

Exploring the Teaching Challenges in Chinese Secondary Vocational Piano Education

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Abstract: *The term generally describes the various challenges and barriers that educators may encounter while instructing students in secondary vocational piano education. Such challenges could have to do with things like the classroom setting, instructional materials, student-teacher relationships, teaching techniques, and instructional tactics. This review gathers and arranges various academic viewpoints on the difficulties encountered in secondary vocational piano instruction, as well as some suggested approaches and techniques for overcoming them. To understand and investigate how secondary vocational piano educators with varying backgrounds and experiences identify and address the issues they face in the classroom, the researcher is considering using qualitative research methodologies. The expected findings may provide useful teaching methods and strategies to resolve problems in secondary vocational piano instruction. They may also offer theoretical guidance and helpful encouragement for the field's advancement to address present issues, improve instruction's efficacy, and encourage changes and advancements in associated social spheres.*

Keywords: Secondary Vocational School, China, Piano Education, Teaching Challenges, Teaching Strategies

1. Introduction

To help the reader navigate this conceptual work, this section explains the difficulties of teaching piano at the secondary vocational level, its research background, the research questions and objectives, and the structure of the dissertation.

1.1 present the theme

In 2012, the Chinese Ministry of Education mandated those piano lessons are essential for secondary vocational education in early childhood education, aligning with national standards. This emphasis on piano instruction is reflected in the teaching requirements for these programs (2012). The Ministry introduced the concept of dual-qualified teachers, requiring vocational instructors to possess both professional competencies and pedagogical skills to build a high-quality teaching team. Consequently, educators in these institutions must meet competency assessment standards (2022). The demand for qualified music educators has increased due to the expansion of music programs in secondary vocational schools (Liu, 2018; G. Xu, 2021). This aligns with the Ministry's criteria for dual-qualified educators, focusing on competency levels and diverse teaching methods (Ministry of Education of the People's Republic of China, 2022). However, challenges in piano teaching persist, including instructors' proficiency,

students' varied learning abilities, curriculum design differences, and inconsistent teaching resources. By identifying these challenges, educators can better address issues, and relevant departments can implement targeted curriculum or policy changes.

1.2 Research background

The Chinese Ministry of Education began collecting research reports from 13 provinces in the early 20th century to enhance secondary vocational education. Jiang (2000) highlighted the government's commitment to this goal. In 2014, the "Develop Standards for Music Major Teaching in Secondary Vocational Schools (Trial)" set national criteria for curriculum structure, teaching hours, instructional methods, practical learning environments, and faculty qualifications (2014). These standards specify the traits, knowledge, and performance skills expected from music educators.

In 2022, the Ministry outlined basic requirements for dual-skilled secondary vocational educators, categorized into junior, intermediate, and senior levels, focusing on professional knowledge, research leadership, and vocational skills (2022). Despite these standards, challenges persist in music education within secondary vocational schools, which vary in their emphasis on music (Fan, 2021). A lack of integrated music textbooks leads to unstructured course content, with schools prioritizing certain music subjects over others. Enhancing the consistency of music education and adopting standardized curricula will benefit students (Fan, 2021).

Research indicates that secondary vocational students would benefit significantly from piano improvisational accompaniment practice. However, early childhood education specialists are not developing their improvisational skills adequately (Lin, 2022). Increasing training and providing students with more hands-on experience will enhance their readiness for careers in music. Some researchers highlight that student struggle to find time for learning improvised accompaniment, hindering their ability to meet future workforce standards. Administrators must address this issue (Zhen, 2016). Suggestions for improvement include supporting creative teaching models, enhancing curriculum design, simplifying music teaching materials, and expanding teachers' skills (Zhen, 2016). Improved music education can better prepare students for their careers and personal development.

1.3 Research purpose and research problems

The objective of the study is to understand the current environment and status of piano training in Chinese secondary vocational schools. The study seeks to examine and delineate the principal impediments to secondary vocational piano education, encompassing challenges associated with educators, student learning difficulties, and concerns regarding instructional resources. It aims to address these challenges to improve secondary vocational piano education and investigates techniques to elevate instructional quality and the professional development of piano educators in secondary vocational institutions.

- i. Research Question 1: What challenges might secondary vocational piano instructors face in their pedagogical practice?
- ii. Research Question 2: What approaches and strategies are employed to address these challenges?

1.4 Article structure

In the conceptualization section, the researcher will define teaching challenges in secondary vocational schools precisely. This will be followed by a discussion of relevant history, literature, and theoretical frameworks, with a focus on secondary vocational schoolteachers.

The methodology will employ qualitative research techniques, including observations and interviews, to gain a deeper understanding of the unique difficulties and coping strategies of vocational piano teachers. This approach allows for a more nuanced understanding of teaching challenges and insights into instructors' cognitive processes and pedagogical practices.

The section on expected results will outline potential findings, including specific instructional strategies that may help address these issues. Exploring teaching challenges could reveal previously overlooked concerns or inspire educators to develop new teaching resources and innovative methods, considering practical application, academic significance, and future growth. The discussion will analyze possible research limitations and the applicability of the concept of teaching challenges to current research and real-world scenarios. The significance and potential benefits of this research will be reiterated, highlighting its contribution to advancing piano instruction theory. Future studies should explore comprehensive improvements in piano instruction, effective teaching strategies, and ways to enhance student outcomes while addressing teaching challenges.

2. Conceptual explanation

At this segment, the researcher will define the issues of teaching piano at secondary vocational institutions and discuss the background, relevant literature, and theoretical underpinnings. The researcher will examine the concept's development and fundamental elements.

2.1 Definition

This study describes the challenges Chinese secondary vocational school piano teachers face. These issues may affect student learning, instruction efficiency, and classroom efficiency. Here are some challenges Chinese secondary vocational education may face: Teachers must give individualised instruction and focussed assistance programs since students have different learning motivation, aptitude, comprehension, and styles (Du, 2022; D. Xu, 2020; J. Zeng, 2021; Y. Xu, 2019).. Teaching is harder if pupils lack self-direction and don't want to learn piano (Xue, 2022; D. Xu, 2020). According to the teaching environment, inadequate practice rooms, classroom supplies, and instructional materials may affect secondary vocational school piano teachers' and students' learning (Sheng, 2022; H. Jiang, 2017). The teaching atmosphere and efficacy can be affected by inappropriate curriculum content, inefficient teaching methods, strict teaching strategies, disordered classroom management, and more (Xue, 2022; Liu, 2018). These are the challenges of teaching piano in secondary vocational schools. Piano teachers must continually study, research, and challenge to improve learning and instruction.

2.2 Conceptual background

Changes in national education policy have influenced China's educational goals and targets throughout history. Since the 1950s, Premier Zhou Enlai has promoted secondary vocational schools to meet demand (Zhang, 2014). China's technical talent training system is growing rapidly, and secondary vocational institutions have grown significantly over the previous 20 years. In 1985, the state stressed that secondary vocational education is the weakest link in the education system and must be improved (2008). The state held three national vocational education conferences in 1986, 1991, and 1996. Due to economic development's demand for trained technical talent, secondary vocational education changed structurally, resulting in higher vocational education. Several laws and policies were passed during this time to advance vocational education and encourage its expansion (Chen et al., 2021).

The state expanded higher education in 1999 to reflect the modernisation trend. This campaign increased China's higher education enrolment to 15% by 2002. Regular full-time college admissions increased 4.7-fold from 1998 to 2005 to 5.04 million (Ministry of Education of the People's Republic of China, 2008). According to the Ministry of Education's 2005 Report on the Status of Vocational Education, over 700 important vocational schools were merged and elevated to higher education (Chen et al., 2021). The first 10 major music professional institutions in China became music schools, and several comprehensive universities added music departments. The employment market's need for college graduates is also approaching saturation. Companies are progressively upping the bar for hiring talent; several occupations require a bachelor's degree, and others a master. Secondary vocational school graduates have little job market benefit. Some employers still prefer candidates who graduated from regular high schools and completed a full-time, four-year bachelor's degree with an arts entrance exam, ignoring secondary vocational school graduates who upgrade their degrees or take adult higher education exams (Sheng, 2022).

As financial conditions improve, spiritual life is important, especially when raising children. Many parents encourage their children's creative education, but they also ensure it doesn't interfere with their cultural education (Sheng, 2022). Social attitudes towards secondary vocational education are also established. Secondary vocational schools have lowered their admissions standards, easing cultural achievement and professional course requirements for students, despite national and regional educational departments' subsidies for disadvantaged students, scholarships, and tuition exemptions to increase enrolment and visibility (Sheng, 2022; Y. Jiang, 2011). The current enrolment status is poor since most students lack piano experience and music knowledge.

Despite the Ministry of Education's efforts to develop professional standards for vocational education teachers, such as the Professional Standards for Secondary Vocational School Teachers (Trial) (2013), some secondary vocational schools still use the hiring standards for regular undergraduate teachers, with a focus on higher degrees. These educators often have an academic focus and lack practical teaching skills, making it difficult for them to teach secondary vocational education (Sheng, 2022). Many secondary vocational schools don't consider student improvement in their instructional objectives; they merely seek honours graduates. This relieves teachers and pupils of stress and complacency. Due to underfunding, new teachers lose enthusiasm rapidly. Teachers leaving secondary vocational schools for better jobs creates instability (Sheng, 2022). These factors make teaching piano at secondary vocational schools harder.

2.3 literature review

The current research explores secondary vocational piano teachers' issues from four perspectives: students, teachers, instructional resources, and basic education system and curriculum design. Student observations reveal two main points. Students' inadequate music foundation is the main reason. Since colleges and universities have loosened entry restrictions to meet enrolment targets, it is harder to ensure student quality (Sheng, 2022). D. Xu (2020), G. Xu (2021), and J. Zeng (2021) report that many secondary vocational school students are recent junior high school graduates without piano lessons. Before admittance, these students often studied alone or never professionally. Before enrolling, students mostly learnt music from internet resources and school classes (Q. Jiang & Jiang, 2023; Q. Zeng, 2020). In elementary and secondary schools, singing with teachers is a primary focus of music classes, which may be replaced by other academic topics (Q. Jiang & Jiang, 2023). Many secondary vocational school students concentrate in music due to social trends, family pressure, job, or inability to

enter their selected high schools (Y. Jiang, 2011). These factors provide secondary vocational pupils an inadequate musical foundation, straining piano teachers.

The student's inability to learn independently is point two. Piano lessons in secondary vocational schools are usually group classes, leaving students without enough individual instruction. Non-independent learners struggle to focus on large classes. As the course content becomes more in-depth and they lack practice time, these students lose interest in learning or even become resistant to it (Sheng, 2022). Some scholars also observe that student differences in piano learning aptitude and personality can lead to a lack of motivation (G. Xu, 2021). According to J. Zeng (2021), many secondary vocational students specialising in early childhood education think learning the piano is a waste of time because it is useful but not essential. Such negative student attitudes can make piano teaching harder for secondary vocational teachers.

Teachers' concerns have focused on four areas: staff insufficiency is the first. This indicates poor piano instruction skills. Scholars (G. Xu, 2021) report that many secondary vocational school piano teachers are graduates of music schools where they learnt difficult Chinese and Western music and received one-on-one instruction. They adopt this one-on-one technique for teaching secondary vocational education, which is improper. H. Jiang (2017) stated that while many secondary vocational teachers have gained hands-on teaching experience, their professional skills may plateau or diminish. As role models and mentors for their students, she emphasises the necessity for specific training for professional teachers, especially piano teachers, who must consistently improve their standards.

Second, there's not enough teaching variation. Electric piano collective teaching dominates secondary vocational piano teaching (Sheng, 2022). This method allows students to absorb more information in a shorter time by using a lot of input, but it often leads teachers to focus on a group of proactive and exceptionally talented students while the majority struggle with learning outcomes due to inattention, which lowers their motivation to learn the piano and slows teaching progress (Sheng, 2022). This collaborative teaching technique also involves the instructor leading a group demonstration and explanation before assigning practice pieces (Zhu, 2021). Some academics (Xue, 2022; Liu, 2018) argue that while consistent practice can help students get good grades and credits, it may neglect the development of students' singing, improvisation, and musical expression skills and their ability to adapt to different teaching situations in early childhood education (Sheng, 2022).

No structured educational materials are the third argument. Sheng (2022) found that secondary vocational music majors' study different subjects independently, with piano instruction being particularly unrelated to art appreciation, vocal performance, and improvisation. Teachers often don't talk to other teachers and focus on their own material. However, Zheng (2012) highlighted that many secondary vocational teachers teach piano improvisation using individual piano sessions, thereby overwhelming pupils with composition analysis, music theory, and other courses. As a result, students' performance and accompaniment skills are poor after graduation, causing a substantial gap between their competences and training outcomes.

Fourth, qualified teachers are scarce. Secondary vocational piano teachers are heterogeneous due to rising student enrolment, which has affected piano instruction (Liu, 2018). Secondary vocational schools use outside academics, but many teachers also manage administrative, research, and class monitoring (H. Jiang, 2017). In these settings, most secondary vocational piano instructors employ communal teaching techniques and hurry through tasks to accomplish

fast. This makes it hard to grasp each student's individual circumstances, resulting in poor learning outcomes (G. Xu, 2021; Liu, 2018).

Regarding resources for education. Even though most secondary vocational schools have improved access to online resources and multimedia classrooms, and some teachers use internet-assisted teaching to engage students, many still use traditional collective teaching models due to limited teaching concepts and creative teaching activities. Online and multimedia resources are typically overlooked by older, highly qualified teachers who lack the flexibility to incorporate them into their lessons (Sheng, 2022). Teachers need supplies to provide piano lessons. Even though the secondary vocational school where some researchers work has 80 acoustic and 110 electronic pianos for more than 1,000 students, there are only two electronic piano rooms and one music classroom. Teachers' schedules and pupils' practice opportunities are severely limited. Additionally, the equipment is in poor condition and poorly maintained (Zhu, 2021; H. Jiang, 2017). Performance platforms assist students enhance piano skills and mental health. Due to education financial limits, many secondary vocational schools cannot give enough performances and competitions (Sheng, 2022).

Concerning basic academic structure and curriculum. The secondary vocational music education professional skills curriculum comprises piano-related courses including improvisation and basic piano instruction, considering the basic education system and curriculum design. Usually four to five semesters, the curriculum has 68 to 272 instructional hours (Ministry of Education of the People's Republic of China, 2014). A short school year and a heavy workload are major concerns for secondary vocational piano teachers (G. Xu, 2021; D. Xu, 2020; N. Yang, 2009). Even though many higher vocational institutions use a collaborative training model, extending the five-year teaching timetable helps vocational talent development. Some studies show that many five-year training programs solely mix higher education and secondary vocational curriculum without adapting them for real-world teaching (Q. Jiang & Jiang, 2023).

Incorrect curriculum design is also clear. that scholars (J. Zeng, 2021) say that secondary vocational schools don't have a coherent piano educational philosophy or training standards, resulting in ambiguous learning objectives and inappropriate teaching materials. Thus, piano teachers simply use their own experiences. Many academics are also concerned that current secondary vocational teaching plans do not reflect the needs of the workforce, emphasizing technical skills while maintaining the same percentage of theoretical courses. This has led to insufficient practical course hours, confusing teaching outlines, and unjustified teaching training programs. Jiang (2017), Q. Jiang & Jiang (2023), and others have raised these problems.

2.4 Theoretical foundation

The researcher studying piano instruction issues must also address theory. This section will explain some ideas that help people understand teaching problems, like educational theory and social psychology. Based on educational theory, pedagogical content knowledge theory requires subject teachers to communicate their knowledge to students of different ages, educational backgrounds, and learning styles (Shulman, 1987). This is in addition to knowing their material. The researcher can determine if teachers have the theoretical understanding and teaching skills to handle a variety of teaching obstacles by examining how they view piano teaching challenges. According to Lian (2008), expert teachers educate to fulfil themselves and realise their worth. They develop their professional and instructional skills by actively addressing teaching issues through practice and reflection. However, new teachers might focus

on assignments and basics (Lian, 2008). They often struggle with poor training, instruction, memorisation, and self-esteem (Livingston & Borko, 1989a, 1989b).

According to social cognition, an individual, their behaviour, and their environment interact (Bandura, 1977). Observational learning can assist teachers overcome classroom challenges and help students adapt (Bandura, 1999). Teachers may struggle with students' educational and familial influences on their attitudes, interests, and skills. Teachers must understand their students' backgrounds to improve their methods. Focussing on how facilities and teaching environment effect student learning can assist teachers improve the learning environment and wisely distribute resources to support cognitive growth (Bandura, 1999). Self-regulation also involves managing emotions, thoughts, and behaviours (Bandura, 1999). Cognitive awareness can help people achieve personal and life goals by strengthening their ability to handle problems and adapt to their surroundings (Bandura, 1999). In difficult teaching settings, experienced music educators have stronger emotional control, stress reduction, and composure, according to Teachout (1997). However, rookie teachers must watch and mimic more experienced teachers to enhance their teaching methods and conceptual knowledge to promote cognitive and emotional regulation (Livingston & Borko, 1989a, 1989b).

Teacher efficacy, considered through the lens of teacher beliefs, states that instructors' expectations and beliefs influence their teaching behaviours and effort, which affects students' learning outcomes (Bandura, 1995). Individual and group teacher efficacy exist (Bandura, 1995). Teachers with varied levels of personal efficacy may define piano teaching issues differently and react differently to them (Bandura, 1995). For instance, Peng (2015) noted that inexperienced teachers may feel more exhausted and less confident when presented with classroom issues. regarding collective efficacy, Teaching teams can improve their efficacy and beliefs by working together, supporting each other, and sharing experiences (Bandura, 1995). A group of piano teachers may boost collective efficacy by giving their students a sense of accomplishment when they deliver a concert or compete (Peng, 2015).

Tao Xingzhi's theory of subjectivity in education (Hu & Zuo, 2021; Tao, 1991a, 1991b) emphasises that teachers should foster a sense of ownership among students rather than rote-learning addresses that prevent them from applying what they've learnt. Tao Xingzhi believes that educators should strive for reciprocal development with their pupils while simultaneously developing their own abilities (Hu & Zuo, 2021; L. Yang, 2010). By focussing on the concept of subjectivity, the researcher can better understand instructors' and students' viewpoints on teaching challenges, as well as teachers' tactics and techniques of implementation. Some experts believe that teachers must tailor their lessons to each student. This will help students overcome learning problems, identify appropriate learning strategies, stimulate their enthusiasm and creativity about learning, and receive better teaching assistance and creative practice chances (Hu & Zuo, 2021; L. Yang, 2010).

2.5 The emergence of teaching challenges

Understanding diverse research opinions and theoretical discussions demonstrates that piano instruction issues often have various causes. Educational policies, instructor credentials, instructional technology, and student demands often change. By exploring these factors, secondary vocational instructors can improve teaching and address these challenges. Updates to national education policies may generate Ministry of Education or other government legislation and regulations. These may necessitate secondary vocational schools to change curriculum, instruction, assessment, and lesson plans. The latest Chinese Government Work Report (2024) stresses digital education's quick and superior growth, which underpins

educational improvement at all levels. These laws give educators and students more opportunities and challenges. New laws force teachers to acquire new methods and adapt to a changing educational environment.

Second, synthesising research viewpoints and scholarly conversations lets academics examine the conceptual strengths and weaknesses of modern secondary vocational education studies. For example, research emphasises the importance of student-driven learning in secondary vocational education settings (Bochkareva et al., 2020). According to other studies (Hao & Pilz, 2021), secondary vocational education is less attractive in China than traditional high school education, owing to long-term employment advancement chances in the labour market. According to study (G. Xu, 2021; J. Zeng, 2021), teachers may feel stressed by growing teaching responsibilities if they lack the requisite knowledge, skills, or innovative teaching spirit. On the other hand, research (Sheng, 2022) reveals that to minimise classroom obstacles and hurdles, educators must immediately alter their lesson plans to fit the diverse needs of secondary vocational students. Combining multiple points of view allows the scholar to provide more detailed and targeted answers for resolving difficulties in secondary vocational education.

Thirdly, reading research papers and theoretical concepts will help you grasp secondary vocational piano teaching issues. This provides new ideas and approaches to secondary vocational music instruction that are tailored to China's unique circumstances and addresses the relative lack of research on secondary vocational education in this environment, particularly piano courses. As internet technology enters education, instructors must learn multimedia, video editing, and video design (Keleş, 2020). Combining cognitive psychology and music education could lead to innovative piano instruction methods to overcome learning barriers. Since these methods may focus more on the development of each student's unique skills and the broadening of educators' pedagogical horizons, they may differ from more traditional forms of secondary vocational piano instruction.

2.6 Core elements

Teaching and learning the piano in Chinese secondary vocational schools is complicated by the environment and resources, the professionalism and competence of teachers, the curriculum and its organisation, student motivation and engagement, and the school or locality's educational policies and objectives. These key characteristics help the researcher understand and improve secondary vocational piano training in China as well as provide analytical dimensions. The researcher plan to examined target teachers' faculties' hardware facilities, related resources such pianos, and whether piano rooms and music classrooms were adequate for teaching. The researcher explored teachers' academic background, teaching skill, teaching experience, and teaching pressure to discover if professionalism and ability affect piano instruction efficacy. This study will look at teacher-selected resources and classroom arrangement to determine if secondary vocational school piano instructors' lesson plans meet students' needs. The researcher will track teacher-student communication, student motivation, and piano learning engagement to assess teachers' effectiveness. Finally, the local government's support for secondary vocational piano teaching, the school's pedagogical goals, and piano instruction placement may affect target teachers' attitudes and efficacy. The effectiveness of piano lessons and the results for the pupils may be affected by these elements.

3. Methodology

Qualitative research with multiple cases will be employed in this study. Case studies, according to Johnson and Christensen (2012), will depend on interviews and observations. Accurate documentation and characterisation of all viewpoints, analysis of examples, and definition of research participants' general situations are the goals of these methods. The researcher will choose nine or twelve prime examples of classroom settings to include in the study. It may be difficult for early researchers to ensure an adequate number of research samples if they are unable to find enough willing secondary vocational piano teachers to participate in the study. Research subjects should be diverse in terms of geography and years of teaching experience. To overcome the issue of a limited sample size, the author proposes a method called snowball sampling (Johnson & Christensen, 2012). In this method, research participants are asked to recommend other teachers who could be interested in participating. In order to better understand the similarities and differences among the problems faced by secondary vocational piano teachers, it is helpful to concentrate on suggestions and factors to think about when collecting and analysing data. To maintain the validity and reliability of the data, the author will modify the sample size if additional samples are required later on in the investigation. Researchers can learn more about the unique struggles and solutions used by secondary vocational piano teachers by employing qualitative research methods. This will provide light on the difficulties of secondary vocational piano education as well as the habits of mind and behaviour of the teachers involved.

Based on the study's aims and research questions, the researcher would either examine existing literature or write an interview guide to ensure all pertinent issues are covered. The researcher will interview educators to gain insight into the obstacles and strategies they face in the classroom. Researchers may document crucial teaching moments, such as teachers' responses to knowledge points and classroom disruptions, on camera or audio with subjects' consent. With the approval of the instructor, the researcher may gather course materials and lesson plans. The examiner frequently uses triangulation in their data analysis to guarantee the accuracy of their conclusions (Johnson & Christensen, 2012). They can ensure the data is legitimate and create a realistic simulation of the classroom environment by comparing and contrasting lesson plans, classroom observations, and interview data. It is probable that the researcher will adhere to a practical strategy. The author's goal in evaluating this qualitative data is to shed light on the intrinsic motivations and working mechanisms of secondary vocational piano instructors with varying degrees of experience, knowledge, and capacity to absorb new information, as well as on the elements that may make this occupation challenging. By combining theoretical research with case studies, this study investigates problems with and potential solutions to secondary vocational piano instruction. The researcher will be better able to understand the myriads of challenges that develop while instructing secondary vocational piano students by using these methods. They will also provide suggestions for further studies that could enhance vocational music education in secondary schools and help the researcher discover answers to questions.

4. Expected results and impacts

In the Expected Results and Impact section, the researcher will explain the expected research findings and their implications for academic theory, real-world teaching, and future applications. The researcher intends to understand the relevance and influence of the study findings in this part and properly predict the research outcomes by analysing and discussing secondary vocational education challenges.

4.1 Expected results

This study aims to identify and address challenges in secondary vocational piano instruction to enhance teaching quality. It will examine how teachers' competencies and pedagogical strategies impact classroom problem-solving. The research will explore gaps in teacher preparation, student engagement, and instructional resources in China's secondary vocational piano education. The study will propose strategies to improve curriculum planning, introduce innovative teaching tools, and enhance students' piano performance and engagement. The analysis will also assess the role of collaboration, critical thinking, and creativity in professional development. Findings are expected to contribute to local economic and cultural growth, support student employment, and promote social equity. Ultimately, the study will offer practical solutions and theoretical insights to address instructional challenges and drive innovation in the secondary vocational education system.

4.2 Practical impact

This research takes a practical approach to identifying and overcoming teaching barriers in secondary vocational piano education. It may highlight effective pedagogical methods to enhance student learning, classroom management, and student-teacher interactions. By identifying areas for improvement, such as the integration of technology and the development of cross-cultural skills, the study aims to modernize instructional practices. The research will address systemic issues such as resource allocation, outdated curricula, and inadequate technology. Recommendations will focus on policies and methods that adapt to the evolving needs of society and students. Through data analysis and case studies, this research will provide actionable insights to improve secondary vocational piano education.

4.3 Academic impact

This study seeks to reshape secondary vocational piano instruction by presenting new findings. It may uncover unaddressed challenges, such as managing diverse student backgrounds and balancing various musical disciplines. By understanding these barriers, educators can refine their teaching strategies to enhance student outcomes and teacher efficacy. The research will integrate transdisciplinary knowledge from fields such as pedagogy and cognitive psychology to enrich secondary vocational piano education. This comprehensive approach will offer novel perspectives, contribute to existing literature, and encourage further research. Ultimately, it aims to advance theoretical and practical applications in secondary vocational education, fostering improved learning experiences and societal development.

4.4 Potential applications

To comprehensively examine the pedagogical challenges encountered by secondary vocational piano educators, it is essential to concentrate on both the instructional obstacles and the evolving trends in secondary vocational education. The researcher contends that conventional course designs and teaching methodologies fail to satisfy the educational and career needs of secondary vocational students due to changes in social conditions and technological improvements. This research can uncover successful pedagogical tools, develop innovative training programs for secondary vocational educators, provide strategies for instructional improvement, and offer methodologies for curriculum design. These findings may motivate secondary vocational education specialists to devise novel application methods or prompt policymakers to investigate educational policies aimed at enhancing vocational music instruction. These prospective applications and policy recommendations can improve existing secondary vocational education practices and promote the advancement of innovative teaching methodologies and technological implementations to effectively respond to the continuously changing modern society.

4.5 Solutions

Secondary vocational piano teachers may face challenges related to student abilities, educator experience, instructional resources, and curriculum design. This research aims to propose targeted solutions to these issues. For instance, students may have varying levels of musical proficiency, which can hinder their progress. Teachers are encouraged to tailor lessons to students' needs and emotions, promoting gradual foundational learning that respects individual learning paces rather than relying on rigid, one-size-fits-all instruction. Inexperienced teachers may lack the necessary skills to handle diverse classroom situations. To address this, the study suggests implementing mentorship programs, encouraging peer observations, and providing professional development opportunities. These strategies can help novice teachers gain valuable insights and refine their teaching methods.

Integrating new technologies into lesson plans can also be a challenge. Schools could establish research groups, develop teaching resource platforms, and provide training to help teachers adapt to emerging instructional technologies. Additionally, curriculum design often lacks coherence and clear progression. The research recommends setting specific goals for students, such as mastering left-hand accompaniment in the first semester and focusing on children's song improvisation in the second. This structured approach supports continuous learning and skill development. Overall, this study provides empirical and theoretical guidance to enhance secondary vocational piano education, addressing the needs of educators, students, and policymakers. The proposed strategies could positively impact teaching methods, curriculum development, and technology integration, ultimately fostering better student outcomes and supporting comprehensive musical training.

5. Discussion and analysis

This part contains four major components, beginning with a conceptual study of piano instruction challenges in secondary vocational schools and existing research. Second, it translates this research discourse into education. Third, the researcher assesses the probable barriers to investigating this topic. Lastly, the limitations of this study are listed.

5.1 Relevance of existing research

Research frequently investigates effective teaching methods to address challenges in piano instruction at secondary vocational schools (Sheng, 2022; H. Jiang, 2017). Group teaching, as found by Wang (2021) and Sheng (2022), can enhance student learning and teacher efficiency by allowing instructors to tailor lessons to individual needs. The XinDi approach, used by Zhu (2021), demonstrates that innovative teaching methods and principles can improve curriculum design, teaching resources, and student learning abilities in secondary vocational piano education. Piano teachers often face challenges related to students' diverse educational and musical backgrounds, which influence their comprehension and engagement. Teachers must employ various teaching strategies to bridge gaps in students' learning styles, as shown by Butto (2022), which can enhance both teacher development and student learning. These challenges require empirical research and theoretical support for comprehensive understanding and effective solutions.

Existing studies based on educational and psychological theories provide substantial theoretical backing. Shulman's pedagogical content knowledge (1986) and Bandura's social cognitive theory (1986, 1991, 1999) explain the interaction between teaching methods, student cognition, and external influences, helping to contextualize secondary vocational teaching challenges. This study will explore the application of these theories to secondary vocational piano

education in China, considering the influence of cultural and environmental factors. Contemporary research emphasizes individual differences and student engagement. Sheng (2022) suggests that "micro-lesson" teaching can overcome the limitations of large-class instruction by promoting balanced communication, enhancing cognitive and practical skills, and motivating students (Bochkareva et al., 2020).

This study aims to summarise and adapt teaching methods to diverse student needs, while examining how individual variation affects teaching outcomes. The research investigates challenges in secondary vocational piano instruction and explores solutions to improve teaching practices. Teaching feedback and observation-based interviews will identify instructional deficiencies and bridge gaps between theoretical research and practice. The findings will provide new insights and practical recommendations for enhancing secondary vocational piano education.

5.2 Relevance of practical applications

The problems with teaching piano in secondary vocational education and their real-world consequences are categorised in this study. As a result, the study's emphasis will be on different strategies and approaches that teacher may employ to address a range of problems. Without exposure to music, many Chinese secondary vocational students are unprepared. They are primarily exposed to it through school bands or social media. Students with musical training are unusual. There are a lot of instructional responsibilities that secondary vocational school piano teachers have to complete quickly (Sheng, 2022; Y. Xu, 2021; J. Zeng, 2021; D. Xu, 2020). Experts now think that some students in vocational programs in secondary school, who were ignored in junior high, quickly find what they're passionate about and engage in meaningful conversations with their instructors. They get the job done fast and sometimes even teach (Sheng, 2022).

According to zhu's interviews with secondary vocational school teachers (2021), instructors of piano courses for preschool education majors do not advocate using a fixed textbook. This is because, although the state has created a textbook tailored to this major, all the piano textbooks sold are different, making it impossible to find one that is fully appropriate for students enrolled in this program. Motivating secondary vocational instructors to create piano education materials for use in their own communities is a real possibility. Local or national educational authorities may be prompted to establish regulations or mechanisms to improve secondary vocational courses as a result.

5.3 Potential challenges

Ambiguities in theoretical foundations, resource limitations, and technological constraints pose challenges in studying and implementing secondary vocational piano education. Vocational colleges often struggle to address the complexities of piano instruction due to factors such as varying subjective interpretations, insufficient conceptual clarity, and inconsistent instructional methods and resources. Addressing these issues requires a thorough review of existing literature to understand current scholarly perspectives on piano teaching challenges and applying conceptual analysis to refine interpretations.

The research may encounter barriers such as high instrument costs, a lack of qualified teachers, and regional disparities. These limitations can hinder educational program development and implementation. To mitigate these issues, the researcher can seek financial and technical support from local governments or educational institutions, propose strategies to enhance the institution's educational status, and provide professional development opportunities for

educators. Additionally, adapting teaching methods to the specific cultural and regional contexts of secondary vocational institutions can help improve the acceptance and effectiveness of educational strategies.

5.4 Potential limitations

This study may face limitations in scope, research methodologies, data collection, and outcome interpretation, which could impact its reliability and applicability to other contexts. Given its narrow focus on piano instructors and professional students in secondary vocational classes, the findings may not be generalisable to other educational settings. The study employs qualitative research methods, including interviews, document analysis, and direct observations, which enable a comprehensive examination of individual cases. However, the limited sample size and potential data biases may restrict the study's overall validity.

Incomplete or missing data during collection and processing may further undermine the results' accuracy. Interviewees might feel uncomfortable sharing their methods due to concerns over confidentiality or fear of criticism, leading to incomplete or biased responses. These factors, along with the possibility of losing or misinterpreting data from a small sample size of 9-12 cases, could affect the study's findings and interpretations. Such challenges could result in inefficiencies in terms of time, resources, and research labour.

6. Conclusion

Before concluding this conceptual study, the researcher examined Chinese secondary vocational school piano teaching challenges. Piano is difficult for many students due to poor musical foundations. Piano students' lack of motivation is another issue. Poor instruction, topic isolation, and lack of methodologies are other issues. Piano teachers utilise many methods to teach themes and techniques. Lack of specialised educators is another issue. Too many pupils reduce instructional efficacy and student interest because teachers can't provide each one enough time and advice. Secondary vocational schools' unworkable fundamental curriculum and course structure limit piano teachers' skills. Secondary piano education is difficult due to limited resources, teachers' disrespect for network and multimedia equipment, and lack of display platforms.

They demonstrate the difficulty of teaching piano in secondary vocational schools and are crucial to understanding and improving this style of education. Understanding student diversity may improve teaching. Improving teachers' pedagogical skills and instructional methods can also lower the difficulties from teacher-student ratios imbalance. Increasing kids' scholastic interest might motivate them to learn piano theory and practice. Professional development and resource use for secondary vocational piano teachers should be prioritised. This helps teachers adapt to difficult instruction. Psychological, educational, and musical theories can improve secondary vocational piano instruction theory. It gives a complete assessment of emotional awareness, psychological drive, and professional teaching. Students and teachers benefit from these methods.

Technology should also be emphasised in secondary vocational piano education research. Network technology and multimedia-assisted instruction give teachers many tools and give students a customised and dynamic learning experience. Increased educator-student contact improves learning outcomes and coherence. Promoting and leveraging these new tools can improve secondary vocational piano training despite limited resources. By discussing the topic, this research promotes piano instruction theory and practice. Secondary vocational piano

teaching requires academic progress, creativity, and risk-taking. Studies and better teaching methods should address these issues and improve piano training. Research could address individual pedagogical issues and secondary vocational piano instruction framework improvements.

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