

Teaching Applied Piano Singing While Playing Based on Xindi Applied Piano Pedagogy: Taking Fujian Vocational College of Art as an Example

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Abstract: As known to all, China has witnessed remarkable development in addition to its effective implementation of the “double reduction” policy. Under such circumstance, the piano has drawn more interest and parental affection as a vital course that may improve students’ all-round qualities. While piano education is gaining momentum, the country has raised the requirements for the piano teacher workforce in terms of their professional qualities. Under the background of promoting quality-oriented education nationwide, piano education in Chinese vocational colleges of art has garnered more attention. In contrast to applied piano instruction, which has received wide recognition and promotion, the traditional elite private teaching model targeted at nurturing pianists has more than ever failed to meet societal demands. The majority of graduates from vocational colleges of art seem to be unable to apply what they have learned. They are unable to compose accompaniment for simple songs, write piano music, provide piano accompaniment for singers, or sing while playing the piano. As a result, they fall short of living up to the expectations of piano teaching and meeting the needs of music teacher employment in primary and secondary schools. The development of “Xindi Applied Piano Pedagogy” can effectively address the aforementioned problems. As piano teachers, the authors experimented with Xindi Applied Piano Pedagogy to teach singing while playing the piano to first-year students at Fujian Vocational College of Art. A measurement table was used to measure the differences in various musical abilities of those students after the experiment, statistical analysis of the data was performed, and the preliminary results were obtained. The results showed that training in Applied Piano Singing while Playing led to a noticeable improvement in students’ musical literacy, harmonic hearing, singing while playing beloved songs, and other abilities. Xindi Applied Piano Pedagogy is guided by the philosophy of talent cultivation, featuring “application, theories, and practice.” It can be tailored to different students, so that they can indeed apply what they have learned and enhance their practical and innovative capabilities.

Keywords: Xindi Applied Piano Pedagogy; Singing while playing; Experimental research

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1. Introduction

As known to all, China has witnessed remarkable development in addition to its effective implementation of the “double reduction” policy. Under such circumstance, the piano has drawn more interest and parental affection as a vital course that may improve students’ all-round qualities. While piano education is gaining momentum, the country has raised the requirements for the piano teacher workforce in terms of their professional qualities. According to statistics from China Musicians Association, the current rates of

children who are learning the piano in kindergartens and primary schools are over 60% and 30%, respectively, and the total number of piano learners who are children in China has reached 30 million, increasing by 10% every year. Accordingly, the demand for professional piano teachers has grown notably across the society ^[1]. As the main source of piano teachers, music education programs in universities and vocational colleges of art have increasingly ascribed importance to the research on piano teaching methods. Against the background of promoting quality-oriented education nationwide, piano education in Chinese vocational colleges of art has been increasingly valued. In contrast to applied piano instruction, which has received wide recognition and promotion, the traditional elite private teaching model targeted at nurturing pianists has failed to meet societal demands. In short, piano teaching desperately needs a reform.

Focusing on piano education, Xindi Applied Piano Pedagogy has become a comprehensive teaching mode integrating five factors: piano playing, singing while playing, accompaniment, piano four hands, and piano duo. While carrying forward the traditional piano teaching mode, it breaks away from the single elite teaching mode and opens up new horizons for applied piano education, which inspires musical imagination and thinking as well as improves hands-on skills through crash courses on exploration, imitation, improvisation, and creation ^[2]. It boosts quality-oriented music education and enables the students to apply their knowledge and make achievements in learning, cultivating their application abilities in a comprehensive way. As an empirical study of the students from Fujian Vocational College of Art, this research further proves the feasibility of using Xindi Applied Piano Pedagogy in educational establishments at all levels. By conducting teaching experiments, the theory related to Xindi Applied Piano Pedagogy was applied and used to teach the subjects. The results may provide some references for traditional piano teaching and drive the virtuous cycle of developing quality-oriented music education.

“Singing while playing” is a basic skill for piano majors; however, it is the weakest component in the teaching ability structure of teachers ^[3]. As far as the subjects of this research are concerned, the effectiveness of Xindi Applied Piano Pedagogy has been proven, in which a course on singing while playing using the method is offered to the students in that vocational college of art. On this premise, the conclusion of this research can be applied to other vocational colleges of art, which may play a significant role in popularizing applied piano courses in those colleges. In addition, it is possible to improve the artistic education in primary, secondary, and higher institutions, as well as forge a consistent artistic teaching system across different school levels. Classroom teaching and practical activities are complementary, and they reinforce each other. Both, artistic popularization and brand and characteristic courses can bear fruit simultaneously. Lastly, school education and social resources can be integrated effectively ^[4].

2. Research

2.1. Measuring the “applied piano singing while playing” ability

2.1.1. Aim

Following the data collection of the basic musical abilities of the subjects through a pretest, students who had not learned music before should improve in terms of their ability to sing while playing, develop harmonic hearing, and strengthen their capabilities in using accompaniment figures flexibly after the 16 lessons of the Applied Piano course.

(1) Test subjects

This study used the cluster random sampling method to collect information of the freshmen majoring in Artistic Education at Fujian Vocational College of Art. Sixty freshmen were selected for the experiment, with 80% of them being girls and 20% being boys.

(2) Tools

The tools used for this study included a self-made test paper titled “The Measurement Table of Applied Piano Singing while Playing Ability.”

(3) Variable

This study adopted a controlled experiment with a single variable. The only variable was the applied piano teaching method, leaving other factors including age, gender, control, time, and class duration as constant.

2.2. Subjects of teaching

In order to facilitate teaching, two freshmen classes, consisting of 60 students majoring in Artistic Education in Fujian Vocational College of Art, were selected for the experiment. Among these 60 students, there were 20 males and 40 females, most of whom were roughly at the same piano level. A total of 60 pretests and 60 posttests were conducted.

2.3. Syllabus

- (1) Textbooks: *Xindi Applied Piano Singing while Playing Course: Learning the Piano by Singing while Playing Simultaneously*, *Xindi Easy Applied Piano Course: Learning the Piano by Playing Nursery Rhymes*, and *Xindi Applied Piano Singing while Playing Crash Course Score*.
- (2) Teaching instruments: 1 piano and 30 digital pianos.
- (3) Course schedule: the Applied Piano Singing while Playing course commenced at the start of the new semester of Artistic Education in Fujian Vocational College of Art in September, consisting of 16 lessons, each of which lasted for 45 minutes, including the preparation time.
- (4) Content design: this experimental research integrated the teaching of chords, accompaniment figures, singing while playing, and theoretical musical knowledge into the teaching content of the 16 lessons according to *Xindi Applied Piano Pedagogy*; for instance, the teaching objectives of Lesson 1 included learning how to distinguish between two chords and play them (I and V7), playing mi sol of the I chord and fa sol of the V7 chord with fingers 2 of both hands, mastering the accompaniment figure X--- of easy block chords, as well as singing while playing two songs using the I-V7 chord progression ^[5].

2.4. Teaching design and teaching process

The Applied Piano Singing while Playing course was divided into 16 lessons. Lessons 1–4 lasted from September 16 to 30, 2021, lessons 5–8 from October 8 to 23, 2021, lessons 9–12 from October 24, 2021, to November 15, 2021, and lessons 13–16 from November 22, 2021, to December 13, 2021. The teaching design is shown in **Table 1**.

Table 1. Teaching design

Lessons	Playing content	Chords	Accompaniment figures	Singing while playing
1–4	With fixed fingering, both hands play the I chord (left hand: playing do with finger 1; right hand: play mi and sol with fingers 3 and 5, respectively), the IV chord (left hand: play do with finger 1; right hand: play fa and la with fingers 1 and 3, respectively), and the V7 chord (left hand: playing sol with finger 2; right hand: playing fa and sol with fingers 2 and 3, respectively).	I IV V7	Easy block chords within an octave	Ten songs


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Lessons	Playing content	Chords	Accompaniment figures	Singing while playing
5–8	The left hand plays do of the I chord and the right hand play mi and sol. The left hand plays do of the IV chord and the right hand plays fa and la. The left hand plays si of the V7 chord and the right hand plays fa and sol.	I IV V7	Easy block chords in two octaves and easy semi-broken chords	Ten songs
9–12	The left hand plays do of the I chord on the small octave, and the right hand plays do, mi, and sol on the one-line octave. The left hand plays fa of the IV chord on the small octave, and the right hand plays do, fa, and la on the one-line octave. The left hand plays sol of the V7 chord on the small octave, and the right hand plays si, fa, and sol on the one-line octave.	I IV V7	Extended block chords in two octaves and extended semi-broken chords	Ten songs
13–16	The left hand plays do of the I chord on the small octave and the right hand plays sol, do, and mi on the one-line octave. The left hand plays fa of the IV chord on the small octave, and the right hand plays la, do, and fa on the one-line octave. The left hand plays sol of the V7 chord on the small octave, and the right hand plays sol, si, and fa on the one-line octave.	I IV V7	Extended block chords in three octaves and extended semi-broken chords	Ten songs

The teaching was conducted in line with the objectives of the original syllabus, with minor adjustments based on the actual situation. **Table 2** shows the teaching materials used from Xindi Applied piano book.

Table 2. Usage of teaching materials from Xindi Applied piano book *Play Children’s Song and Learn to Play the Piano, Volume 1*

<p><i>Lessons 1–4</i></p> <p>(1) To get to know and familiarize with the piano keys.</p> <p>(2) Hand positioning: identify do, mi, and sol, as well as si, fa, and sol on the one-line octave; play do with finger 1 of the left hand and mi and sol with fingers 1 and 3 of the right hand; play si with finger 2 of the left hand and fa and sol with fingers 2 and 3 of the right hand.</p> <p>(3) For the I chord, play do with finger 1 of the left hand and mi and sol with fingers 1 and 3 of the right hand simultaneously; for the V7 chord, play si with finger 2 of the left hand and fa and sol with fingers 2 and 3 of the right hand; then, move on to relevant exercises.</p> <p>(4) Play them in nursery rhymes and practice singing while playing. Figure 1 shows an example score titled “A Boat Race.”</p>	<p>A Boat Race</p>  <p>Figure 1. “A Boat Race”</p>
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- (1) Hand positioning: Identify do, mi, and sol, as well as do, fa, and la on the one-line octave; identify si on the small octave and fa and sol on the one-line octave; play do with the left hand and mi and sol with the right hand simultaneously; play do with the left hand and fa and la with the right hand simultaneously; play si with the left hand and fa and sol with the right hand simultaneously; and then move on to relevant exercises. **Figure 2** shows the accompaniment figure for “A Boat Race.”
- (2) For further learning, in the case of the I chord, play once with the left hand and three times with the right hand; in the case of the IV chord, play once with the left hand and three times with the right hand; in the case of the V7 chord, play once with the left hand and three times with the right hand; and then play them in the songs to practice singing while playing. Identify the I, IV, and V7 chords on the piano and play them skillfully in two methods. Learn to sing while playing at least three to five songs. **Figure 3** shows an example score titled “Butterfly.”

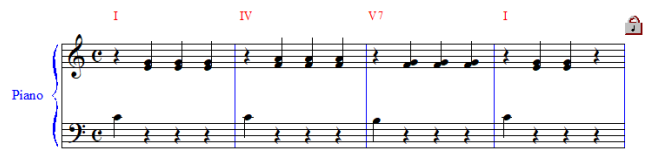


Figure 2. The accompaniment figure for “A Boat Race”

Butterfly



Figure 3. “Butterfly”

Lessons 5–8

These four lessons focused on the extended learning of accompaniment figures. The students were taught how to play extended block chords in two octaves and extended semi-broken chords. The accompaniment figure was left right right right left right left right. The students were also taught 10 new songs and how to sing while playing them. **Figure 4** shows an example score titled “Childhood.”

Childhood



Figure 4. “Childhood”

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Lessons 9–12

The teaching objectives of Lesson 9 included learning how to play chord progressions with block chords when two chords appear in the same bar, requiring the students to play the I–V7 chord progression and sing while playing two new songs. The objectives of Lesson 10 included learning how to play the I–IV–V7 chord progression with semi-broken chords and sing while playing two new nursery rhymes. The objectives of Lesson 11 included learning to play the I–IV–V7 chord progression with block chords and semi-broken chords as well as sing while playing two new songs with two accompaniment figures, respectively. The objectives of Lesson 12 included playing the I–IV–V7 chord progression with semi-broken chords skillfully while singing two new songs. **Figure 5** shows the accompaniment figure for “Childhood.” The objectives of Lesson 12 include playing the I–IV–V7 chord progression with semi-broken chords skillfully while singing two new songs. **Figure 6** shows an example score titled “Snail.”



Figure 5. The accompaniment figure for “Childhood”

Snail



Figure 6. “Snail”

Lessons 13–16

These lessons focused on how to play extended block chords in three octaves and extended semi-broken chords (playing do of the I chord with the left hand and sol, do, and mi with the right hand; playing fa of the IV chord with the left hand, and la, do, and fa with the right hand; playing sol of the V7 chord with the left hand and sol, si, and fa with the right hand). **Figure 7** shows the accompaniment figure for “Snail.” Besides, the students had to learn to sing along while playing 12 different songs.



Figure 7. The accompaniment figure for “Snail”

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Figure 8 shows an example score titled “When You Are Old.”



Figure 8. “When You Are Old”

3. Implementation

3.1. Reliability test

Reliability analysis can be used to assess the stability, consistency, and the reliability of the test results. In order to ensure that the test results are reliable, a reliability analysis of the effective data from questionnaires should be carried out before analyzing the results. Cronbach’s alpha is usually used in social science research. Normally, if the reliability coefficient is above 0.9, it indicates excellent reliability; if it is between 0.8 and 0.9, it indicates good reliability; if it is between 0.7 and 0.8, it indicates relatively good reliability; if it is between 0.6 and 0.7, it indicates acceptable reliability; if it is below 0.6, it indicates that revision is needed [6].

According to **Table 2**, the reliability coefficient is 0.808, and Cronbach’s alpha based on standardized items is 0.883, wherein both values are above 0.7. The questions in the measurement table have a relatively high-reliability coefficient; therefore, the data are considered relatively reliable [7].

Table 2. Reliability statistics

Cronbach’s alpha	Cronbach’s alpha based on standardized items	Number of items
0.808	0.833	12

3.2. Validity test

Validity refers to the degree to which the psychological and behavioral characteristics that need testing can

be accurately tested by tests or measurement instruments, namely the accuracy and reliability of test results [8]. Normally, the lower the significance level in Bartlett's test of sphericity ($p < 0.05$), the more likely the variables have significant associations. KMO values are used to compare simple and partial correlation coefficients among items, ranging from 0 to 1.

In this study, KMO test and Bartlett's test of sphericity were used to measure validity. The purpose of the validity test is to determine whether different variables are independent of one another through the test of sphericity. The KMO value of the questionnaire was above 0.6, and the significance level in Bartlett's test of sphericity was 0.000 (< 0.01); therefore, the validity of the data was considered good. **Table 3** shows the result from KMO and Bartlett's test.

Table 3. KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy		0.676
Bartlett's test of sphericity	Approx. chi-square	350.164
	df	66
	Sig.	0.000

The eigenvalue of factor 1 was 4.511 (> 1), and its explained variance was 37.59%. The eigenvalue of factor 2 was 2.07 (> 1), and its explained variance was 17.252%. The eigenvalue of factor 3 was 1.382 (> 1), and its explained variance was 11.518%. A total of 3 common factors were extracted. The cumulative variance contribution rate was 66.360% ($> 60%$). The explanatory importance of the extracted factors was good, which means that the extracted factors had a good effect.

Table 4. Total variance explained

Component	Initial eigenvalue			Extract the sum of squares of loads			Sum of squares of rotational loads		
	Total	Percentage of variance	Accumulation %	Total	Percentage of variance	Accumulation %	Total	Percentage of variance	Accumulation %
1	4.511	37.590	37.590	4.511	37.590	37.590	3.834	31.949	31.949
2	2.070	17.252	54.842	2.070	17.252	54.842	2.505	20.873	52.822
3	1.382	11.518	66.360	1.382	11.518	66.360	1.625	13.538	66.360
4	0.981	8.171	74.531						
5	0.727	6.061	80.592						
6	0.594	4.948	85.540						
7	0.451	3.761	89.301						
8	0.417	3.478	92.779						
9	0.330	2.747	95.526						
10	0.273	2.275	97.802						
11	0.156	1.301	99.103						
12	0.108	0.897	100.000						

Extraction Method: Principal Component Analysis

After establishing the component matrix, the questions in the same line in the ranking of the highest factor loadings were classified into one type and emboldened. The questions were divided into

accompaniment, identification, and singing while playing, and the validity of the data was good. In brief, all the indicators passed the KMO and Bartlett's test. The explained variance of the extracted factors was greater than 60%, and each factor loading was greater than 0.5. The division of dimensions was distinctive, and items in the same dimension were consistent. Therefore, requirements were met, and the validity of the data was relatively good [9].

Table 5. Rotated component matrix

	Component		
	1	2	3
Can the students master simple accompaniment patterns?	0.819	-0.108	0.069
Can the students switch between I, IV, and V7 chords with ease when singing while playing songs?	0.809	0.086	0.178
Can the students switch between different accompaniment textures with ease when singing while playing songs?	0.780	0.141	0.226
Are students able to adapt nursery rhymes?	0.738	0.223	-0.094
Can the students play simple nursery rhyme scores with the I-IV-V chord symbols with ease?	0.693	0.407	0.152
Can the students sing along while playing songs?	0.620	-0.136	0.100
Can the students compose harmonic accompaniment for simple nursery rhymes?	0.609	0.471	0.025
Can the students follow the rhythm accurately when playing music?	-0.095	0.830	-0.052
Can the students identify the pitch of a single note played on the keyboard?	0.151	0.812	0.111
Can the students accurately sing a simple nursery rhyme immediately when the score is given?	0.135	0.793	0.094
Can the students recognize the switch between the I, IV, and V7 chords when the teacher plays a nursery rhyme?	0.024	0.173	0.863
Are students sensitive to errors when practicing the songs they have learned to sing while playing in the class?	0.263	-0.048	0.852

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

3.3. Experiment content

As shown in **Table 6**, the significance level between the pretest and posttest of item 1, "Can the students follow the rhythm accurately when playing music?" was 0.01 ($t = -10.305$, $p = 0.000$). By comparing the specific differences, the pretest average (2.52) was noticeably lower than that of the posttest (4.02).

Table 6. Rhythm

Item		Average	Standard deviation	t	p
(1) Can the students follow the rhythm accurately when playing music?	Pretest	2.52	0.97	-10.305	0.000
	Posttest	4.02	0.68		

As shown in **Table 7**, the significance level between the pretest and posttest of item 2, "Can the students accurately sing a simple nursery rhyme immediately when the score is given?" was 0.01 ($t = -5.969$, $p = 0.000$). By comparing the specific differences, the pretest average (2.30) was noticeably lower than that of the posttest (3.55).

Table 7. Singing

Item		Average	Standard deviation	t	p
(2) Can the students accurately sing a simple nursery rhyme immediately when the score is given?	Pretest	2.3	0.91	-5.969	0.000
	Posttest	3.55	1.25		

According to **Table 8**, the significance level between the pretest and posttest of item 3, “Can the students identify the pitch of a single note played on the keyboard?” was 0.01 ($t = -10.297$, $p = 0.000$). By comparing the specific differences, the pretest average (2.30) was noticeably lower than that of the posttest (4.08).

Table 8. High pitch

Item		Average	Standard deviation	t	p
(3) Can the students identify the pitch of a single note played on the keyboard?	Pretest	2.3	1.06	-10.297	0.000
	Posttest	4.08	0.65		

As shown in **Table 9**, the significance level between the pretest and posttest of item 4, “Can the students play simple nursery rhyme scores with the I–IV–V chord symbols with ease?” was 0.01 ($t = -18.578$, $p = 0.000$). By comparing the specific differences, the pretest average (1.57) was noticeably lower than that of the posttest (4.00).

Table 9. Playing

Item		Average	Standard deviation	t	p
(4) Can the students play simple nursery rhyme scores with the I–IV–V chord symbols with ease?	Pretest	1.57	0.62	-18.578	0.000
	Posttest	4	0.74		

As shown in **Table 10**, the significance level between the pretest and posttest of item 5, “Are the students able to adapt nursery rhymes?” was 0.01 ($t = -12.927$, $p = 0.000$). By comparing the specific differences, the pretest average (1.47) was noticeably lower than that of the posttest (3.65).

Table 10. Adaptation

Item		Average	Standard deviation	t	p
(5) Are the students able to adapt nursery rhymes?	Pretest	1.47	0.6	-12.927	0.000
	Posttest	3.65	1.3		

According to **Table 11**, the significance level between the pretest and posttest of item 6, “Can the students master simple accompaniment patterns?” was 0.01 ($t = -13.203$, $p = 0.000$). By comparing the specific differences, the pretest average (1.55) was noticeably lower than that of the posttest (3.87).

Table 11. Accompaniment

Item		Average	Standard deviation	t	p
(6) Can the students master simple accompaniment patterns?	Pretest	1.55	0.62	-13.203	0.000
	Posttest	3.87	1.1		

As shown in **Table 12**, the significance level between the pretest and posttest of item 7, “Can the students sing along while playing songs?” was 0.01 ($t = -19.174$, $p = 0.000$). By comparing the specific differences, the pretest average (1.50) was noticeably lower than that of the posttest (4.02).

Table 12. Singing along while playing

Item		Average	Standard deviation	t	p
(7) Can the students sing along while playing songs?	Pretest	1.5	0.6	-19.174	0.000
	Posttest	4.02	0.81		

3.4. Result analysis

Based on the results of the teaching experiment, learning the course improved the students’ ability in singing while playing regardless of gender. The students were able to master the basic skills of singing while playing in applied piano teaching, and they showed relatively great interest in it, especially in the flexible use of harmonic texture. They were quite amazed at the advantages of the course.

- (1) It made it a reality where students could learn the piano by singing while playing popular songs and achieve the goal of learning the piano happily.
- (2) The arrangement of the teaching content is logical and progressive, piquing the interest of learners. The knowledge progresses from easy to difficult, and from easy accompaniment figures to extended ones.
- (3) After mastering the patterns of accompaniment figures played by the left hand, learners can concentrate on the melodic accompaniment by the right hand, so as to speed up the learning process.

Judging from the apparent improvement in accompaniment, note identification, and singing, teaching singing while playing by applying Xindi Applied Piano Pedagogy in vocational colleges of art appears to have benefits. Additionally, it enhances the initiative, activeness, and involvement of students in learning and changes their attitude from a passive one into an active one, thus improving their abilities in singing while playing ^[10].

4. Teaching reflections

The teaching experiment, in which 60 students were involved, made them who had not learned to play the piano before fall in love with it. It did not only expand their knowledge on singing while playing, but also reverse their passive attitude toward piano exercises. Moreover, it enabled them to sing while playing dozens of songs, which significantly improved their initiative in learning the piano.

Learning with the grand staff and chord symbols in a way that combines the intuition of sensibility with that of rationality enables learners to read music quickly and accurately. The easy left-hand accompaniment figures are taught from the basic to the advanced ones. Playing harmonies by the right hand also progresses from fingers 1–3 to fingers 4–5, and even two positions. In this way, the students may feel that learning the piano is easy and delightful, and they would be able to learn to compose accompaniments for familiar nursery rhymes within a short period of time ^[11]. Singing while playing or just playing familiar nursery rhymes can remarkably trigger their interest in learning the piano. The new knowledge imparted in each lesson should be arranged in such a way that the students can learn step by step, from easy broken chords, easy semi-broken chords, half note, quarter note, eighth note, dot, accompaniment figures, chord progression, rhythm training, and playing range to walking bass lines. In this way, students would be able to learn the piano in a creative, interesting, and quick manner. They would be able to build up a sense of confidence in learning the piano and gain a sense of accomplishment, meeting the teaching purpose of Xindi Applied Piano Pedagogy, which is to learn music through the piano. As a teaching characteristic of Xindi Applied Piano Pedagogy, the combination of singing while playing aims to train students to synergize

singing while playing as well as play and identify chords ^[12]. This form of teaching can help students obtain a sense of mode and pitch faster and more effectively. It also assists in the training of traditional harmony hearing and keyboard playing. On this basis, students would be able to develop harmonic thinking and comprehensive application capabilities, enhancing their ability to improvise accompaniments ^[13].

5. Conclusion

Students' enthusiasm and joy in learning, their speed of learning, and their creativity in learning the piano may be enhanced by taking the Applied Piano Singing while Playing course for one semester. This will improve their application ability, musical aesthetic ability, and appreciation ability. Furthermore, it is suitable for learners of various ages and may improve students' skills in piano playing, singing, accompaniment, harmony, transposition, and composition. Applying the practicality of piano in an autonomous learning cycle may help improve students' all-round qualities. Therefore, while learning the piano, learners can improve their performance level and play their favorite songs within a short time. Creativity and improvisation teaching improves professional piano students' ability in applying piano improvisation and accompaniment, comprehensively develops their musical quality, and enables them to enjoy the fun in learning the piano. Furthermore, it enables students to feel the beauty of music, use the piano to express their feelings, and most importantly, gain a sense of accomplishment as they learn and develop their piano playing skills.

Disclosure statement

The authors declare no conflict of interest.

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