

# **IMPROVEMENT OF STUDENT ABILITIES IN PIANO ACCOMPANIMENT AT ZHOUKOU VOCATIONAL AND TECHNICAL COLLEGE**

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## **Abstract**

The purpose of this research is to find out the problems of the students by holding the piano accompaniment level test for the students majoring in preschool education in Zhoukou Vocational and Technical College, and establish a workbook for professional training according to these problems, so as to improve the students' skills level. The purpose of this study (1) What problems do students have when they play piano accompaniment. (2) Improve students' piano accompaniment level. (3) Check the effectiveness of the training materials. The subjects of this study were 21 students who signed up, from the class of 2020, aged between 18-21. According to the comparison of the two test results, the research results achieved the expected purpose.

**Keywords:** Piano, improvisation, accompaniment, preschool education

## **Introduction**

The main research content of this paper is the problems existing in the piano improvisational accompaniment course for preschool students, and summarizes the teaching problems in the piano improvisational accompaniment course. This research studies the problem in the form of testing and training. First, a scoring standard is established, and three experts are asked to evaluate the scoring standard. Then, the students' rhythm, fingering, hand shape, chord

use, and notation ability in piano improvisational accompaniment works are evaluated., fluency and other six aspects to score. Through the analysis of these data, we can find out the reasons why students are too low in some items in the test, and build workbooks based on these questions, so that students can train in a targeted manner, so that students can complete the theory of song accompaniment and playing in a short time. The improvement of ability (Wang.S.X,2019). After training, students' piano improvisational accompaniment level was tested again to verify whether the students' piano improvisational accompaniment ability improved. At the same time, three experts were also invited to evaluate the effectiveness of the workbook. The teaching reform of piano improvisational accompaniment courses in higher vocational colleges has important theoretical value and practical significance to improve the comprehensive quality of students majoring in preschool education, and to deliver qualified music talents to the society. This paper takes the students majoring in preschool education in Zhoukou Vocational and Technical College as the object to study.

## **Research Objectives**

1. To find out students' problems with piano improvisational accompaniment,
2. to create piano accompaniment training guidebooks
3. to train students' piano improvisational accompaniment, and evaluate the piano students.

## **Literature Reviews**

Zhoukou Vocational and Technical College is a full-time public higher vocational college in Zhoukou. At present, the university has 13 second-level teaching departments and one affiliated hospital, among which the School of Preschool and Art is the largest second-level college with the largest number of students. Among them, preschool education is a relatively prominent major, which includes piano, vocal music, dance and other courses. In piano major, piano improvisational accompaniment is a comprehensive course integrating practicability and technology, which is an indispensable skill course in music major teaching in higher vocational colleges, and also one of the courses for

students to improve their music professional level. At the same time, it is a comprehensive discipline of piano performance, (Huang Qian, 2014) vocal music, and acoustics, audition singing and ear practice. Therefore, the piano improvisational accompaniment course is very important to the students majoring in preschool education in higher vocational colleges. From the overall teaching status of piano improvisational accompaniment course for preschool education majors, many students have problems such as weak piano playing skills, weak theoretical foundation, unreasonable arrangement and harmony, unenhanced visual playing ability, creative thinking, and performance of music in playing (Zhu Y L. 2017). How to train students' ability of improvisational accompaniment in a simple and efficient way is a problem that many piano teachers continue to explore in their teaching.

### **Research Methodology**

This research belongs to quantitative research to improve students' piano accompaniment level by establishing scoring criteria and workbooks. This research adopts the method of test and training to test piano accompaniment for students majoring in pre-school education. Purposeful, planned, and systematic collection of test data from research objects.

Perform qualitative analysis on the test data, find out the existing problems, design the piano training materials based on the existing problems, and conduct training through the training materials to test whether the students' accompaniment level has been improved and whether the expected results have been achieved.

**Target population:** This research is based on the 2020 students majoring in preschool education in Zhoukou Vocational and Technical College. Students are required to participate voluntarily. A total of 21 students have signed up. All students from the 2020 class are girls, aged between 18-21.

**The research instruments:** The researchers created scoring criteria and workbooks for research purposes, as shown below.

- 1 Piano Assessment Criteria / piano accompaniment tests
- 2 Piano accompaniment guidebook
3. Piano Assessment Criteria

This study first asked three experts to evaluate the test standards, and then conducted piano provisional accompaniment tests on pre-school education students. During the test, scores are made from six aspects: rhythm, fingering, hand shape, chord usage, sight-reading, and fluency.

The full score for each standard item is 10 points. According to the students' playing situation, three experts are invited to make a score. And make the transcript into a table. After the exam is over, qualitatively analyze the students' performance to find out the reasons for the low scores of certain standards in the piano accompaniment of the students.

Three piano experts evaluated the scoring content and criteria, and agreed on the scoring criteria and content.

Validity of the research instruments: First of all, experts are invited to evaluate the scoring standards. After passing the evaluation, students are tested and scored strictly in accordance with the standards. Then, students are analyzed and summarized according to the scores to find out the reasons. Then the students have targeted training, through a period of training, again test students' piano accompaniment level. Compare the results of the two tests to ensure the accuracy and validity of the data.

### **Specific terminology**

Piano improvisational accompaniment: Piano improvisational accompaniment is a comprehensive course combining practical and technical aspects. It is an indispensable skill course in the teaching of music majors in higher vocational colleges. It is a comprehensive subject integrating piano performance, vocal music, harmony, listening and ear training. Widely used in music teaching, singing, performance and other fields. It is a compulsory course for preschool education majors.

Preschool education: The pre-school education major aims to cultivate students with professional knowledge of pre-school education, who are capable of working as preschool teachers and administrators of pre-school education institutions, mainly engaged in education and teaching, education consultation, administration and other positions. Courses offered include piano, vocal music, dance, painting and so on.

### **Data collection method**

First explain the situation to the students, ask them to sign up voluntarily, determine the time and place, and inform them of the exam content.

Second, in accordance with the plan in the specified time to test the students, in the piano impromptu accompaniment test, in strict accordance with the scoring standards of three experts to score the students. Tabulate your grades.

Third, according to the establishment of the exercise book for students to train, after the training of students for the second test, the test results into a table.

Fourthly, analyze and summarize the results before and after two times and draw a conclusion.

Data analysis techniques: Percentage ( % ), mean (x) and standard deviation were used to analyze piano accompaniment performance (SD).

### **Results**

For the content of the test, the researchers designed the scoring criteria and asked three piano experts to evaluate the scoring criteria to ensure the accuracy of the scoring, fairness and rationality of the test. The scoring content includes six aspects: rhythm, fingering, hand shape, chord usage, visual spectrum ability, and fluency. The scoring standard is divided into three grades, 0-4 points, 5-7 points, 8-10.

1. the results of the first test
2. to training time and content arrangement
3. the second test results

#### **The results of the first test**

In this test, the song "Jasmine" is used to test the students' performance in piano accompaniment, The difficulty of playing is medium in the course materials, according to the research design content, the first piano accompaniment test was conducted on September 1, 2021. Invite piano experts to grade students' tests according to the grading scale.

Table 2. Results of the first test

	Hold piano accompaniment level test in Zhoukou vocational and technical college.							
The first time	The maximum score for each test is 10 points							
Content level	Rhythm	Fingering	hand shape	Chords use	Sight reading	Fluency	Total score	average score
Name								
1Ms.Han	10	9	4	5	8	8	44	7.3
2Ms.Wang	10	8	5	6	9	8	46	7.6
3Ms.Yan	10	6	7	4	7	7	41	6.8
4Ms.Lu	9	4	4	4	5	6	32	5.3
5Ms.Teng	10	7	6	6	9	7	45	7.5
6Ms.Wu	10	8	5	7	8	8	46	7.6
7Ms.Fan	6	5	7	4	4	5	31	5.1
8Ms.Geng	10	7	9	3	9	8	46	7.6
9Ms.Guan	10	9	9	5	10	9	52	8.6
10Ms.Cheng	10	8	6	7	9	9	49	8.1
11Ms.Du	10	4	5	7	8	8	42	7
12Ms.Huang	7	6	4	4	8	6	35	5.8
13Ms.Hou	9	6	3	3	10	9	40	6.6
14Ms.Kang	10	7	5	3	8	9	42	7
15Ms.Xiang	9	5	4	6	8	9	41	6.8
16Ms.Liu	10	8	5	8	9	9	49	8.1
17Ms.Xu	10	9	6	7	7	7	46	7.6
18Ms.Li	10	8	7	8	9	8	50	8.3
19Ms.Yu	6	6	5	6	6	5	34	5.6
20Ms.Zhang	10	8	3	4	9	7	41	6.8
21Ms.Zhang	10	8	4	4	8	8	42	7
<b>total</b>	168	146	113	111	168	160	894	148.1
<b>Average(X)</b>	8	6.95	5.38	5.28	8.0	7.61	42.5	7.1

Judging from the results of this test, the minimum score of the students is 31 points, the highest is 52 points, the average score is 42.5 points, and the average score of the individual items is 7.1 points. The scores for fingering, hand shape and chord use were 6.95, 5.38 and 5.28 respectively.

Through the first test, it was found that the students had problems in three aspects of hand shape, fingering, and chord use, and they needed to strengthen training. Statistics of student score percentage based on first test scores

Table 3 Analytical Grade Percentage

Content level	Grading standards		
	<b>8--10</b>	<b>5--7</b>	<b>0--4</b>
1. Rhythm	85.60%	14.20%	0
2. Fingering	47.60%	42.80%	9.50%
3. Hand shape	9.50%	52.30%	33.30%
4. Chords use	9.50%	47.60%	42.80%
5. Sight-reading	76.20%	19%	4.80%
6. Fluency	61.90%	38%	0

According to the average scores of the three teachers, in the rhythm scoring item, 18 students scored above 8 points, accounting for 85.7% . In the fingering scoring items, only 10 students scored above 8, accounting for only 47.6%, and 9 students scored between 5 and 7, accounting for 42.8%. There are only two students who scored 8 points or above in the hand type scoring item, accounting for 9.5, and 7 students who scored between 1 and 4 points, accounting for 33% . The reason for the low score is mainly due to the poor independence and flexibility of the 4th and 5th fingers of the fingers. In the use of chords, only two students scored 8 points, accounting for 9.5% , and 9 students scored between 1 and 4 points. accounted for 42.8% . The main reason is that the use of chords is inaccurate and too single. In the sight-reading ability score, 16 students scored above 8, accounting for 76.1% . In the fluency scoring item, 13 students scored above 8, accounting for 61.9% . From the analysis of the above test results, because some of the pre-school students were admitted from high school, and the other part was admitted to secondary school, the students have poor basic knowledge of piano and weak playing ability. When I first came into contact with the piano, I was unfamiliar with the piano and lacked awareness. Secondly, the enrollment of students majoring in preschool education

is uneven, and many students do not have a solid basic skill in playing the piano, which has caused the problem of difficult teaching.

The piano accompaniment course is a comprehensive course integrating music theory, harmony, piano, and solfeggio. Practical piano playing and related music theory knowledge are essential skills for students to master. In the traditional curriculum setting, the disjointness and poor integration of each course content have caused the problem of disconnection between students' practice and theory, which cannot make students integrate piano practice and music theory knowledge with each other. In terms of class schedule, the theoretical and practical classes are taught separately, which leads to the students forgetting most of the theoretical knowledge when they start to play, resulting in no good results, wasting resources and the time and energy of teachers and students.

Through the analysis of students' performance, it is found that most of the students have irregular hand shapes, wrong fingering, and single chord use.

### Training time and content arrangement

**Training Time:** The training time is from September 8th to December 22nd. It is scheduled to be held every Wednesday afternoon. There are two classes per week, a total of 16 weeks and 32 class hours. The training plan is arranged according to the content of the workbook as follows:

Table 4: The training time is from September 8th to December 22<sup>nd</sup>.

weeks	Training content	Class hour allocation
	Part 1 Fingering Training	
1	1.Suitable fingering 2.Wear fingering	2
2	3.Across the fingering 4.Expansion of fingering	2
3	5. Shrinkage fingering 6. Transposition of fingers in the same scale 7. Wheel fingering	2
	Part 2 Hand training	
4	1. Fourth and fifth finger training	2
5	2. Correct way of hand shape	2

6	3. Hanong training	2
	Part 3 Chord Use	
7	1.Chord names and structure	2
8	1.1.triad function	2
9	1.2.Use of triads	2
10	2. Accompaniment type training	2
11	2.1.Melodic accompaniment within the octave	2
12	2.2.semi-decomposed chord	2
13	2.3.broken chords in octaves	2
14	2.4.Accompaniment of lyrical songs with the accompaniment of broken chords	2
15	2.5 A melodic accompaniment pattern more than one octave	2
16	Comprehensive training	2
	contents	32

In the training process, the combination of theory and practice has been strengthened. Because each student's situation is different, the researchers teach students in accordance with their aptitude, strengthen guidance and training according to each student's weaknesses, and emphasize that they should continue to practice after class.

### The Training Content

According to the analysis results, most of the students' problems mainly focus on the two aspects of hand shape and chord use. In order to solve these problems, it is necessary to train in the two aspects of hand shape and chord use. Hanon and scales began to practice, especially to strengthen the training of students' 4th and 5th fingers while practicing scales can improve the speed and flexibility of students' fingers. In the use of chords, it is necessary to combine theory and practice. In addition to strengthening the study of theory, the learned theory should be used in the accompaniment of songs to achieve better results. For some students who scored relatively low in the rhythm scoring items, they were required to follow the metronome for training to develop a sense of rhythm. For some students' unreasonable use of fingering, it is necessary to strengthen the learning of piano fingering rules. For sight-reading ability and fluency, training to increase the number of accompaniment repertoires can further improve performance.

### Second Test Results

According to the research plan, after 32 class hours of training, the second test is conducted, and three experts are invited to score.

Table 4.6 Comparison of total scores (T1/T2)

Content level	Rhythm	Fingering	hand shape	Chords use	Sight-reading	Fluency
total score(T1)	168	146	113	111	168	160
total score(T2)	203	180	174	174	198	187

From the comparison of the total scores, the score of the second test is significantly higher than that of the first test(  $T1 < T2$  ), indicating that the training effect is remarkable and the workbook created has achieved the expected purpose. The experimental results are satisfactory.

From the above analysis results, it can be concluded that:

1 Through the first test, it was found that the students mainly had an incorrect hand shape, wrong fingering, single chord use, and unproficiency.

2 The training time is 16 weeks, 32 lessons, and the training content includes hand shape training, fingering training, and chord training.

3 After passing the second test, the scores of students' hand shape, fingering, and chord use was significantly improved, and the effect was good.

4. By comparing the results of the first time and the second time, it was found that the average score of the students in the second time was significantly higher than the average score of the first time, indicating that the experiment was successful. The workbook created has achieved the desired purpose.

### Discussion

From the results of this experiment, the majority of students in the piano accompaniment test mainly has incorrect hand shape, and unreasonable use of chords, the main reason is that many students do not have the foundation of piano playing, some of them just touch the piano for the first time after entering the school, are not familiar with the piano, lack of awareness. Secondly, the disjointed and poor integration between the contents of each course causes

the disjointed problem between students' practice and theory, which makes it impossible for students to integrate piano practice and music theory knowledge.

In the form of testing and training, this study scores the rhythm, fingering, hand shape, Chords use, sight-reading, and fluency in the piano accompaniment works performed by the students. Through the analysis of these data, it is found that the students are in the test, and some items have relatively low scores. Based on these problems, create piano training materials to allow students to train in a targeted manner. After the training, the students' piano accompaniment level will be checked again to verify whether the students' piano accompaniment ability has improved. Evaluate the effectiveness of piano accompaniment training materials.

The results of this study can provide teaching reference for other teachers, improve teaching methods and improve teaching level according to the situation of students. We can also promote the teaching reform of piano accompaniment in higher vocational colleges and improve the comprehensive quality of students in preschool education.

## **Conclusion**

The purpose of this study is to find out students' problems in piano accompaniment through tests, how to improve students' piano accompaniment level, Evaluate the effectiveness of piano accompaniment workbooks. Through the first test, it was found that the students mainly had incorrect hand shape, wrong fingering, single chord use, and unproficiency. The training time is 16 weeks, 32 lessons, and the training content includes hand shape training, fingering training, and chord training. After passing the second test, the scores of students' hand shape, fingering, and chord use was significantly improved, and the effect was good. The results of the first time and the second time, it was found that the average score of the students the second time was significantly higher than the average score of the first time, indicating that the experiment was successful. The workbook created has achieved the desired purpose.

## References

- Huang Q. (2014) On the Cultivation of Piano Accompaniment Ability in Higher Vocational Music Majors. (Dissertation, Hunan Normal University).<https://xueshu.baidu.com/show?paperid=d8ad404658517&site=xueshuse>.
- He Y Y. (2010). **Practical tutorial for piano accompaniment**, Guangdong China: Jinan University Press. Xinghai Conservatory of Music.
- Lauren. A (2005) Improvisation: An Integral Step in Piano Pedagogy. Music Honors Theses. [http://digitalcommons.trinity.edu/music\\_honors/1](http://digitalcommons.trinity.edu/music_honors/1)
- Liu C. (1999). **Piano accompaniment tutorial**, Beijing China: People's Music Publishing House.
- Qin Q S. (2011). Current Situation and Improvement of Piano Accompaniment Ability of Normal College Students. *Music Time and Space* (10), 67-68. <https://xueshu.baidu.com/usercenter/paper/show?paperid=04dda784857f>.
- Shi W Z. (2014). Problems and Countermeasures of Piano Accompaniment Course in Colleges and Universities. Hebei Normal University, <https://kns.cnki.net/File Name=1015541477.nh&DbName=CMFD2015>.
- Sun D T. (2015) Practice and Exploration of Innovative Research on Piano Accompaniment Course in Higher Vocational Education. Hebei University.[https://xueshu.baidu.com/usercenter/paper/show?paperid=9de3119db6a1566a9dfe30a967cc2fcb&site=xueshu\\_se&hitarticle=1](https://xueshu.baidu.com/usercenter/paper/show?paperid=9de3119db6a1566a9dfe30a967cc2fcb&site=xueshu_se&hitarticle=1).
- Sun F. (2019) The Connotation of Piano Improvised Accompaniment and the Ability Accomplishment of Accompanist .2019 1st Asia International Symposium on Arts, Literature, Language and Culture (AISALLC 2019).
- Sun J X. (2013). Innovation of accompaniment teaching in colleges and universities. *Popular Literature and Art: Research on Science Education*. P219-219 Northwest Normal University. [https://xueshu.baidu.com/usercenter/paper/show?paperid=429eb3fee2a121343e6de726038a1661&site=xueshu\\_s.e](https://xueshu.baidu.com/usercenter/paper/show?paperid=429eb3fee2a121343e6de726038a1661&site=xueshu_s.e).
- Wang S.X. (2019) Research on Basic Training of Piano Accompaniment [J]. *Journal of Chifeng University (Chinese Philosophy and Social Science Edition)*, 2019, 40(09): 8991. <https://kns.cnki.net/kcms/2019&filename=ZWDW201909024&v=Naw6qTyw74yNK3w16pZKaQlnzFRVcDeSpgLj5vF6OyuN9ohhnagtQRM03%25mmd2FbN0Cob>.

- Wang Y N (2016) **Research on piano performance and accompaniment teaching**, Beijing China: China Book Publishing HouseShanxi Yuncheng Normal University.
- Xia J B.(2008) The cultivation and training of impromptu piano accompaniment and Impromptu performance. (Dissertation, Northeast Normal University).<https://xueshu.baidu.com/usercenter/paper/show?>.
- Xu M. (2013). A study on the teaching of piano accompaniment for musicology majors in China Normal University.Central China Normal University. [https://xueshu.baidu.com/usercenter/paper/show?&site=xueshu\\_se&hitar](https://xueshu.baidu.com/usercenter/paper/show?&site=xueshu_se&hitar) ticle=1.
- Xue Y L. (2018) **Strategy Research of Piano Accompaniment Teaching in College Music Education**. 2018 4th International Conference on Education & Training, Management and Humanities Science (ETMHS 2018).
- Yi J. (2016) Brief Analysis on Innovation of Piano Accompaniment Teaching in Colleges and University. International Conference on Arts, Design and Contemporary Education (ICADCE 2016).
- Yu X. (2017) The Explore of the Piano's Impromptu Accompany for Preschool Education Majors. 2017 4th International Conference on Economics and Management (ICEM 2017) ISBN: 978-1-60595-467-7.
- Yang Y H. (2011). On the Cultivation of Piano Accompaniment Ability. Sound of Yellow River, 000(015), 43-44. <https://xueshu.baidu.com/>.
- Zeng Z. (2019) The cultivation of harmonic thinking in piano. Guizhou Normal University<https://xueshu.baidu.com/usercenter/paper/show?paperid=13584b775905c709ddc6282fb64ecfed>.
- Zhu Y L. (2017). Research on Problems and Solutions in the Teaching of Piano Accompaniment in Colleges and Universities. Journal of Nanchang Institute of Education, 032 (006), 59-61.