

A Study of the Influence of Teaching Systems and Talent Cultivation Models on the Teaching Effectiveness of Piano Majors in Chinese Higher Education Institutions

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Abstract – This study aims to explore the influence of teaching systems and talent cultivation models on the teaching effectiveness of piano majors in Chinese higher education institutions. With the rapid development of higher education in China, particularly the trend of specialization and internationalization in the field of arts education, the teaching quality of piano majors, as an essential component of arts education, directly impacts student development and China's international competitiveness in music education. This research employs a qualitative approach to analyze the key factors influencing the teaching effectiveness of piano education in Chinese universities from multiple dimensions. The study identifies that the improvement of teaching systems, the innovation of talent cultivation models, and the enhancement of faculty quality are the primary factors affecting teaching effectiveness. Based on these findings, the study suggests that university administrators should optimize aspects such as teaching organization, curriculum design, and teacher training to improve the quality of piano education and students' overall capabilities. This research provides theoretical support and practical guidance for the further development of piano education in Chinese higher education institutions.

Keywords – Piano majors; teaching systems; talent cultivation models; teaching effectiveness

I. INTRODUCTION

The piano, an iconic instrument renowned globally for its innovative spirit and transformative influence, has undergone remarkable evolution. Originating from the harpsichord and clavichord, it surpassed its predecessors with Bartolomeo Cristofori's 'gravicembalo col piano e forte', revolutionizing music by enabling dynamic volume control through keyboard strikes (Pollens, 2022). This advancement fostered richer musical expression. Throughout history, stylistic variations like Viennese and English pianos broadened creative horizons. In the 20th century, electronic and digital pianos emerged, blending traditional piano experience with electronic features like diverse timbres and recording capabilities, enhancing its expressive range. As a cornerstone of Western classical music, piano teaching quality attracts widespread attention. Amid globalization and intensified music education exchanges, international research on piano pedagogy intensifies, focusing not just on technical proficiency but also on artistry and educational methodologies, striving to

elevate the overall standard of piano instruction worldwide (Cheng, 2021).

In comparing the problems faced by China's piano education system with those in other countries, such as Europe (particularly Germany and Austria) and the United States, we can observe distinct approaches and challenges that are both unique and shared.

In Europe, Germany and Austria stand out for their emphasis on music's historical and cultural traditions in piano education (Fan, 2020). While this approach fosters a deep understanding of music and its heritage, it may also inadvertently limit students' exposure to more contemporary or experimental forms of expression (Wang & Guo, 2022). However, the rigorous classical music training and respect for original compositions serve as cornerstones of their educational system, ensuring a strong foundation in technique and interpretation.

In contrast, the United States offers a more diverse and innovative piano education landscape, shaped by its multicultural society. The emphasis on individuality and creativity encourages students to explore their unique musical voices, though this may come at the cost of a less standardized or rigorous technical training (Li, 2021). The flexible curriculum and opportunities for improvisation and composition reflect a broader vision of what a musician can be.

China's piano education system, traditionally focused on technical proficiency and precise interpretation of classical works, has faced criticism for potentially stifling artistic creativity and individual expression (Qian, 2022). However, recent trends indicate a shift towards incorporating more artistic sensibility and creative teaching methods into the curriculum, seeking a balance between technical mastery and artistic expression. This evolution reflects China's recognition of the importance of fostering well-rounded musicians who can both execute complex pieces flawlessly and convey their own artistic vision.

Through systematic theoretical analysis, this study will deeply explore the key factors that affect the teaching effectiveness of piano major in colleges and universities in China, and on this basis, put forward practical improvement strategies. These strategies aim at promoting the continuous optimization and development of piano education, improving students' comprehensive quality and cultivating more excellent piano professionals. The research objectives are as follows:(1) To explore whether education policy has a positive impact on the teaching effectiveness of piano major in colleges and universities;(2) To explore whether teachers' effectiveness has a positive impact on the teaching quality of piano major in colleges and universities;(3) To explore whether teaching system has a positive impact on the teaching effectiveness of piano major in colleges and

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universities;(4) To explore whether talent cultivation mode has a positive impact on the teaching effectiveness of piano major in colleges and universities.

This study proposes practical solutions to directly address the specific factors affecting the effectiveness of piano teaching in Chinese universities.In order to deeply explore the key factors that affect the teaching effectiveness of piano major in colleges and universities in China, this paper puts forward the following research questions: (1) Does education policy have a positive impact on the teaching effectiveness of piano majors in colleges and universities? (2) Does teachers' quality have a positive impact on the teaching effectiveness of piano majors in colleges and universities? (3) Does teaching system have a positive impact on the teaching effectiveness of piano majors in colleges and universities? (4) Does talent cultivation mode have a positive impact on the teaching effectiveness of piano majors in colleges and universities?

II. PROBLEM STATEMENT

Synthesis of the pertinent perspectives of scholars on the factors influencing the effectiveness of piano instruction in academic institutions reveals the following key elements:

Education Policy

In exploring the factors that affect the quality of teaching piano majors in Chinese higher education institutions, the important role of educational policies has to be mentioned. As a framework guiding the development of piano education, education policy has a profound impact on teaching content, methods, evaluation system and other aspects. As the state attaches great importance to aesthetic education, piano education, as an important part of aesthetic education, has become increasingly prominent in the higher education system. The issuance of the relevant guidance framework by the Ministry of Education not only standardizes the basic requirements of piano teaching, but also provides policy support for the improvement of teaching quality.

The degree of importance attached to piano education by national education policies determines the positioning of piano majors in higher education. Hu (2022) analyzed the impact of the "double-decrease" policy on piano education, and proposes personalized teaching and innovative methods to adapt to policy changes and improve teaching quality.^[on page 35]

The regulations on the content of piano teaching in the education policy have a guiding role in teaching methods and objectives. The policy encourages innovative teaching methods and advocates teaching in combination with modern educational technology and students' personality development, which helps to stimulate students' interest in learning and improve the interactivity and effectiveness of teaching. Lu (2022) discussed the challenges and opportunities facing piano teaching in China in a multicultural context. Emphasizing the impact of cultural diversity on the content and methods of piano teaching, she puts forward reform proposals such as integrating multicultural elements and innovating teaching modes,

aiming at enriching the teaching content and enhancing students' cultural literacy and piano playing skills.

Wang (2023) focuses on the teaching quality assurance system of piano collective class for preschool education majors in private applied colleges and universities. She analyzes the current problems of piano collective class teaching and puts forward suggestions to build a teaching quality guarantee system, including improving the teaching management system and strengthening the construction of the faculty, in order to improve the teaching quality of piano collective class.

In addition, the education policy also involves the evaluation system for students. Wu (2023) explores the innovative development of college piano teaching based on the development of the times. She analyzes the book "Research on the Piano Teaching System and Development of College Piano in the New Era" and explores the path and strategy of the innovative development of college piano teaching based on the background of the development of the era. She believes that college piano teaching should follow the pace of the times and constantly update the teaching concepts and methods to meet the social demand for high-quality music talents.^[8]

The education policy also provides support for international exchanges and cooperation in piano education. The policy encourages the introduction of international advanced education concepts and teaching methods, and promotes academic exchanges at home and abroad, which not only improves the quality of teaching, but also broadens the international perspective of students. Zhou (2023) focused on the dissemination of China's piano culture under modern media technology. She analyzes the influence and role of modern media technology on the dissemination of piano culture, and discusses how to use modern media technology to promote the dissemination and development of piano culture. She believes that modern media technology provides a broader platform and channel for the dissemination of piano culture, which helps to enhance the popularity and influence of piano culture.

Teacher's Quality

In the field of piano teaching in Chinese higher education institutions, teacher quality is a key factor in teaching quality. Piano teachers not only need to have high-level performance skills and music theory knowledge, but also should have advanced teaching concepts, innovative teaching methods and good teacher-student interaction ability.

Teachers with high level performance skills and profound knowledge of music theory can better teach students the essence of piano art. Yan & Yin (2020) discussed the paths and challenges of piano teachers' professional growth from the perspective of teachers' professional development, and emphasized the importance of continuing education and practice for piano teachers' professional skills improvement.

Zhang (2020) focused on the construction of "dual-teacher" piano teachers in preschool education majors in higher vocational colleges and universities, and explored the importance and methods of cultivating piano teachers with professional theoretical and practical teaching abilities.

Wang (2019) explained the core tasks of piano teaching, including skill training, musical understanding and creative expression, and discussed the basic conditions that piano teachers should have, such as professional skills, teaching ability and cultural literacy.

In addition, the educational philosophy of teachers is crucial to the overall development of students. Zheng (2022) discussed the reform of piano teaching under the guidance of the new curriculum concept. He emphasized that under the guidance of the new curriculum concept, piano teaching should highlight the main position of students, improve the efficiency of classroom teaching, and focus on the diversity of teaching methods and the comprehensiveness of teaching content. This is of great significance for enriching students' artistic connotation and promoting their all-round development. Zhou (2023) evaluated the book Concepts and Practices of Piano Education and Teaching and outlined the basic theoretical knowledge of piano teaching and guidance on teaching practices. He emphasized the book's comprehensiveness and practicality in terms of piano education history, teaching theory, performance techniques, and teaching cases, providing valuable reference materials for piano teachers.

Good teacher-student interaction is equally crucial to improving the quality of teaching and learning. Teachers should establish a supportive learning environment through positive motivation and personalized feedback to help students build confidence and overcome learning challenges. Yang (2020) emphasized the important role of innovative thinking and teacher-student interaction in piano teaching. According to the author, innovative thinking is an indispensable element in piano teaching, while teacher-student interaction is an important way to cultivate students' innovative thinking. By strengthening teacher-student interaction, students' learning interest and creativity can be stimulated, and the effect and quality of piano teaching can be improved. [5]

Teaching System

In the literature research on the teaching quality of piano majors in Chinese higher education institutions, the construction of piano teaching system is regarded as another key factor affecting the teaching quality. The piano teaching system includes several interrelated components such as curriculum, teaching content, teaching methods, evaluation mechanism, etc., which together determine the direction and effect of teaching activities.

The modernization and internationalization of teaching content is an important aspect of improving teaching quality. Zhao (2020) analyzed the current situation and development trend of contemporary piano education in China from a cultural perspective. She believes that piano education should pay more attention to the inheritance and development of cultural connotation, combine traditional culture with modern music, and cultivate students' cultural self-awareness and musical innovation ability. Zhang (2020) discussed the reform strategy of higher vocational piano teaching from the perspective of multiculturalism. She believes that piano teaching should incorporate multicultural elements to cultivate students' intercultural literacy and innovation ability. The article also puts forward specific

reform measures, such as optimizing curriculum, innovating teaching methods and expanding teaching resources, aiming to improve the quality and effect of higher vocational piano teaching.

Furthermore, the innovation of teaching methods is crucial to stimulate students' interest in learning and creativity. The traditional teacher-centered teaching mode has gradually changed to a student-centered teaching mode. Interactive teaching methods such as project-based learning, case study teaching, and group discussion can improve students' participation and learning effect. Sun(2021) explored the application of the module teaching method in the piano course of preschool education majors in colleges and universities, emphasizing the advantages of the method in improving teaching efficiency and adapting to students' individualized learning needs. Liu (2023) studied the application of the flipped classroom model in piano teaching, analyzing how the flipped classroom promotes students' active learning and deepens their understanding, and how to improve the interactivity of teaching through technical means.^[1]

In addition, the richness of teaching resources is also an important factor affecting the quality of teaching. Including high-quality faculty, advanced teaching facilities, and rich teaching materials are important to improve the quality of teaching. Zhao (2020) focuses on the construction of online teaching resources sharing and evaluation mechanism of college piano.

Through the construction of online teaching resource sharing platform, the optimal allocation and efficient use of resources can be realized. At the same time, the establishment of a scientific evaluation mechanism can ensure the quality and effect of online teaching and provide a strong guarantee for students' learning. Guo (2020) discussed the application of Internet resources in university basic piano teaching is discussed. Internet resources are characterized by richness, convenience and interactivity, which can provide powerful support for piano teaching. By utilizing Internet resources, teachers can innovate teaching methods and means to improve students' learning interest and participation. At the same time, students can also utilize Internet resources for independent learning and expanding learning to enhance the learning effect. Yu (2023) discussed the current situation of piano curriculum resources development in music teaching is studied. He analyzed the problems and deficiencies in the current development of piano curriculum resources and put forward corresponding suggestions for improvement. He believes that the development of piano curriculum resources should focus on practicality, diversity and innovation to meet the learning needs of different students. At the same time, it is also necessary to strengthen the integration and optimization of curriculum resources to improve the efficiency and quality of resource use.

Talent Cultivation mode

In China's higher education system, the cultivation of professional piano talents is an important task in the field of music education. This process not only requires students to master superior piano playing skills, but also involves in-depth study of music theory knowledge, comprehensive

enhancement of cultural literacy, and active cultivation of creative ability. The teaching quality of piano majors is affected by a variety of factors, including the scientific construction of the piano teaching system, the professionalism of teachers, the adequate supply of teaching resources, the innovative use of teaching methods, and the students' personal motivation and commitment to learning.

The development of professional pianists in higher education involves a number of dimensions. Guo (2020) explored ways to stimulate students' interest in learning piano and improve their motivation, emphasized the importance of interest and motivation in the piano learning process, and proposed specific teaching strategies. Fan(2020) analyzed the key elements in the selection and cultivation of piano professionals, including individual talent, educational environment and personal efforts, and discussed how to synthesize these elements to cultivate high-quality piano professionals. Ji (2023) studied the cultivation mode of applied talents and discussed how to improve the applied ability and market adaptability of piano direction students of music majors through teaching reform and practical teaching. Liu (2023) focused on the cultivation mode of compound piano professionals in local colleges and universities. She believes that with the diversification of social demand for music talents, local colleges and universities should actively explore the cultivation mode of compound piano professionals. This cultivation mode should focus on the overall development of students, including the cultivation of piano playing skills, music theory literacy, artistic practice ability and other aspects. At the same time, it is necessary to strengthen school-enterprise cooperation to provide students with more practice opportunities and employment channels.

Overall, the cultivation of professional piano talents is a complex process involving multiple factors and requiring collaboration of various parties. By building a scientific cultivation system, adopting innovative teaching methods, providing rich teaching resources and establishing an effective evaluation mechanism, more excellent professionals can be cultivated for the piano specialty in Chinese higher education.

Conceptual Framework

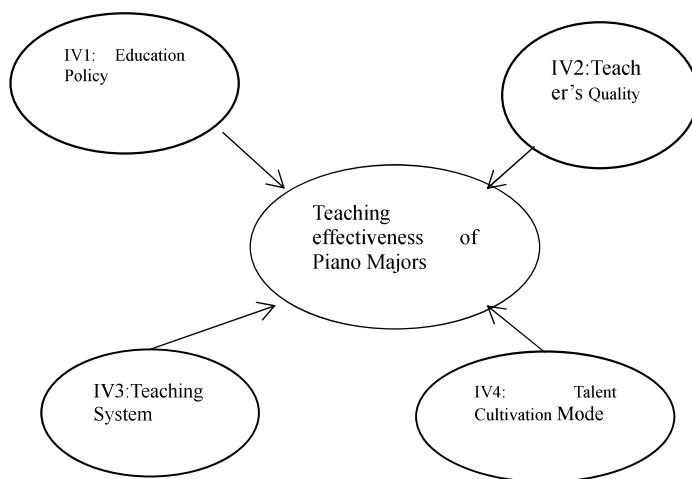


Figure 2.1 Conceptual Framework

When discussing the current situation and development of piano education, this paper sets the following conceptual framework of variables: Independent variables include piano education policy, teacher quality, teaching system and professional piano talent training, which are important components of piano education environment, and their changes may directly affect the effectiveness of piano education. The dependent variable is the training effect of professional piano talents, including students' skill level, music accomplishment and artistic expression. By exploring the relationship between independent variables and dependent variables, we can deeply understand how various elements in the piano education system work together to affect the training of professional piano talents, so as to provide a scientific basis for the reform and development of piano education.

III. LITERATURE REVIEW

This study employed a qualitative research methodology. The data collection process primarily entailed a review of the existing literature on the subject matter, as previously researched by other scholars. In the process of data collection, this study primarily analyses previous scholars' research on the factors influencing the quality of teaching piano to majors in higher education institutions. This provides a preliminary theoretical foundation for this paper.

Furthermore, a systematic summary of the teaching situation of piano majors in colleges and universities in China was made on the basis of a synthesis of the conclusions of previous studies, taking into account the specific context of higher education in China. This synthesis included a systematic review of existing theories and a detailed examination of the specific circumstances of piano teaching in higher education institutions in China. This systematic review of the literature provides a theoretical and methodological foundation for the writing of this study.

IV. FINDINGS

A synthesis of the research findings and observations of the scholars yielded the following results:

Education Policy have a Positive Impact on the Teaching Effectiveness of Piano Majors in Colleges and Universities

The positive impact of education policy on the effectiveness of piano teaching in higher education can be seen in the introduction of new teaching concepts and the development of innovative teaching methods (Liu, 2023). The introduction of modern educational theory and the concept of core literacy has prompted educators to consider the role of the student as a subject in their own right. This has led to a shift in pedagogical practice, whereby students are encouraged to take an active role in the classroom and to develop their capacity for innovation and practical ability (Rao, 2020). Furthermore, the education policy has facilitated the enhancement and innovation of teaching content, thereby expanding students' knowledge base and

improving the relevance and practical applicability of teaching through the optimization of teaching materials and the incorporation of new content.^[6]

Furthermore, the education policy also facilitates enhancements to the teaching evaluation system and the reinforcement of the development of teachers. A diversified teaching evaluation system can examine students' learning in all aspects, respecting students' individual differences and promoting students' personalised development (Sun, 2021). The emphasis is placed on the comprehensive enhancement of teachers' quality, whereby they are encouraged to engage with new piano compositions on a regular basis, enhance their professional abilities and cultural literacy, provide guidance to students in terms of their artistic outlook and values, and facilitate a mutually beneficial learning experience. Collectively, these measures contribute to the enhancement of the quality of piano education at the university level, aligning it more closely with the societal demand for individuals with expertise in music and the arts (Wu, 2023).

In order to enhance the effectiveness of piano instruction at the college and university level, the education policy proposes the implementation of specific strategies. These include the updating of pedagogical approaches, the prioritisation of student-centred and active learning, the enrichment of content through the integration of traditional and modern piano art knowledge, and the innovation of teaching methods through the adoption of diverse techniques such as situational simulation (Xie, 2020). The use of task-driven and multimedia aids; the enhancement of teacher training to improve professionalism and teaching innovation ability; and the improvement of the evaluation system are also recommended. In order to improve the evaluation system, students are required to implement process evaluation and personalised feedback; to increase the practical aspects; and to improve students' performance and creative skills through stage practice and creative activities. These strategies are aimed at cultivating students' comprehensive musical literacy, stimulating innovative thinking, and meeting the social demand for high-level artistic talents in piano.

Teachers' Quality have a Positive Impact on the Teaching Quality of Piano Majors in Colleges and Universities

The quality of teaching staff has a considerable positive effect on the enhancement of piano teaching standards within colleges and universities. High-quality teachers are able to demonstrate a profound comprehension of the nuances and objectives of piano education. They employ sophisticated pedagogical concepts and methodologies to engage students and foster their creativity (Yang, 2023). Such individuals typically possess substantial professional expertise and artistic training, enabling them to effectively instruct in piano performance and musical theory while simultaneously guiding students to gain profound insights into the nuances of musical compositions, thereby fostering their musical appreciation and artistic expression abilities. Furthermore, effective teachers are mindful of the importance of teaching interaction (Zhang, 2020). They facilitate this through the utilisation of effective communication and feedback, enabling them to gain a timely

understanding of students' learning needs and issues. This, in turn, allows them to provide students with personalised guidance and assistance.

Concurrently, teachers' commitment to professional development and a lifelong learning attitude are also pivotal in enhancing the quality of their teaching. The continuous acquisition of new teaching techniques and concepts allows teachers to adapt to the requirements of educational reform, innovate teaching methods and enhance the effectiveness of their teaching (Wang, 2023). Teachers can act as role models and convey educational sentiment, inspiring students to pursue excellence and establish a positive artistic outlook and values, thus facilitating their progress and growth in piano education (Rao, 2020). By improving the quality of teachers, colleges and universities can cultivate more musical talents with professionalism and an innovative spirit.

Strategies to enhance the quality of piano teachers should encompass the organisation of regular professional training and academic seminars with the objective of updating teachers'

professional knowledge and teaching skills. Furthermore, teachers should be encouraged to participate in exchanges at home and abroad with the aim of broadening their international outlook and assimilating advanced teaching concepts (Li, 2021). Finally, teaching reflection should be implemented. Peer review can facilitate mutual learning and growth among teachers. Providing opportunities for artistic practice can enhance teachers' stage presence and teaching demonstration skills. An incentive mechanism can recognise teaching innovation and academic achievements, inspiring teachers to continuously enhance their professionalism and enthusiasm for teaching (Guo, 2020). These measures can effectively enhance the professionalism of teachers and the effectiveness of teaching.

Teaching System have a Positive Impact on the Teaching Effectiveness of Piano Majors in Colleges and Universities

The teaching system has a substantial, beneficial impact on the calibre of piano professional teaching in colleges and universities. It is believed by scholars that a standardised teaching system can ensure the systematicity and coherence of teaching content (Li, 2021).. This is evidenced by the Music School of Shandong Normal University, which has effectively improved the quality of teaching by accurately grasping the key points of learning at different stages through a stage-by-stage, step-by-step teaching model. Furthermore, innovations in the teaching system, such as the combination of modern educational theory and the concept of core literacy, and the adoption of diversified teaching methods, including situational simulation and task-driven, have the potential to enhance students' practical abilities and innovative thinking, and to promote the overall development of music literacy (Liu, 2023).

Furthermore, scholars have highlighted the significance of individualised teaching and a teaching system that prioritises artistic practice in enhancing the effectiveness of education. By respecting students' individual differences, providing personalised instruction

and increasing opportunities for stage practice, students can be inspired to learn, and their playing skills and musical expression can be enhanced (Lu, 2022). At the same time, the construction of a diversified teaching evaluation system, combining process evaluation and outcome evaluation, can more comprehensively examine the learning situation of students, and promote the personalised development of students (Liu, 2023). This is a positive contribution of the teaching system to the improvement of the quality of piano teaching in colleges and universities.

In order to enhance the efficacy of piano instruction in higher education institutions, a series of targeted strategies have been identified. The curriculum system should be optimised, with greater integration of theory and practice, and an increase in interdisciplinary courses to broaden students' knowledge. Teaching methods should be innovated, with the use of case studies, group discussions, interactive learning and other diversified teaching methods. Teacher training should be strengthened, with a focus on the professional training of teachers to enhance teaching and research capabilities. A reform of the evaluation system is required, with the establishment of a comprehensive, objective and fair evaluation mechanism, focusing on process evaluation. In addition, practical teaching should be enhanced by increasing stage performances, social practice and other activities to enhance students' practical ability (Pollens, 2022). Furthermore, international exchange and cooperation should be promoted to advance the international vision of teachers and students, and enhance international competitiveness. The implementation of these strategies will facilitate an enhancement in the quality of teaching and the effectiveness of talent cultivation within the piano programme.

Talent Cultivation Mode have a Positive Impact on the Teaching Effectiveness of Piano Majors in Colleges and Universities

The talent cultivation mode has a beneficial effect on the effectiveness of teaching provided to piano majors in colleges and universities. Scholars posit that the student-centred talent cultivation model can more effectively stimulate students' learning interest and creativity, and meet the learning needs and development potential of different students through personalised teaching methods and curriculum (Qian, 2022). This model places an emphasis on the active participation of students and the cultivation of their practical abilities, thereby enabling students to develop holistically in piano performance, music creation and theoretical research.

Furthermore, scholars have indicated that a talent cultivation model that integrates market demand and career orientation facilitates students' adaptation to societal and career-related requirements (Rao, 2020). Through interactions and collaboration with industry experts, as well as involvement in authentic music production and performance activities, students can obtain valuable practical experience and enhance their professional abilities and career prospects (Sun, 2021). Concurrently, this model also motivates educators to consistently update their teaching content and methodologies to align with the advancements and transformations in music education,

thereby ensuring the sustained enhancement of teaching effectiveness.

Specific strategies to enhance the efficacy of talent training include: formulating flexible and diversified teaching plans to accommodate the learning styles and needs of different students; reinforcing the practical teaching aspect and augmenting students' practical abilities through workshops, concerts and collaborative projects; reinforcing the connections with the industry, providing internships and employment opportunities for students, and ensuring that the teaching content is aligned with the occupational standards; encouraging teachers' professional development and conducting regular updated training in pedagogy and subject knowledge; and establishing a feedback mechanism to continuously optimise the curriculum and teaching methods through evaluation by students, teachers and industry experts (Wu, 2023). These measures will facilitate the cultivation of highly proficient piano professionals who are equipped to meet the demands of the contemporary era.

V. DISCUSSION

The study of the teaching effectiveness of piano majors in Chinese colleges and universities is of great significance for the enhancement of the overall level of music education and the cultivation of high-quality musical talents. As a crucial component of musical education, the calibre of piano instruction has a direct bearing on the professional competencies and artistic

Development of students. In light of the growing demand for musical and artistic talent in society, the provision of high-quality piano education can meet market demand and facilitate student employment. Despite the importance of studying the teaching quality of piano majors in Chinese higher education institutions, there are some limitations to this research. The uneven distribution of geography, culture, and educational resources may result in significant differences in the quality of piano teaching across different regions and institutions, introducing a degree of complexity to the study.

The findings of this study demonstrate that the study of piano teaching effectiveness is intimately connected to a number of related fields. It is interdisciplinary in nature, drawing upon a multitude of fields, including pedagogy, psychology, and the arts, thus offering a fertile ground for interdisciplinary research. The findings of this study can inform the development of strategies for enhancing the quality of piano education in higher education institutions, as well as inform the formulation of related policies. The application of the research findings from this study can be seen in two main areas: teaching practice and the formulation of educational policy. At the level of teaching practice, the research results can inform teachers of the necessity to update teaching methods, optimise the curriculum and improve teaching effectiveness. At the level of education policy formulation, the research results can provide a basis for decision-making for government and education management departments, facilitate the rational allocation of educational resources, and inform educational reform.

In order to ensure the objectivity and fairness of the evaluation of teaching quality among piano majors in Chinese colleges and universities, it is recommended that a unified teaching quality evaluation system be established in subsequent developments. It is imperative to reinforce the development of the teaching workforce, enhancing the professionalism and pedagogical proficiency of educators. It is recommended that teaching content and methods be innovated, and that students' personal development and creative abilities be cultivated. It is recommended that investment in piano education be increased, that teaching facilities be improved, and that more practice opportunities be provided. It is anticipated that these measures will result in an effective improvement in the teaching effectiveness of piano majors in Chinese higher education institutions, in the cultivation of more excellent musical talents, and in the promotion of the development of Chinese music education.

ACKNOWLEDGEMENT

The authors would like to thank the City of University for providing the supports for this study

REFERENCES

Cheng, Y. (2021). Discussion on effective measures of university basic piano teaching supported by Internet resources. *Good Day (031)*, 1-1.

Fan, Q.J. (2020). Selection and Cultivation Elements of Piano Professionals. *Sichuan Theater*, (009), 158-160.

Guo, Y.R. (2020). An Introduction to the Methods of Cultivating Students' Interest and Learning Motivation in Piano Teaching. *Times Education: Late(9)*, 0115-0115.

Hu, M.Q. (2022). Piano education industry under the "Double-decrease" policy. *Air America* (4), 670 - 672.

Ji, H. (2023). Construction of talent training system for piano majors in higher vocational colleges. *Employment and Security*, 4, 145-147.

Li, H. H. (2021). Reform and thinking about piano teaching in college music majors. *Chinese Science and Technology Journal Database (Citation Edition) Education Science* (10), 3.

Liu, J. J. (2023). Research on the utilization and practice of flipped classroom in piano teaching in colleges and universities. *Art Technology*, 36(21), 231-233.

Lu, Y. (2022). Research on piano teaching reform of teacher education majors under the perspective of core literacy. *Avant-garde*, 12, 61-63.

Liu, D. (2023). Exploring the significance and effective path of piano popularization education in colleges and universities. *Chinese Science and Technology Journal Database (full text version) Education Science*, (4), 3.

Pollens, S. (2022). A History of Stringed Keyboard Instruments. *Cambridge University Press*.

Qian, W. Z. (2022). The development history of Chinese and Western piano and the development trend of piano quality education in China at the current stage. *Art Education*, (6), 90-93.

Rao, N. J. (2020). Outcome-based education: An outline. *Higher Education for the Future*, 7(1), 5-21.

Sun, Y. (2021). On the use of modular teaching method in piano courses for preschool education majors in colleges and universities. *Music Education and Composition*, (006), 32-37.

Wu, Z.Y. (2023). Exploring the Innovative Development of College Piano Teaching Based on the Development of the Era--Reviewing the Research on the Piano Teaching System and Development of College Piano in the New Era. *Chinese College Science and Technology* (3), I0021-I0021.

Wang, W.Q. (2023). Research on the quality assurance system of teaching piano group lessons for preschool education majors in private applied colleges and universities. *Talent* (16), 189-192.

Wang, C., & Guo, L. L. (2020). The evolution of European piano playing schools: The development of the "weight school." *Art Education* (04), 89-92.