

Innovative Teaching Mode of Instrumental Music Courses in Colleges and Universities in China: An Exploratory Study

Jia Yu^{1,2,*}

¹Jishou University, Jishou, China

²Adamson University, Manila, Philippines

*Corresponding author

Abstract: *This study assessed the application of innovative teaching methods among 150 instrumental music students and 15 teachers in colleges and universities in Hunan Province, China using a questionnaire survey. The results found that most students held positive attitudes towards and were satisfied with innovative teaching methods such as technology integration and collaborative learning. Teachers' evaluation of innovative teaching methods differed significantly depending on the major they taught. Students were satisfied with the teaching effectiveness but only moderately satisfied with the curriculum. Teachers' assessment of teaching effectiveness was consistent with that of the students. There was a significant positive correlation between innovative teaching methods and teaching effectiveness. This study identified existing problems in current instrumental music courses and provided a basis for improvement. It also validated the effects of innovative teaching methods which will facilitate the transformation and innovation of curriculum teaching models.*

Keywords: *innovative teaching methods, instrumental music, teaching effectiveness, satisfaction, correlation*

1. Introduction

In the era of new media, due to the progress of technology, the traditional instrumental music teaching method has been unable to fully meet the needs of the majority of scholars. The rapid development of network technology makes new media infiltrate into every corner of life and study imperceptibly, presenting us with the overwhelming reality of new media. Every era needs to bring forth new ideas[1]. Therefore, by analyzing the current situation of traditional instrumental music teaching and exploring how to make use of innovative teaching mode to develop rapidly is a topic that needs continuous research.

Nowadays, information resources can be shared, and the diversification of new media changes people's psychological quality, thinking mode and character building to varying degrees [2]. At the same time, the innovative teaching mode also innovates the traditional teaching mode and is replaced by a new one [3]. In recent years, there have been more and more researches on the use of innovative teaching methods in education, and it has been found that innovative teaching modes such as active learning, flipped classroom, project-based learning, and research-based learning have been proved to be an effective teaching method [4]. For example, compared with traditional lecture-based teaching methods, active learning can improve students' test scores and reduce the failure rate. In addition, active learning has been found to increase student engagement and motivation. Flipped classrooms can improve student test scores, critical thinking skills, and motivation. In addition, a study by Strayer found that students in flipped classrooms had a better understanding of course material than students taught in traditional classrooms. Similarly, project-based learning has been shown to be an effective teaching method in many subject areas, and project-based learning improves student engagement, problem solving, and critical thinking skills. In addition, a study by Mergendoller et al. found that project-based learning improved students' content knowledge and memory. Research-based learning has been found to be an effective teaching method in many subject areas, improving students' critical thinking skills, problem-solving skills, and overall academic achievement [5]. In addition, a study by Arbaugh et al. found that research-based learning increased student engagement and motivation.

2. Research significance

The use and research of innovative teaching models can have a significant positive impact on students, helping them to develop important skills and foster a love of learning that can help make learning more interactive and engaging for students.

For instrumental music teachers, the application and research of innovative teaching models can help teachers improve their work efficiency and sense of accomplishment, and help teachers better engage and motivate students, thus improving the teaching effect.

For future researchers, with the ongoing exploration of new teaching models that can help shape the future of education and contribute to ever-improving teaching practices, innovative teaching models often require researchers to explore new and emerging areas of research that help expand the overall knowledge base in the field of education. when

For school administrators, the use and research of innovative teaching models can bring tremendous benefits to school administrators, helping to improve student achievement, attract and retain highly qualified teachers, build strong community ties, and help build a strong and dedicated faculty that is invested in the success of the school.

3. Research design

3.1 Problem Design

In this study, the following questions will be designed to investigate and evaluate the innovative teaching mode of instrumental music course in Jishou University, so as to provide a basis for the formulation of more effective innovative teaching mode and its program.

3.1.1. Performance of respondents in instrumental music class

Student

- (1) Gender
- (2) Age
- (3) Grade
- (4) Major

Teacher

- (1) Gender
- (2) Age
- (3) Teaching major
- (4) Teaching years

3.1.2 Students and teachers evaluate innovative teaching methods in instrumental music courses

- (1) Technology integration
- (2) Collaborative learning
- (3) Blended learning
- (4) Multi-sensory teaching method

3.1.3 Students and teachers evaluate the teaching effect of the innovative teaching mode of instrumental music course

- (1) Teaching methods
- (2) Teaching atmosphere
- (3) Teaching order
- (4) Teaching effect

3.2 Research hypothesis and research paradigm

At the significance level of 0.05, this study tested the following hypothesis: The learning efficiency and learning effectiveness of the surveyed instrumental music students are significantly related to the use of innovative teaching modes and means.

3.3 Method design and sampling

Descriptive comparative study design using quantitative methods in this study. The study site is JS University School of Music and Dance, and the study participants are students and teachers majoring in instrumental music in JS University School of Music and Dance. 251 students majoring in instrumental music at JS University were selected for the survey, as shown in the table below. Using at least 150 instrumental music students from various majors, and another respondent from 17 teachers who teach instrumental music professionally, the researchers obtained at least 15 respondents for a total of 165 respondents.

4. Statistical results, analysis and interpretation

4.1 Basic information of respondents

In terms of students, the vast majority are female, between the ages of 18-19 and 20-21, most of the student respondents are from the second year, and most of the student respondents are students majoring in piano and guzheng.

In terms of teachers, most of them are female, and most of them are 26-35 and 36-45 years old. Most of them teach piano, saxophone, clarinet and flute, and most of them have been engaged in teaching practice for 0-5 years, followed by 21-25 years of teaching.

4.2 Evaluation of students and teachers on innovative teaching methods of instrumental music courses based on the following models

(1) Students

In terms of technology integration, the statistical results showed that the surveyed students agreed with or were satisfied with the innovative teaching methods of instrumental music courses, with an overall average score of 3.14 and SD of 0.93.

In terms of collaborative learning, the statistical results show that students agree or are satisfied with collaborative learning in the innovative teaching method of instrumental music. Respondents were allowed to practice instrumental music and to allow other instrumentalists to play good music. Students are encouraged to develop the ability to create music collaboratively. Teachers encourage students to cooperate and establish a democratic and harmonious relationship between teachers and students. The overall weighted average score $\bar{x}=3.11$, $SD=0.94$ can clearly show this conclusion.

(2) Teachers

In terms of technology integration, the surveyed teachers agreed with the innovative teaching methods of instrumental music courses, with the overall average score of $\bar{x}=2.65$ and SD value of 1.13, which were interpreted as "effective".

Among the indicators, "In the classroom, I use Internet resources to make the class interesting" and "I use pictures, videos," "I create teaching situations through multimedia," "Improving the teaching efficiency of music lessons" and "I use music production software to let students create their own music" ranked first with a weighted average of 1.15 and 1.01 SD scores of $\bar{x}'=2.53$ and 1.19, respectively, and 1.13.

In terms of collaborative learning, the overall mean is 2.91, and the corresponding standard deviation ($SD=1.12$) means "agree", which can be interpreted as the effectiveness of the innovative teaching methods of instrumental music course teachers. The first level is obvious and allows students to practice instrumental music in small groups. The lowest ranking is recorded by guiding students to feel the results of collaboration, experience the joy of collaboration, and inspire the intrinsic motivation of collaboration. The overall weighted mean score $\bar{x}'=2.91$ and $SD=1.12$ proved this conclusion.

The overall average score of the interviewed teachers' evaluation of the innovative teaching methods of instrumental music courses in mixed learning was 2.64 points, and the corresponding standard deviation was 1.16 points, indicating "agree", and the overall interpretation was "effective". In instrumental music courses, there is no significant difference between the age of the teacher and the years of music teaching and the assessment of innovative teaching methods, so the null assumption for these variables will be accepted.

4.3 The evaluation of students and teachers on the teaching effect of innovative teaching mode of instrumental music course was made based on the following aspects

In terms of teaching methods, both students and teacher respondents agreed with the innovative teaching methods of instrumental music courses. Overall mean score \bar{x} = 3.110, SD value is 0.87, SD value is 2.85, SD value is 1.13.

In terms of teaching atmosphere, both student and teacher respondents' assessments agreed with the innovative teaching methods of instrumental music courses. The average score of the students was \bar{x} = 3.05 and SD value was 0.91. The teachers' overall average rating of \bar{x} = 3.38 and SD value of 1.31 can be interpreted as satisfactory.

For students, the first innovative teaching classroom practice, the teacher-student interaction is strong, flexible teaching forms, such as group teaching, one-to-one teaching, task teaching, etc., \bar{x} = 3.15, SD = 0.87 interpreted as "agree"; For teachers, in the practice of innovative teaching, teachers and students have strong interaction and flexible teaching forms, such as group teaching, one-to-one teaching, task teaching, etc. SD = 0.87 Interpreted as "agree".

Among all the indicators, whether it is online or offline courses, through communication tools such as QQ groups, the communication channels between teachers and students have the lowest weighted average score of convenience and timely. The weighted average score of students is \bar{x} = 2.90, SD = 0.97, and the weighted average score of teachers is \bar{x} = 2.60.

In terms of teaching order, both the interviewed teachers and students agreed and understood the evaluation of the innovative teaching method of instrumental music course as "effective". The overall average score was 3.17 and SD value was 0.87, while the overall score of the interviewed teachers was 2.91 and SD value was 1.10.

For both online and offline courses, students and teachers who dress appropriately, behave appropriately, are in good spirits and have a good image, \bar{x} = 3.34, SD = 0.84, \bar{x} = 3.21, SD = 1.21, indicating "agree", are ranked 1.

The average score of students and teachers was the lowest, indicating that the teaching process was orderly and in line with the requirements of the syllabus. The weighted average score was \bar{x} = 2.98, SD = 0.90; The weighted average score was \bar{x} = 2.80, SD = 1.08; The degree of multimedia teaching equipment, hardware and software to meet the teaching needs of the teacher respondents is also the lowest, \bar{x} = 2.80, SD = 1.08.

In terms of teaching effectiveness, student and teacher respondents agreed on the effectiveness of innovative teaching methods in instrumental music courses, resulting in an overall mean score of 3.02, SD of 0.88, and SA of 2.85, with a corresponding standard deviation of 1.09.

4.4 There is a significant correlation between students' and teachers' evaluation of instrumental music curriculum learning innovative teaching methods and teaching effectiveness.

This study examined the Pearson correlation coefficient between students' evaluation of innovative teaching methods in instrumental music course learning and teaching effectiveness, and detected a low to medium positive correlation, with a correlation level of 0.05 and a p value of 0.0001 less than alpha. Therefore, the null hypothesis will be rejected.

As for the relationship between teachers' evaluation of innovative teaching methods in instrumental music course learning and teaching effectiveness, we found that collaborative learning, blended learning and multi-sensory methods were highly positively correlated with teaching effectiveness, so the null hypothesis would be rejected. However, there is a very low negative correlation between technology integration and teaching effectiveness.

4.5 Acceptance of innovative teaching methods

Students and teachers generally hold a positive attitude towards innovative teaching methods. In particular, technology integration, cooperative learning, blended learning and multi-sensory approaches were highly rated. Students learn deeply through multimedia resources, online tools, etc. Teachers, on the other hand, find that the new method brings a more vivid teaching experience. However, technical and resource constraints may affect the full implementation of these methods.

4.6 Effectiveness of innovative teaching tools and strategies

Multimedia resources, online courses and cooperative learning are the mainstream innovative tools and strategies in education today. They provide a more lively, interactive learning experience for students, while providing teachers with a more flexible approach to teaching. However, these innovative tools and strategies also face technological and resource challenges, and appropriate selection and application are critical to their success.

5. Discussion

5.1 Strengthen teacher training

Regular teacher training can help teachers overcome technical barriers and improve their self-confidence and motivation. Training content should be designed according to the needs and backgrounds of teachers to ensure that it is practical and targeted. For example, for those teachers who are less familiar with technology, basic computer skills and operational training can be provided. For those teachers who already have some experience, there can be an in-depth discussion of how technology can be integrated into teaching to create a more interactive and engaging learning experience.

5.2 Continuous investment in technology and resources

Investing in technology and resources is key to supporting innovative teaching methods. With the development of educational technology, schools and educational institutions need to constantly update and upgrade their equipment and systems to ensure their functionality and performance. This includes the purchase of new computers, software, networking equipment, and teaching resources, as well as the maintenance and repair of existing equipment and systems.

5.3 Encourage student feedback

Students are direct participants and beneficiaries of the teaching process, and their feedback and suggestions are essential for evaluating and improving innovative teaching methods. By collecting feedback from students on a regular basis, educators can understand the practical effects of innovative teaching methods, as well as the needs and expectations of students. This can help educators adjust and improve teaching content, methods and strategies to better meet the learning needs of students.

5.4 Interdisciplinary Cooperation

Collaboration between music education and other disciplines can create a richer and more diverse learning experience for students. Through interdisciplinary collaboration, students can approach music from different perspectives and ways, while also developing their interdisciplinary thinking and abilities. This not only enhances students' learning experience, but also helps them better understand and apply music knowledge and skills.

6. Conclusion

Although this study is an in-depth discussion and analysis of innovative teaching tools and strategies, there are still some unresolved problems and controversies. To better understand and apply these tools and strategies, more in-depth and targeted research is recommended.

These studies can target specific teaching tools or strategies, such as multimedia resources, online

courses, or collaborative learning. They can discuss their effect and influence from different angles and levels, such as students' learning outcomes, teachers' teaching effects, school education quality and efficiency. In addition, these studies may also consider different contexts and conditions, such as the age, gender, learning style and background of the students, the education and experience of the teachers, the size and resources of the school, etc.

In addition to qualitative and quantitative research methods, experiments and case studies can be used to test and validate the real effects and potential value of innovative teaching tools and strategies. This can help educators and researchers to better understand and solve practical teaching problems and improve the quality and effect of education.

Overall, further research is essential to drive growth and innovation in music education. In order to ensure the validity and reliability of the research, it is necessary to adopt scientific and rigorous research methods, as well as research strategies integrated with practice.

References

- [1] Hu Y Y. *Research on the aesthetics of art in the era of new media--taking animation art as an example [D]*. Southeast University, 2015.
- [2] Zhou Z. *Research on Microclass Teaching of High School Ideological and Political Classes under Internet Thinking [D]*. Guizhou Normal University, 2016.
- [3] Chen C X. *Basic status and development trend of new media communication in the context of network era [J]*. China Newspaper Industry, 2014, (16):23-23.
- [4] Wang X Y, Liu D P, Zhu Y J, et al. *An online program of "Basic Chemistry" in the context of delayed start [J]*. University Chemistry, 2020(35):52-55.
- [5] Li X Q. *Exploration of nervousness in accordion performance [J]*. Music World, 2010(12):22-24.