

# Research on the Teaching Quality Management of “Xindi Applied Piano Pedagogy”

Lanqing Ye, Hongmei Yang\*

Rattanakosin International College of Creative Entrepreneurship, Rajamangala University of Technology Rattanakosin, Nakhon Pathom 73170, Thailand

\*Corresponding author: Hongmei Yang, ye.lanqing@rmutr.ac.th

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**Abstract:** Xindi Applied Piano Pedagogy (XAPP) is one of the key achievements of Chinese music education reform in recent years, reflecting the booming of piano education in China. Twenty years after its establishment, the pedagogy has been widely accepted by society. Based on the PDCA (plan-do-check-act) cycle, the paper studies XAPP in relation to teaching quality management, hoping to achieve quality teaching results by improving teaching models and quality. In order to investigate the XAPP teaching process, a closed-loop management on XAPP’s teaching quality is formed, and the questions are divided into different modules: teaching team building, curriculum design, course in effect, teaching materials selection, teacher assessment and rectification, customer satisfaction survey, as well as teaching evaluation and feedback. The application of the PDCA cycle in XAPP’s teaching quality management is then analyzed, with an aim to optimize applied piano teaching management and improve XAPP’s teaching system, curriculum design, teaching materials, and theoretical framework. This paper also studies XAPP from a management perspective, which not only promotes the development of music education, but also expands the research field of music education management.

**Keywords:** PDCA cycle; Xindi Applied Piano Pedagogy; Teaching quality management

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## 1. Introduction

As China’s society, economy, and culture continue to develop, more and more individuals are beginning to learn piano as a means to improve their artistic literacy and meet their spiritual needs. Meanwhile, there has been much debate throughout the country over whether playing the piano is an elite or popular activity. A consensus has been reached that mass education for improving artistic literacy and elitist education for cultivating excellent art professionals should go hand in hand. It is undeniable that traditional elitist piano education has made an indelible contribution to the cultivation of professional pianists, as proven by the frequent emergence of Chinese pianists on the world stage in recent years. However, problems remain with piano popularization. The majority of students receiving traditional elitist education cannot satisfy the demands of the general public as they are either unfamiliar with accompaniment improvisation, or they have never composed music on the piano. As a result, they fail the mission of providing people a better music experience. Students who major in piano from the music department of normal schools are incapable of accompanying songs. They are unable to sing and play at the same time; they overly use sheet music and forget about numbered musical notations; they are unfamiliar with transposition and improvisation; they are also incapable of conducting proper music classes once becoming primary or secondary school teachers. Piano learning among the public is even worse since the demanding and long piano practice has weakened

their interest in piano learning, which begs the question, “What on earth is the purpose and meaning of piano learning?”

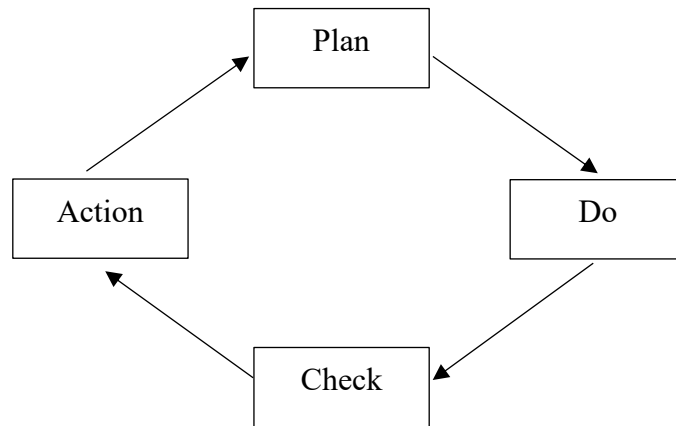
Based on the current situation, Professor Xin Di began to question the traditional way of piano teaching. Back then, he realized that it was not scientific to teach all piano learners the same way; instead, the teaching methods should be modified in light of the students’ skills. In accordance with the all-around education in China, Professor Xin began to devise an applied piano pedagogy. After much thinking and research, Xin proposed the inventive education philosophy of “Eight First and Eight Later,” which includes “general education first, individual education later; group teaching first, one-on-one lesson later; public education first, elite education later; amateur teaching first, professional teaching later; affectional cultivation first, rational guidance later; practical resources first, classical materials later; interest motivation first, technique training later; learning first, succeeding later,” blazing a trail for piano education best suited to the general public. Xindi Applied Piano Pedagogy (XAPP) hence came into being. Twenty years after it was first conceived, it has evolved into a comprehensive education system in terms of teaching materials, curriculum, team building, and talent cultivation. More than 90 XAPP teaching materials have been published thus far, comprising of complete teaching modules that benefit countless people of all ages. Most of the teaching materials are now being used by colleges and universities around the country. XAPP has revolutionized the piano teaching modules and curriculum setting for music education in Chinese colleges and universities.

XAPP is one of the achievements the Chinese music education system has made in recent years. It also reflects the flourishing of piano education in China. Twenty years after the pedagogy was conceived, XAPP has gained wide recognition from the society. Based on the PDCA (plan-do-check-action) cycle, this paper studies the practice of XAPP in teaching quality management, hoping to improve the teaching process and quality, and ultimately achieve outstanding teaching outcomes. In order to investigate the XAPP teaching process, the questions are divided into different modules: teaching team building, curriculum design, course in effect, teaching materials selection, teacher assessment and rectification, customer satisfaction survey, as well as teaching evaluation and feedback. The PDCA cycle is applied to analyze and explore those questions in depth. The purpose of this research is to thoroughly investigate the teaching quality management of XAPP and to provide suggestions for solving those questions. The ultimate goals are to establish a perfect service quality management for the huge market of applied piano education, formulate scientific and reasonable quality management measures, and offer feasible strategies for XAPP’s future development.

## 2. PDCA cycle

In the 19th century, American quality management guru Walter Andrew Shewhart put forward the renowned theory of the PDCA cycle. The theory was later adopted by William Edwards Deming and then came into public eyes. According to the theory, quality optimization can be achieved with an endless four-step cycle of “Plan-Do-Check-Act,” or the PDCA cycle (**Figure 1**), also known as the Deming cycle <sup>[1]</sup>. In a PDCA cycle, the task is executed in four steps, and the process will continuously repeat itself.

- (1) Plan: The focus of the entire cycle, in which targets are set and plans are formulated for each step.
- (2) Do: The plans formulated in the last step are implemented, and the ways of implementation are listed to ensure effective results.
- (3) Check: The details of plan implementation are checked.
- (4) Act: The plan implementation is summarized, process evaluated, and improved, with its strengths developed and weaknesses disposed of; the unresolved quality factor is proposed, and the next cycle begins <sup>[2]</sup>.



**Figure 1.** PDCA cycle

XAPP is combined with the PDCA cycle and its scientific procedures, and the following management procedures are obtained:

(1) Plan

This step aims to formulate the teaching philosophy and overall objective of XAPP. Based on XAPP’s characteristics, realistic teaching goals are set for each course under the pre-set overall objective.

(2) Do

This step includes completing the teaching objectives by designing courses under the management concept of “highlighting teaching implementation, teaching contents, and methods, as well as assisting teaching activities.”

(3) Check

This step includes carrying out the teaching process in a meticulous way, constantly upgrading the teaching management system, timely spotting and solving problems, proposing countermeasures for improvement, as well as closely monitoring teachers’ performance, so as to form a long-term management mechanism that links every part of teaching, guarantee smooth and high-quality teaching performance, as well as provide teaching evaluation and feedback for teachers.

(4) Act

Based on the feedback and the inspection results, this step includes rectifying the deficiencies, proposing improvement measures, and formulating effective strategies. When all is done, the next cycle begins. The PDCA cycle will never end, so the teaching quality will keep improving.

**3. Application of PDCA cycle in the teaching quality management of XAPP**

The PDCA model emanated from the industrial world. In order to apply this model to the teaching management of piano education, the major concepts of the quality management model need to be adjusted. Based on the contents of this study and guided by the overall analysis framework of the PDCA cycle, the problems concerning the teaching quality in XAPP’s practices are summarized and then analyzed. The problems are divided into six categories: teaching objective setting, teaching team building, curriculum design, courses in effect, teaching materials selection, and teacher assessment and evaluation.

(1) Plan

According to the PDCA cycle, the setting of objectives and the reasonable designs of the curriculum are essentials in the entire process of any project or activity. XAPP’s teaching quality is reflected in its teaching objectives. These objectives are the concrete manifestations of the teaching philosophy and the

overarching direction of talent cultivation. Reasonable teaching objectives serve as the foundation of teaching quality and are also considered an important feature of applied piano teaching. Based on the teaching objectives of the curriculum, each course will be meticulously designed, with the separate objectives of each course tailored to the needs of the students. The teaching scheme will be further refined and optimized to formulate targeted teaching plans and select suitable teaching materials to complete the objectives.

According to the PDCA cycle, the execution of teaching activities demonstrates the importance of talent cultivation, and teaching team building serves as the key to improving teaching quality and talent cultivation. For a newly set-up musical discipline, such as XAPP, simply cultivating or introducing talents is insufficient; instead, more attention should be paid to the training of young and middle-aged teachers, the creation of a long-term beneficial mechanism for teaching team building, and the establishment of a pillar team within institutions, in order to meet the needs of talent cultivation and discipline construction. In recent years, under the ingenious pedagogy of Professor Xin, thousands of teachers have been trained within the society, forming an evenly-structured XAPP specialized teaching team and a mature long-term mechanism for these practitioners. XAPP's application has reached out to three levels of cultivation (bachelor's, master's, and doctorate), providing endless reserve forces for the society's teaching team building. For institutions, they have not only highlighted talent cultivation, but also actively established long-term mechanisms for teaching team building to meet the needs of talent cultivation and discipline construction. They offer clear-cut assessments and evaluation systems for their teachers by strictly following the rules of student evaluation and teaching supervision.

## (2) Do

This step of the PDCA cycle represents the execution of the XAPP curriculum. In XAPP, students learn music by playing the piano. The curriculum system is optimized using a five-in-one teaching model, which includes playing, singing while playing, accompanying, double piano, and piano duet. XAPP highlights course content integration and strives to improve students' artistic literacy. Instead of focusing on a single professional skill, this pedagogy aims to provide comprehensive training on teaching skills to cultivate classroom teaching techniques and students' innovation. However, due to the diverse sources of students, their mastery of piano playing is never the same. Individualized and differentiated teaching services should be provided to tap the potential of elite students. Therefore, diversified and individualized learning experiences are needed for students. Reforms of teaching methods and means should also be strengthened. Individualized teaching schemes should be formulated to better suit the needs of students. Teaching and research activities, such as open classes, showcases, and online or offline teaching seminars, should be frequently organized to explore and optimize the current teaching methods and means, as well as advance the innovation and development of music education.

Teaching materials are selected to better suit the needs of students. The XAPP team strictly follows the requirements of XAPP's curriculum setting, teaching planning, and syllabus, as well as selects the teaching materials from the Xindi Applied Piano Pedagogy series. However, due to the diversified needs of students, the teaching materials are selected from those intended specifically for social institutions, primary and middle schools, as well as universities and colleges based on students' needs, teaching positioning, and overall teaching objectives.

## (3) Check

This step of the PDCA cycle represents the feedback the teacher receives after execution. The manager should track the teaching progress, examine teachers' ability to organize and control classroom teaching, and investigate if they have clear teaching plans, proper time arrangement in class, strong adaptability, and the flexibility to use different teaching methods, such as inspirational teaching, emotional teaching, situational approach, as well as demonstration and teaching through interactive activities. These teachers

should also be fluent communicators to keep the lesson interesting and lively while guiding students through the process of learning the piano step-by-step and developing strong bonds with them. Whenever they spot a student falling behind, they should be able to adjust their teaching methods and strategies in a timely manner. Students' learning outcomes are also important. By assessing their abilities in playing one tune in different ways, playing the piano, singing while playing, accompanying, playing the double piano, and in piano duet, the teachers will be able to help students gain a clearer understanding of their piano skills and then determine a more suitable method of piano learning for themselves.

#### (4) Act

The last step in the PDCA cycle is to "act." In XAPP's teaching quality management, the last step is when teachers summarize the teaching execution. It is also an important step in piano teaching. The problems that existed in the previous steps will be reviewed, such as during the objective setting, teaching team building, curriculum design, classroom teaching, material selection, teaching support, and evaluation. Every drawback in each step will be thoroughly analyzed before formulating strategies and proposing feasible suggestions to improve the curriculum. In order to improve the teaching quality, it is imperative to equip oneself with a growth mindset. The evolution of education should follow the progress of society. It is a diverse activity with both, universality and individuality. The construction of the scientific and social discipline of "applied piano," which involves teachers, students, and managers, is made possible by the identification of internal and external factors that contribute to the overall improvement of the teaching quality. With the problems solved, and the research direction established, XAPP will gradually move away from empiricism and direct its focus on scientificity; once reasonable teaching processes are being recycled, teachers will come to understand what they are actually fighting for.

#### **4. Conclusion**

Using the PDCA cycle, this paper conducted an in-depth analysis and exploration of XAPP's teaching management. XAPP's teaching philosophy and objectives, which include clear curriculum objectives for training piano teachers, have proven to be in line with the needs of students. The core teaching team has executed the teaching plan according to the syllabus and teaching objectives. So far, 90 books have been published to provide teachers and students with teaching and learning materials, respectively. In the process, the management plays the role of supervising teaching activities. Under their supervision, students attend classes, teachers participate in teaching seminars and regularly hold open classes, while schools organize lecture contests, discussions, and exchanges.

However, due to the large number of students who enroll in the courses, the teaching objectives are far from the actual situation. At present, the structure of each course's objectives needs further refinement. There is still plenty of room to balance the objective setting of each course. Innovative teaching methods with refined and improved teaching objectives are still required. Moreover, no standardized teaching documents exist for course syllabuses, teaching plans, teaching methods, and approaches, resulting in failures to design reasonable courses for students from different backgrounds and with different levels of piano mastery. No targeted and complete plans have been devised for curriculum design, content updates, and internship, nor any formulation of plans for designing teaching content and objectives. Comprehensive appraisal and evaluation systems are still needed to better evaluate teachers. Mechanisms for teacher training and evaluation have not been developed. Therefore, the current practices have failed to demonstrate the advantages of the XAPP discipline and elevate the level of curriculum construction.

#### **5. Suggestions**

According to the needs of students, the teaching objectives and schemes require further refinement and

optimization. Based on the actual situation and practical needs of pre-schools, primary and middle schools, as well as social piano institutions, specific measures should be devised for setting teaching objectives to train more piano teachers. Teaching and research activities should be actively carried out to promote teaching improvement. Teachers should have enough support from all sides, while schools should attempt to stimulate teachers' eagerness to conduct scientific research, constantly improve their professionalism and cultural accomplishment, step up the building of scientific research teams, maintain the balanced development of academic teams, improve the quality and quantity of scientific projects and achievements, promote discipline construction and team building, as well as provide excellent scientific research support for piano teaching. Refinement is still needed for the course syllabuses, teaching plans, and teaching methods of the XAPP curriculum. Teaching standards should be formulated and strictly followed by every school. Reasonable courses should be designed for students with different levels of piano mastery and from different backgrounds. Targeted and complete plans should be devised for curriculum design, content updates, and internship. The teaching contents and teaching objectives should be merged under targeted curriculum design, fully demonstrating XAPP's advantages and elevating the level of curriculum construction. XAPP calls for the nature of education to be exhibited in piano learning. The five-in-one teaching model should be used to optimize the curriculum system, achieve course content integration, and improve students' artistic literacy. Instead of focusing on a single professional skill, it is essential to provide comprehensive training on teaching skills to cultivate teachers' innovation and classroom teaching techniques. The XAPP team should strictly follow the requirements of XAPP's curriculum setting, teaching planning, and syllabus, as well as select teaching materials from the Xindi Applied Piano Pedagogy series. However, due to the diversified needs of students, the teaching materials should be selected from those intended specifically for social institutions, primary and middle schools, as well as universities and colleges based on students' needs, teaching positioning, and overall teaching objectives. Teaching team building is the key to improving teaching quality and talent cultivation. For institutions, they should highlight talent cultivation and actively create a long-term mechanism for team building, cultivating a backbone teaching team to meet the needs of talent training and discipline research. Faced with the vast market of applied piano education, it is necessary to establish a comprehensive service quality management system and develop reasonable quality control measures, ultimately navigating XAPP in the direction of healthy development.

### **Disclosure statement**

The authors declare no conflict of interest.

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