A BLENDED PIANO TEACHING MODEL FOR NON-PIANO MUSIC MAJOR STUDENTS IN HUNAN CITY UNIVERSITY

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ABSTRACT: *The purpose of this quantitative research is to improve the piano performance skills of the non-piano major sophomore music students in Hunan City University. Based on the Morrison, Ross and Kemp Model (MRK), the researcher selected Sight-Reading, Scales and Arpeggios, Etude and Piano Piece as components of training and assessment to construct the Blended Piano Teaching Model (BPTM). The purposive sampling technique had been employed to select samples and divided into two groups; one was the experimental group with 15 sophomores, and the other was the control group with 15 sophomores from 280 non-piano music majors in the School of Music, Hunan City University. The results revealed that the experimental group using the BPTM statistically significant improve in Sight-Reading, Scales and Arpeggios, Etude and Piano Piece components compared with the control group without applying the BPTM model. Therefore, it was concluded and confirmed that the BPTM was the effective teaching tools in piano teaching for non-piano major music students. As the result, the institutions should consider implementing BPTM as one of the piano teaching strategy.*

Keywords: *Blended learning, Piano teaching, Non-piano Music Major, Blended Piano Teaching Model (BPTM)*

Introduction

In China, there is many music students who are non- piano major. They have poor basic piano skills or no piano skills at all. This situation may cause them to fail other music courses. If students want to better improve their skills in their major (such as vocal music or other instrumental music), they need to learn the relevant knowledge and skills of the piano. In addition, with so many non-piano majors, one-on-one teaching becomes impossible and digital piano group classes become the best choice.

However, to help non-piano music major students, practice more and acquire more skills, a blended teaching model will be designed to eliminate some problems such as lack of completeness of etudes and expressiveness of piano piece. The digital piano teaching refers to the use of digital piano as a tool for teaching activities.

With the increasing number of music major student's year by year, the piano teacher's class hour also increases sharply. If teachers continue to use the traditional teaching methods, it is bound to increase the number of teachers and greatly increase the cost of education. The emergence of digital

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piano collective class greatly alleviates this contradiction and opens a new way to solve these contradictions effectively. The teaching method of digital piano group class advocates teachers as facilitators and students as subjects of learning. This method can better stimulate students' creative thinking and active interest in learning piano (Fisher, 2010). The Blended Piano Teaching Model (BPTM) will comprise of the digital piano teaching and WeChat.

Hunan City University is a university located in Yiyang city, Hunan province, China. A combined student body of 15,300 students, 1,780 faculty members, the university consists of 15 colleges, with 40 specialties for undergraduates. The school of Music has more than 1,000 students, 280 of whom are sophomores in this study. The assessment of piano performance skills in the piano field is generally divided into four aspects: sight-reading, scales and arpeggios, etudes and piano pieces skills.

This study aims to achieve two objectives: 1. To develop a blended piano teaching model for non-piano music major students in Hunan City University to improve their sight-reading, scales and arpeggios, etudes and piano pieces skills. 2. To determine the effectiveness of the Blended Piano Teaching Model (BPTM) in improving the sight-reading, scales and arpeggios, etudes and piano pieces skills of non-piano music majors in Hunan City University.

This study examines whether the BPTM model constructed by the researcher is effective for students by comparing the results of the selected students those who accepted BPTM with those who did not.

Literature Review

History of Group Piano Teaching

Group piano teaching first appeared in Dublin, Ireland, around 1815, when the German musician Johann Bernhard Logier began teaching piano only in class. In his view, this environment is ideal for the introduction of music theory and its application on the keyboard. Thus, the group piano and keyboard harmony classes were born (Richards, 1968).

In the late 1950s and early 1960s, the rise of group piano courses in colleges and universities were mainly aimed at cultivating piano beginners. These classes were designed with the idea that all music majors, regardless of their learning focus, should receive piano training as part of their integrated music training (Monsour, 1962). Thus, the purpose of these courses is to educate students about basic, functional keyboard skills such as visual reading, transposition, and fractional reading. The emergence of electronic piano laboratory has a profound impact on the future and direction of group piano teaching. First installed and realized at Ball State University in 1956, the electronic piano laboratory quickly became the ideal equipment for the university scene group piano project due to the smaller.

In the 1970s, university programs such as that at the University of Oklahoma, directed by E. L. Lancaster, and at the University of Texas–Austin, directed by Martha Hilley, established important group piano teacher-training programs. Anderson (2006).

The 1970s ushered in an era of collective piano teaching, in which collective piano teaching emerged as an important entity fully recognized in the field of piano pedagogy. This trend continued through the 1980s, which saw the birth of the first national piano group symposium. Guy Duckworth, who

established the D.M.A. degree in group environments at the University of Colorado, Boulder, endorsed the philosophy of group lessons, with no private instruction, for advanced students. (Duckworth, G., 1999). Group piano courses and textbooks often emphasize the use of the keyboard as a tool to acquire basic functional skills so as to ensure that students can freely use the piano as an aid in their future teaching as professional music educators (Uszler, Gordon, & Smith, 2000).

Morrison, Ross and Kemp Model (MRK)

Kemp's teaching model is a nonlinear design model consisting of nine design elements. The designer can start with any of these elements, and the model being designed does not necessarily need to contain all of the elements Morrison& Ross & Kemp (2004). This model includes 9 elements as follows:

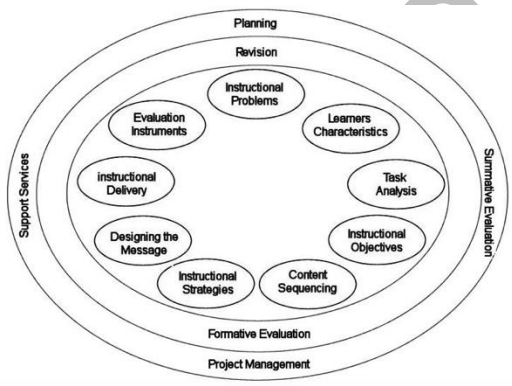


Figure 3: Morrison, Ross and Kemp Model (MRK)

The instructional model described above, the Kemp Design Model, adopts a circular structure, rather than one that is linear (Akbulut, 2007). Designers using this model do not need to consider components in any prohibited "ordered way to implement instructional system design" (Akbulut, 2007).

Blended Teaching

The blended teaching combines face-to-face and online courses. After entering the 21st century, blended teaching mode has developed rapidly, Jacqueline & Ricardo (2011) introduced the development and implementation of "blended teaching" courses. Blended teaching is an attempt to combine all the best elements of online and live teaching into some kind of "super mix", providing students with a wealth of skills and valuable educational experience.

An example of a blended learning model is the flipped classroom. Flipping the classroom refers to readjusting the time inside and outside the classroom to transfer the decision-making power from the teacher to the students. Centeno and Sompong (2015) conducted a research mainly aimed at constructing a development model of blended learning using flipped classroom to improve students' academic performance in the development of communication courses. Another form of blended learning is using social networking sites like Facebook in teaching and learning. Jayapravitra's (2009) research integrated Facebook into the process of teaching and learning as a teaching medium, thus improving the effectiveness of teaching and learning. Anuvareepong (2015) adaptive ADDIE model and SAM model constructed an EMBLE (Empowering Blended Learning) model as the model of supporting development and its application in AU (Assumption University) in MSME (Martin De Tours School of Management).

Social Networking Site

A social networking site is also known as a social networking website or social website. It is an online platform that allows users to create a public profile and

interact with other users on the website. The emergence of social media becomes an important platform for young people to provide emotional and cognitive development, taking up a lot of their time (Roberts, Foehr, & Rideout, 2005). Bausch & Han (2006) reported in the spring of 2006 that the number of users in the top 10 social networking sites in the United States increased from 46.8 million in the previous year to 68.8 million. These sites reveal important information about how young people and young people interact in the information age.

WeChat in Education

WeChat is a Chinese multi-purpose messaging, social media and mobile payment application developed by Tencent.

WeChat application has been used as an educational platform. WeChat could help in communication and interaction between teachers, students and learning resources. According to Huan (2017), based on the needs of interactive teaching mode, WeChat's main interactive functions are integrated, the mobile interactive translation teaching platform is constructed, and the environment of self-exploration and collaboration is created. The research shows that because the new model of mobile interactive teaching based on WeChat can break the limitation of time and space and the teaching mode can effectively promote the construction and cultivation of students' translation knowledge, the new translation teaching mode can effectively promote the interaction of translation teaching and improve the students' translation ability.

Li (2015) pointed out the advantages of WeChat-based music teaching communication platform, as well as its demand analysis, design principles, construction premise and ideas, functional framework and expected effect. As an important social platform, WeChat has the functions of resource center, communication center and personal center.

Wang & Fang & Han & Chen's (2016) study evaluated WeChat's ability to develop a community of inquiry (COI) in WeChat-supported semi-synchronous language communication. Language exchange was performed on WeChat during one semester of the first semester of 2014.

Zeng & Deng & Wang & Liu (2016)'s research focuses on medical education issues, and the use of the WeChat–PBL platform in medical teaching.

Digital Piano and Digital Piano Lessons

Digital piano is a new type of instrumental music that began to rise in the 1960s and 1970s. It is developed from electronic piano. One can find students in a digital piano lab with headphones on and playing various repertoire with Musical Instrument Digital Interface (MIDI) accompaniments supporting their rehearsals and performances (Pike, 2011).

Ajero's (2007) study shows that students' pre-test and post-test scores when compared after the students used the new teaching technique of keyboard technology and MIDI accompaniments combined with the musical instrument digital interface (MIDI) accompaniment and computer-assisted instruction (CAI) technology on group piano.

Baker's (2008) study also used four digital groups piano teaching which included experimental piano IV group，experimental piano II group，control piano IV group and control piano II group .In the experimental

groups, sophomores as tutors (piano IV group students) guides freshmen's (piano II group students) sight-reading ability every week after the class, and in the control groups, the sophomores and freshmen piano groups only study the courses in the classroom. Finally, the researcher used the pre and post test to evaluate the result. The results show that students' visual reading ability has been significantly increased.

Sight-reading

McPherson (1993) defines this skill as the ability to perform rehearsed tracks, performing by memory (remember music using notation and then reproduce it audibly), playing by ear (learn and reproduce music), improvising and reading music visually without prior rehearsal. Students who learn to sight read the piano music well tend to excel in all aspects of the piano (Pamela，2011).

The study of Lehmann & Ericsson (1996) shows that in sight-reading, individual differences in professional pianists' abilities are different due to different professional background. These findings indicate that in addition to acquiring a high level of piano skills, professional pianists have different professional abilities.

Scales and Arpeggios

Demirci (2012) argues that it is of great significance to practice scales on the piano. It is usually used to improve students' key touching skills, improve their hearing ability and assist in playing.

Hofmann (1976) emphasizes that arpeggio plays a very important role in improving the skills of piano playing. It is not only for training fingers, but also for training the ears' sense of coordination, understanding of the intervals, and understanding of the total range of the piano.

Etudes

Etudes show that the performer understands the mechanics of pianist's hands and fingers to build their strength and dexterity (Chen, 2007). Many Chinese piano beginners or students find etudes boring or not interesting because they are not only difficult, but they seem to be endless repetition (Duke, 2019).

Piano piece

Yu (2013) conducted an in-depth analysis of Liszt's piano sonata in B minor from the perspective of musical structure, theme, tonality, texture, beat and speed in combination with the diagram, so as to facilitate players to practice and play.

Conceptual Framework

Non-piano music major students usually have problems with sight-reading, scales, arpeggios, etudes and piano pieces; thus, the blended piano teaching model is believed to help these students improve their piano performance in terms of sight-reading, scales, arpeggios etudes and piano pieces. The model will blend the digital piano group lessons with WeChat Application.

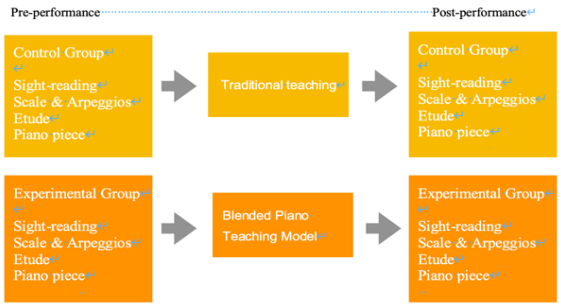


Figure 2: Conceptual Framework

H_1: The students' sight-reading performance skills are different between

students in the control group and experimental group.

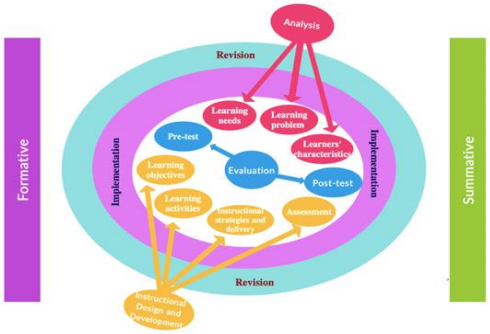
H_2: The students' scales and arpeggios performance skills are different between students in the control group and experimental group.

H_3: The students' etude performance skills are different between students in the control group and experimental group.

H_4: The students' piano piece performance skills are different between students in the control group and experimental group.

Methodology

In this study, the model is developed based on the seven steps proposed by Brahmawong (2013). However, in this study, there are only 6 steps. Step 1 is literature review, step 2 is the development of the conceptual model step 3 is the development of prototype model, step 4 is getting the opinions of experts regarding the prototype model, step 5 will be the implementation of the model to determine its effectiveness and step 6 will be the revision of the model after the experiment.



Characteristics	Frequency	Percent
19 years old	12	40.0
20 years old	13	43.3
21 years old	5	16.7

Figure 3: A Prototype Blended Piano Teaching Model

Experts Validation of the Prototype Model

Table 1: Summary of Experts' Evaluation of BPTM

Summary of experts' evaluation of BPTM

Criteria	$\bar{X}$	Interpretation
1. Usefulness of the model	4.8	Very High
2. Relevance of the model	4.6	Very High
3. Level of satisfaction for each phase	4.6	Very High
4. Clarity of each phase of the model	5	Very High
5. Attractiveness of the overall layout or design	4.4	High
6. Ease of Implementation	4.8	Very High
Overall Weighted Mean	4.7	Very High

* 1.0-1.5 – Very Low; 1.51-2.5 – Low; 2.51-3.5 – Moderate; 3.51-4.5 – High; 4.51-5.0 – Very High

Based on the expert evaluation results, all the items in the BPTM model received the average scores of at least "High". It means that all the items of the BPTM model were suitable for teaching the non-piano music major students of Hunan City University.

Reliability and Validity of the Instrument

The pos-test rubrics are based on the Examination Syllabus of Hunan City University, Music Faculty (Appendix I). Therefore, it was confirmed that the instrument was reliable and valid since the rubrics used in the posttest based on the standards set by Hunan City University.

Data Analysis and Results

Demographic Information

Table 2: Gender Analysis of Participants

Characteristics	Frequency	Percent
Male	10	33.3
Female	20	66.7
Total	30	100.0

Table 3: Age of Participants

There were 20 females' participants (66.7%) and 10 males' participants (33.3%) Table 4.1 involved in the study. Table 4.2 shown 12 (40%) participants aged 19. Thirteen (43.3%) of the participants were

aged 20. There were five participants aged 21 (16.7%). The occupation of all 30 participants (100%) was the student.

Descriptive Analysis

Table 4: Mean and Standard deviation of Piano skills between experimental and control groups

	Group	N	Mean	SD
Sight-Reading	experiment	15	11.8000	.98125
	control	15	10.4533	1.40909
Scales & Arpeggio	experiment	15	12.3533	.84335
	control	15	10.8133	1.44858
Etude	experiment	15	25.5333	1.59493
	control	15	23.6867	2.10641
Piano Piece	experiment	15	32.9667	2.79251
	control	15	30.8267	2.49441

Table 4 shows descriptive statistics of independent variables and dependent variable for 30 valid respondents.

Independent Samples t-Test

Under the Levene's Test for Equality of Variances and Equal variances assumed test, the significance level coefficient is

		Mean Difference	Sig
Sight-Reading	Experimental and Control group	1.35	0.005
Scales& arpeggios	Experimental and Control group	1.54	0.001
etude	Experimental and Control group	1.85	0.011
piano piece	Experimental and Control group	2.14	0.035

Hypotheses Testing

The statistical method of independent sample t-test was used to determine the differences of the means scores of the two groups (the experimental group and the control group) in four aspects of the piano test. The results revealed that all the four aspects were statistically significant differences between the control and the experimental groups. Therefore, it was evident that all the null hypotheses were rejected.

Conclusion

The final results showed that the scores of sight-reading, scales and arpeggios, etudes and piano pieces in the experimental group were significantly higher than those in the control group after WeChat application assisted teaching. The results of this study show that WeChat, the instant messaging application, not only plays an important role in the social field, but also gradually becomes an important auxiliary tool in teachers' teaching activities.

Recommendations

The importance of professional development to teachers

Researcher need to focus on the needs of teachers in order to establish professional development plans. In addition, universities need to encourage teachers' professional development and provide teachers with up-to-date information and promotional activities. At the same time, universities should also develop relevant evaluation standards based on the relevant professional development system of teachers.

Specialized applications auxiliary tool for teaching related subjects

In the further study, if conditions permit, the researchers can establish a team to develop a special application for digital piano group teaching of college students. In this way, the actual situation of teaching can be better matched, and the teaching application can be improved according to the teaching conditions, so as to achieve the best state of digital piano group teaching.

Technology integration

The integration of technology in education is a discipline that represents the future. Understanding and making good use of this subject can improve the teaching quality and promote the booming education.

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