Journal of Neonatal Surgery
ISSN(Online): 2226-0439
Vol. 14, Issue 13s (2025)
https://www.jneonatalsurg.com

OPEN ACCESS

The Research Project Assessing Prospective Novel Pedagogical Strategies For Music Education In Higher Education

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Cite this paper as: Zhang Wei, Muhantha Paramalingam, (2025) The Research Project Assessing Prospective Novel Pedagogical Strategies For Music Education In Higher Education. *Journal of Neonatal Surgery*, 14 (13s), 129-134.

ABSTRACT

More and more people throughout the world are beginning to see the merit in music pedagogy and systematic instruction. Organized piano lessons may help bring together the academic world and the non-professional piano teaching sector since they are based on research-based and well-informed training. Furthermore, the research delves into how these assessments of the suitability of their piano training might influence how they use a range of piano skills while teaching pupils in a classroom environment. The researcher used a questionnaire that comprised a total of twelve separate practical piano abilities. These skills included a wide range of areas, including improvising, sight reading, accompaniment, composition, score eating literature, methods, melodic progressions, harmonisation, transposition, and modulation. The connections between music education and virtue, people, mental health, cognitive growth, and creative problem-solving are examined in this research. In order to probe these associations, the study used quantitative data. These findings provide further support to the concept that musical exposure greatly enhances children's general competence. Based on the quantitative analysis that was conducted in this research to evaluate the relationships between music training and various individual talents, the hypothesis is given increased weight. The study fills up the gaps left by previous research that did not include a quantitative examination of music education. Researchers also provide important suggestions for how colleges and universities may get more involved, develop more comprehensive curricula, and conduct more thorough evaluations of this field.

Keywords: *Learning, Higher Learning, Piano Instruction, Pupils.*

1. INTRODUCTION

Education plays an essential role in the development and progress of communities throughout. One approach to look at music education is as a process that takes into account the years of expertise of teachers and follows a structured curriculum that is presented in a systematic and purposeful manner. Among the most crucial features of this specific case is this. Music teachers, on the other hand, need to be well-prepared and maintain a steady, concentrated attitude while instructing their students. It is thought that a well-structured curriculum backed by knowledgeable and friendly teachers is crucial for helping pupils develop their technique and musicality. An organized curriculum is necessary, according to this viewpoint. Instrumental training is also considered a crucial part of music education, according to research. The reason for this is its multipurpose nature; one of its duties is to enhance one's musical knowledge and skill as an instrument player. Educational institutions that follow a structured music curriculum with a concentration on Western classical music seldom include piano lessons as a central part of their program. Along with a wide range of other instrumental learning majors, it is also often encountered as an auxiliary or minor subject. This is on top of the fact that, among Lincoln University College's music departments and conservatoires, it is the most sought-after major for instrumental study. By studying the piano, one may improve their aural and visual note-reading skills in addition to their knowledge of music theory, harmony, and form. Harmony comprehension could also be an area of improvement for them. The courses that make up the worldwide curriculum include a wide range of topics, including technical studies and exercises, various approaches to teaching and learning the piano, and more (Bautista & Ho, 2022).

The study of piano literature and history, a range of methods for teaching and mastering the instrument, as well as the compositions of Western, global, and regional composers. The importance of improving piano training cannot be overstated, since it directly influences the career paths pursued by music majors upon graduation. Because a musician's career trajectory is so unpredictable, it's conceivable that music students may struggle to grasp the concept of professional development. Due to the fact that many music-related occupations need proficiency on the piano, knowing how to play the instrument might be deemed relevant. These occupations may take many forms, including private music instruction, professional performance, and academic posts at schools like Lincoln University College. Moreover, it is relevant to the work of many artists throughout their lives (Bautista et al., 2023).

2. BACKGROUND

Researchers are looking at the methods used to teach piano at art colleges as part of a larger study on the expanding field of music instruction in specialized schools. This study is being conducted by evaluating different instructional approaches. Traditional piano instruction within classical frameworks has mostly concentrated on teaching student's proper technique, expanding their repertoire, and meeting performance expectations. All the way through piano lessons, this has been maintained. More and more, people are interested in learning about many approaches that are compatible with today's educational standards, the many forms of artistic expression, and the latest innovations in technology. Despite the fact that these methods of instruction have proven effective for basic education, this remains the case.
In the present art college climate, where students place a premium on creativity and interdisciplinary thinking, piano lessons need to adapt to meet the many goals that today's students have set for themselves. More in-depth engagement, critical thinking, and creative expression might be sparked by using creative methods including improvisation, composition, multimedia, and collaborative learning. Doing this is within the realm of possibility. There are now more options than ever before for learning the piano thanks to technological advancements such as digital tools, virtual learning settings, and interactive music software. Because of this, there are now more alternatives to choose from. These technologies have opened up new possibilities for customization, accessibility, and exploration outside the confines of the typical studio. The study's overarching goal is to assess the current state of art in art college education and to suggest new approaches to teaching that are more suitable to this setting. The study considered both past and present methods in music education in an effort to illuminate the dynamic relationship between tradition and innovation in this field. Its goal in behaving in this manner is to aid in the development of a student-centered, adaptable, and innovative curriculum for piano instruction in these schools (Bremmer et al., 2021).

3. PURPOSE OF THE RESEARCH

Analyzing and evaluating novel pedagogical strategies for piano training in art colleges is the goal of this study. Within the framework of art colleges, this project aims to explore and evaluate new methods of teaching piano. Finding and developing strategies that foster artistic expression, technical ability, and creative thinking in a way that is consistent with the interdisciplinary and imaginative nature of art colleges is the overarching goal of this study. The study's overarching objective is to lend a hand in the evolution of piano teaching at art institutions so that it may better meet the needs of contemporary students and the art world at large.

4. LITERATURE REVIEW

By tracing a development from classical to modern approaches, the literature on piano pedagogy reflects shifts in educational theory and practice. Pedagogues like as Carl Czerny and Heinrich Neuhaus established the standard method of teaching piano, which places an emphasis on technical proficiency, repertory expansion, and performing abilities. Despite their emphasis on discipline, organization, and mastery of classical technique, these methods don't often provide enough room for creative inquiry or the fulfillment of individual artistic requirements (Del Barrio & Arús, 2020). Ideas like experiential and collaborative learning are part of the current movement in education toward student-centered methods. Because they foster analytical thinking and creative expression, improvisation, composition, and reflection are cornerstones of music education. The values held by art institutions, which value innovation and collaboration across fields, are congruent with these methodologies. Innovations in technology have also greatly affected the way piano lessons are conducted. Online platforms, interactive software, and MIDI-enabled instruments are all examples of digital technology that has emerged recently and has created new opportunities for participation, immediate feedback, and individualised instruction. Research suggests that this form of technology might increase student engagement and passion while also increasing the usage of creative teaching approaches. More and more people are able to take piano lessons remotely, at their own speed, thanks to the rise of online and hybrid classes (Cook & Rapp, 2020).

5. RESEARCH QUESTION

- How does technological integration effect on piano instruction in art colleges?

6. METHODOLOGY

Research design: SPSS version 25 was used to analyse quantitative data. The 95% confidence interval and the odds ratio were used to determine the direction and degree of the statistical link. At $p < 0.05$, the statistically significant threshold was declared. The researcher was using descriptive analysis to determine the fundamental characteristics of the data. The data's validity and reliability were valuated using ANOVA.

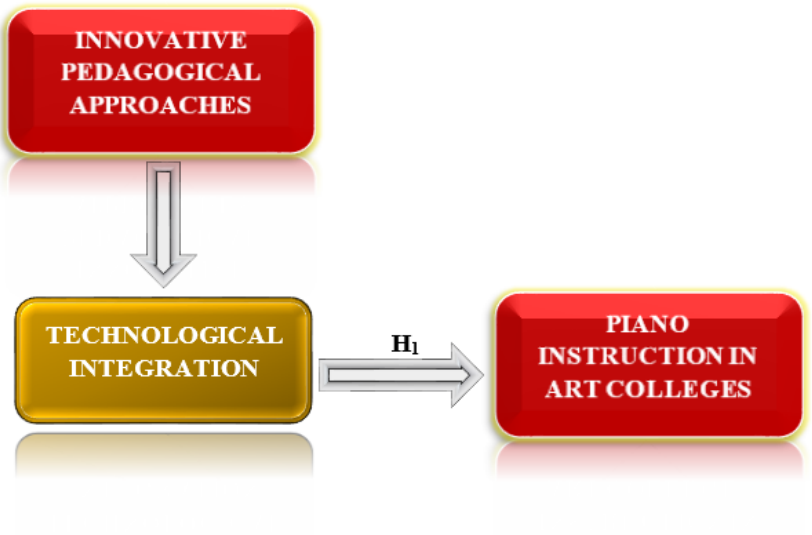
Sample: Rao-soft software was used to estimate the sample size of 390 questionnaires were distributed, 480 questionnaires were returned, and lastly, 80 questionnaires were rejected owing to incompletion of the questionnaire. In the end, 400 questionnaires were used for the research.

Data and Measurement: Quantitative analysis was used to gather primary data for the research project. The survey was broken down into two sections: (a) demographic data; and (b) factor answers for both online and offline channels using a 5-point Likert scale. Researchers gather secondary data from a variety of sources, mostly the internet.

Statistical Software: For statistical analysis, SPSS 25 and MS-Excel were used.

Statistical Tools: To comprehend the fundamental characteristics of the data, descriptive analysis used. The researcher uses the logistic regression model, ANOVA, to assess the validity of the data.

7. CONCEPTUAL FRAMEWORK



8. RESULTS

- **Factor analysis:**

One common way to verify that a set of measurement items has a valid latent component structure is to use factor analysis (FA). It is believed that latent, or unseen, components are responsible for the effects on the observable variables. Factor Analysis (FA) is one option among the model-based approaches. Its main purpose is to simulate the relationship between hidden variables, measurement errors, and observable occurrences. Applying the Kaiser-Meyer-Olkin (KMO) Method was determined whether is suitable for model building. Whether to know whether sampled enough variables, look at the overall model and each one individually. By using statistical methods, they put a number on the possible shared variance across several variables. A higher proportion indicates that factor analysis might work better with the data. The default range of integers returned by KMO is 0 to 1. A sample is considered adequate if its KMO value falls within the range of 0.8 to 1. When the sample size is too small and the KMO is less than 0.6, it's time to make some adjustments. The research needed to use discretion between 0.5 and 0.6, since the study's authors used 0.5 for this.

• KMO When a correlation's total value is close to zero, it means that the component correlations' magnitude is larger overall. Put differently, large-scale correlations provide a significant obstacle to component analysis.

The following are Kaiser's acceptability cutoffs:

A pitiful 0.059–0.050.

• 0.60 to 0.69 less than the mean

Normal range for a middle school student: 0.70–0.79.

With a quality point count ranging from 0.80 to 0.89.

The range between 0.90 and 1.00 is quite impressive.

Table: KMO and Bartlett's

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.870
Bartlett's Test of Sphericity	Approx. Chi-Square	3252.968
	df	190
	Sig.	.000

This demonstrates that claims are valid when used for sampling purposes. Bartlett's Test of Sphericity was performed to ascertain the overall significance of the correlation matrix. The Kaiser-Meyer-Olkin Sampling Adequacy Value is 0.870. The Bartlett's sphericity test yielded a p-value of 0.00. Bartlett's test of sphericity, yielding a significant result, indicated that the correlation matrix is not an identity matrix.

Test for Hypothesis

- **INDEPENDENT VARIABLE**
  - **Innovative Pedagogical Approaches:**

Modern students are more diverse and globalised than ever before, and traditional teaching methods can't keep up. Contemporary pedagogical techniques include innovative ways for promoting participation, analysis, invention, collaboration, and lifelong learning. To provide a more inclusive and engaging educational experience, these initiatives prioritize student-centered learning, leverage technology breakthroughs, and incorporate viewpoints from various fields (Fortuna & Nijs, 2020a).

- **FACTOR**
  - **Technological Integration**

When different systems, tools, and platforms from different technical domains are brought together to function harmoniously inside a system or organization, this is called technological integration. The goal is to increase productivity, simplify operations, and boost process functioning by integrating hardware, software, networks, and data. For instance, in corporate or academic settings, technological integration may include combining various software tools, hardware components, or online platforms to build a unified system that facilitates tasks such as data management, automation, and communication (Hogle, 2021).

- **DEPENDENT VARIABLE**
  - **Piano Instruction in Art Colleges:**

The term "piano instruction in art colleges" describes the practice of teaching and studying the piano as an integral aspect of the academic program at schools that prioritize the arts, such as universities with music, art, or performance degree programs or conservatories. Students' piano playing, knowledge of music theory, and general musical ability are the primary goals of this kind of teaching. Piano lessons are often part of larger music programs in art colleges or are available as electives for those interested in music performance, composition, or education (Ho & Bautista, 2022).

- **Relationship between Technological Integration and Piano Instruction in Art Colleges**

Due to the fact that technology improves both the learning and teaching processes, the correlation between tech integration and art college piano lessons is growing in importance. By incorporating technology into piano lessons, students at schools of contemporary art may have access to cutting-edge resources that foster their musical growth. Improved practice, access to a wealth of musical materials, and immediate feedback are just a few benefits that students may reap from digital pianos, music software, and internet platforms (Fortuna & Nijs, 2020b). Technology has also made learning more flexible by allowing students to work remotely with teachers and classmates using recording tools and virtual classrooms. Using technology, piano teachers may provide students with more individualized lessons, monitor their development, and introduce them to other styles of music and teaching approaches. Piano lessons benefit from this combination because it encourages students to think creatively, actively, and adaptably, while still supporting conventional teaching methods (Frischen et al., 2022).

On the basis of the above discussion, the researcher formulated the following hypothesis, which was to analyse the relationship between Technological Integration and Piano Instruction in Art Colleges.

H_{01}: There is no significant relationship between Technological Integration and Piano Instruction in Art Colleges.

H_1: There is a significant relationship between Technological Integration and Piano Instruction in Art Colleges.

Table 2: H_1 ANOVA Test

ANOVA					
Sum					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	39588.620	147	5655.517	1055.921	.000
Within Groups	492.770	252	5.356		
Total	40081.390	399			

The study's outcome is noteworthy. With a p-value of.000 (less than the.05 alpha level), the value of F, which is 1055.921, approaches significance. This means ***"There is a significant relationship between Technological Integration and piano instruction in art colleges."*** is accepted and the null hypothesis is rejected.

9. DISCUSSION

Using cutting-edge pedagogical approaches to teach students to play the piano improves their learning experience, encourages creativity, and better equips them to tackle the challenges of modern art. Resource availability, willingness to embrace a desire to mix innovation with tradition, and adaptability to changing circumstances are the three most important factors that will determine the success of these initiatives. If art schools pay attention to these details, they may build an impactful and all-encompassing musical education program. This study set out to answer the question, "What are some new ways that art colleges are teaching piano?" by looking at methods that boost student involvement, creativity, and learning results. Findings indicate that students greatly benefit from the use of technology in the classroom, namely interactive piano apps, digital audio tools, and MIDI interfaces, when it comes to visualizing musical concepts and receiving rapid feedback. With the help of these tools, students may also play around with different sounds and compositions, which is perfect for today's tech-savvy students. However, challenges such as maintaining a balanced mix of traditional and new ways and ensuring that access is dispersed evenly were also noted. Methods that bring together diverse areas of research are beneficial for fostering creativity, it was further stressed. By using methods like developing improvisation and composition, integrating visual arts or dance into piano lessons, and so on, students may create their own distinctive expression and establish connections with their broader creative activities. Although these methods are beneficial, they need instructors with a wide variety of abilities and the ability to blend artistic liberty with technical precision.

10. CONCLUSION

This research suggests that piano classes at art colleges may benefit greatly from using innovative teaching methods. Educators may create a more interactive and comprehensive learning environment by using technology, promoting interdisciplinary cooperation, adopting student-centered practices, and incorporating cultural awareness and mindfulness. These techniques align with the creative character of art institutions because they improve technical skill while also encouraging creativity, critical thinking, and self-expression. These results demonstrate the importance of adapting traditional classroom knowledge to meet the dynamic requirements of today's students. A lack of funding, inadequate teacher preparation, and the need to find a middle ground between tradition and innovation are just a few of the negatives that could arise from putting these techniques into practice. To ensure successful implementation, it is crucial to fund teacher professional development, make curriculum flexible, and provide access to digital resources. Finally, modern musical and artistic practices have high standards for students' piano playing abilities, and new approaches to teaching the instrument might greatly improve piano lessons to meet these standards. According to Jang Art schools may produce musicians with the tools to change the world of music if they teach a balanced approach that includes creativity, skill, and self-expression (Jang, 2020).

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