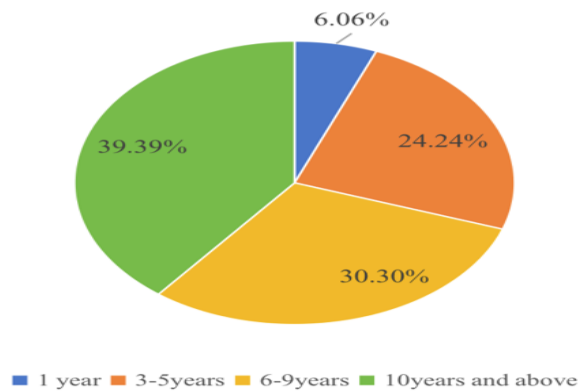
Measurement Direction	Items	Number of Questions
Basic Information	1-3	3
Course Evaluation	4-6	3
Teaching Method Evaluation	7-9	3
Willingness to Recommend the Course	10-12	3

Pie Charts Showing the Basic Information Survey Results (See Figure2)



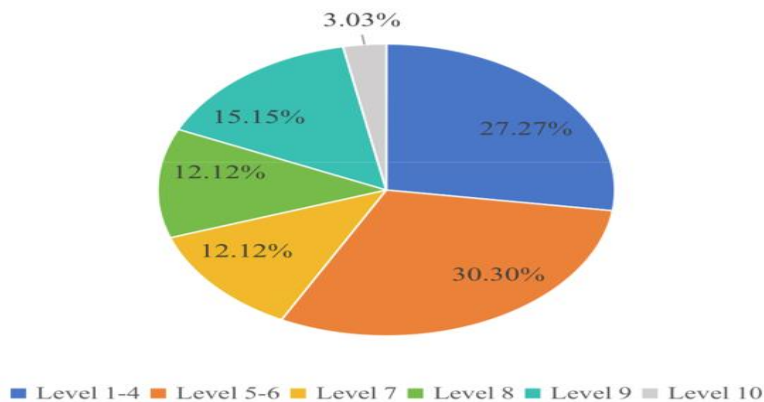
**Figure 2** Gender

The participants comprise 21 females, 63.64%, and 12 males, 36.36%.



**Figure 3** Piano learning time

For piano learning time, most participants are ten years and above, 13 or 39.39%, followed by 6-9 years for 10 or 30.30%, 3-5 years for 8 or 24.24%, and one year for 2 or 6.06%.



**Figure 4** piano level

For piano level, most participants are at Level 5-6, 10 participants or 30.30%, followed by Level 1-4, 9 or 27.27%; Level 9, 5 or 15.15%; Level 7- 8, 4 or 12.12%; and Level 10, 1 or 3.03%.

## Comments on Preference of Teaching Model

Table 7 Comments on Preference of Teaching Model

Item	Yes	No	Unsure	Total
Do you like the teaching model this semester?	27 (81.82%)	1 (3.03%)	5 (15.15%)	33 (100.0%)
Do you feel that you have achieved your expected goals this semester?	29 (87.88%)	1 (3.03%)	3 (9.09%)	33 (100.0%)
Did the teaching mode of this class help you master the teaching content?	28 (84.85%)	2 (6.06%)	3 (9.09%)	33 (100.0%)
Will the micro-lecture design of this class help you master the content of this course?	26 (78.79%)	1 (3.03%)	6 (18.18%)	33 (100.0%)
Is the case analysis in this lesson helpful for mastering the content of this course?	30 (90.91%)	2 (6.06%)	1 (3.03%)	33 (100.0%)
Is the course schedule for this semester helpful for mastering the content of this course?	29 (87.88%)	1 (3.03%)	3 (9.09%)	33 (100.0%)
Has your learning ability improved through studying this semester's courses?	28 (84.85%)	1 (3.03%)	4 (12.12%)	33 (100.0%)
Do you want this course to continue to use this teaching model?	30 (90.91%)	2 (6.06%)	1 (3.03%)	33 (100.0%)
Will this teaching model be adopted in the teaching of other contents?	29 (87.88%)	1 (3.03%)	3 (9.09%)	33 (100.0%)

From Table 7, it shows the preference of the students. Most of the students have positive attitude on the new teaching model, 81.82% like the teaching model, 87.88% achieved their expected goal, 84.85% agreed that the lecturer master the class well, 78.79% agreed that the micro-lecture design of this class help you master the content of this course, 90.91% agreed that this lesson is helpful for mastering the content of this course, 84.85% improved through studying this semester's courses, 90.91% want this course to continue to use this teaching model and 87.88%, teaching model should be adopted in the teaching of other contents.

### Discussion, Conclusion and Recommendation

#### CONCLUSION

#### Current Piano Teaching Status in Higher Education in China

The piano teaching method in Chinese higher schools is overly simplistic, focusing on skill training and performance rather than developing students' musical application abilities. Teachers often focus on demonstrations, providing limited practice opportunities, and suppressing students' interest in and enthusiasm for music. The curriculum Zhong Binglin, Zhao Yingsheng and Hong Yu (2009) is based on professional courses and a small number of elective courses, making it relatively single and requiring more cultivation of students' comprehensive abilities. The evaluation system is mainly based on performance examinations, which overemphasize technical indicators and neglect musical expression and creativity. In contrast, foreign colleges and universities have different teaching objectives for music performance majors, paying attention to music literacy and understanding musical works. The Piano Teaching Model ZHOU Haitao (2008) for Chinese Music Major Students in Higher Education follows three principles: subjectivity and autonomy, activity and quality, and creativity and quality. Teaching requirements YANG Mengbei, WANG Shaoyuan (2020) include a grading standard for the piano professional program, with six levels to achieve a certain level of piano playing ability within three years. Evaluation requirements include formative and summative evaluations, on-site reviews, written comments, and course evaluation forms.

## **Evaluation of Piano Teaching Model for Chinese Music Major Students in Higher Education**

There is a significant difference in Post-test usual scores between different groups ( $t=2.368$ ,  $p=0.024$ ). The average value of the Experimental group (83.29) is significantly higher than the average value of the Control group (78.00). There is a significant difference in Post-test music performance scores between different groups ( $t=2.324$ ,  $p=0.027$ ). The average value of the Experimental group (81.59) is significantly higher than the average value of the Control group (75.69). There is a significant difference in the Post-test basic skills score between different groups ( $t=2.263$ ,  $p=0.031$ ). The average value of the Experimental group (82.47) is significantly higher than the average value of the Control group (75.62). There is a significant difference in Post-test practical teaching scores between different groups ( $t=2.324$ ,  $p=0.027$ ). The average value of the Experimental group (82.47) is significantly higher than the average value of the Control group (77.12). There is a significant difference in Post-test final scores between different groups ( $t=2.886$ ,  $p=0.007$ ). The average value of the Experimental group (82.18) is significantly higher than the average value of the Control group (76.15). There is a significant difference in the post-test score between different groups ( $t=2.822$ ,  $p=0.008$ ). The average value of the Experimental group (82.74) is significantly higher than the average value of the Control group (77.07).

Developing micro-teaching resources and consolidating the foundation of the new mode of teaching. Teachers should combine each unit's teaching content and objectives, seize the important and difficult points, and produce scientific and reasonable micro-teaching resources. In this way, students can better understand and master the teaching content through watching micro classes and improving their learning effect.

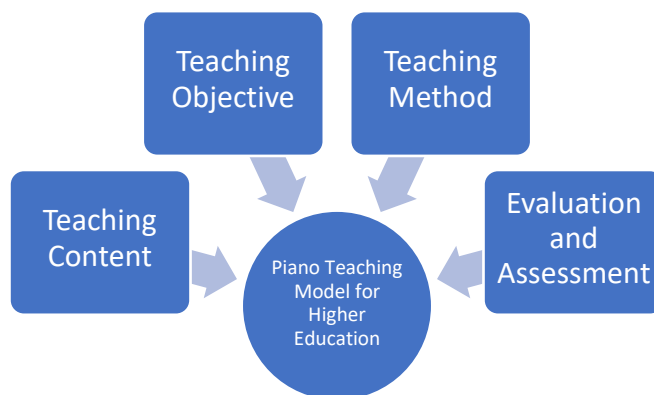
## **DISCUSSION**

The course objectives aim to encourage active participation in classroom activities and master basic piano accompaniment methods and performance techniques. Chang Cheng (2020) suggested that the teaching content focuses on music education majors, aiming to cultivate students' independent learning ability and artistic expression. In China, piano courses should be the focus of piano teaching for music majors, as low efficiency and poor quality hinder the development of students' vocational skills. Teaching content sets a grading standard for the piano professional program, Xie Xuefeng (2000) with six levels to achieve a certain level of piano playing ability within three years. Teachers should update traditional educational concepts, adopt a more open and flexible approach, and create diverse piano classrooms for students with different learning styles and paces. Teachers should divide Wen Rui, Liu Shijiang, Xiong Jianping (2008) the class into three parts: preparation, student sharing, and the final Q&A session, guiding students in active learning, expression, and in-depth thinking. Cui Yuyang (2021) stated that utilizing multimedia technology and micro-teaching resources can enhance piano teaching effectiveness in higher education. Feng Daming (2008) informed that Evaluation requirements include formative and summative evaluations, on-site reviews, written comments, and course evaluation forms. Formative evaluations focus on students' learning process, attitude, method, and effect, while summative evaluations assess students' ability to use the piano comprehensively, including piano performance, accompaniment, and teaching practice.

## **Recommendations**

The teaching objectives of this program are three: knowledge, ability, and quality. Knowledge aims to teach students about the piano evolution process, the history of piano art, and the genre of piano music works. Ability focuses on mastering basic piano performance methods and skills, enabling students to analyze and handle piano music works independently. Quality aims to develop students' aesthetic interest and aesthetic ability, understanding the emotions and values in the piano music culture. Robert M. Hutchins (1993) suggested that the teaching content includes basic piano theory and knowledge, including the structure of the piano, keyboard arrangement, articulation principles, and appreciation of piano music. Students learn basic piano playing methods, such as posture, hand shape, and finger strengthening. They also analyze the musical structure of piano works, understanding the role of musical language and the use of pedals. Burton R. Clark (1987) claimed that playing skills in piano ensembles include rhythmic training, metronome use, and ensemble and accompaniment training. Students learn about piano performance and aesthetics, fostering aesthetic interest and aesthetic ability. The program follows Pan Maoyuan (2017) the teaching model of piano majors in higher

music conservatories, adopting a cooperative teaching approach that emphasizes interaction and communication among students. This approach promotes learning and thinking through group collaboration and collective discussion, exposing students to different viewpoints and ways of thinking.



**Figure 5** the study and application of university piano teaching models

Thus, the study and application of university piano teaching models necessitate continuous exploration, updating, and flexible implementation by educators. It is Gassett O. Jose (1992) hoped that the findings of this study will provide theoretical guidance and practical significance for the reform of university piano teaching, thereby helping to improve students' applied performance abilities.

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