Proceedings of the International Conference on Education, Vol. 11, Issue 1, 2025, pp.179-187

ISSN 2424-6700 online
DOI: https://doi.org/10.17501/24246700.2025.11114

EXPLORING THE RELATIONSHIP BETWEEN PEDAGOGICAL METHODS AND LEARNING OUTCOMES IN MUSIC EDUCATION

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Abstract: The pedagogical methods used in music education play a crucial role in students' learning outcomes, including creativity and artistic expression, musical knowledge and theory, performance skills, technical proficiency, and more. A decline in these outcomes is often observed among music students, potentially due to the pedagogical methods engaged. This study explores the relationship between pedagogical methods and learning outcomes, focusing on the impact of traditional and modern approaches. Data was collected using mixed methods from 250 students (grades 6 to 11) and 20 teachers in the Western Province, through interviews, surveys, focus group discussions, and classroom observations. Comparative analysis of traditional methods, such as rote memorization and teacher-directed instruction, and modern techniques, including collaborative projects, experiential learning, and technological integration, revealed a significant relationship between active, student-centered teaching methods and improved learning outcomes. Quantitative data showed enhanced engagement and performance levels, while qualitative findings highlighted the importance of innovative, context-specific practices. However, insufficient resources and limited teacher training emerged as key barriers to fully realizing the benefits of innovative practices. The findings support a hybrid instructional model that combines traditional and modern techniques, preserving the cultural integrity of music while addressing the dynamic educational needs of learners. Recommendations for future research include strategies to address these barriers and further exploration of hybrid pedagogical models in diverse educational contexts.

Keywords: pedagogical methods, music education, creativity, learning outcomes

Introduction

In spite of the existence of systematic music instruction at school, the desired outcomes of learning are not achieved in terms of students' conduct, school culture and other environments. Music instructions leads to cognitive, social and emotional development of students, which has long been considered integrative learning. The pedagogical approaches largely contribute to their music knowledge, technical competence, innovativeness and performing capabilities. Though traditional approaches like teacher-directed instruction and memorization have been highly adopted to set theory bases, they tend not to improve creative skills and active involvement. By comparison, innovative student-centered strategies like the incorporation of technology, team work and experiential learning intend to improve motivation and comprehension. There is growing concern that children are that children are not gaining the desired competences of music education, which are to develop creativity, tolerance, emotional intelligence, memory and cognitive skills, stress management, language and social skills. This calls into question how far the subject is being taught with the pedagogical strategies that are being used. Innovative teaching practices can be beneficial but are impeded by issues like demanding curricula, inadequate funding and ineffective teacher training. For the sake of ascertaining valuable teaching methods that merge old and new practices without sacrificing the constantly changing needs of music students, one should take in to consideration the interconnection among pedagogical practice and learning outcomes. Through an analysis of the strengths and

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limitations of both approaches, this study seeks to identify the most effective pedagogical strategies that will enhance learning results and make music education fulfill its intended purpose.

Relevant Literature

Pedagogical Approaches to Teaching Music

Pedagogical techniques in music education have changed contemporary, moving from teacher centered to student centered and more experiential learning models. Traditionally, music education in the Western tradition has relied heavily on standard methods such as memorization and direct teaching (Campbell, 2018). While these strategies focus on developing technical skills and theoretical knowledge, they often fail to inspire creativity or engagement (Hallam, 2019). Though these approaches provide a strong foundational framework, studies suggest they might limit students' opportunities to explore personal expression and creative freedom (Hargreaves & Marshall, 2020).

The cognitive, affective, and psychomotor domains of music education encompass the development of technical skills, musical ear and imagination, or musical creativity skills (Elliott & Silverman, 2015). Project-based learning, active learning, and group music-making are a few student-centered strategies that have been shown to positively impact student engagement and performance outcomes (Biasutti, 2017). Collaborative and experiential learning enhanced creativity and fostered a love of music with greater success (Burnard & Dragovic, 2020).

The implementation of technology in music education has its myriad advantages. Engagement as well as motivation of students in relation to the subject of music is heightened when deploying digital tools such as virtual performance platforms and music composition programs (Bauer, 2014). The integration of technology with traditional approaches aids the acquisition of both theoretical and practical skills (King, 2021).

Challenges in Adopting Modern Pedagogical Approaches to Practice

Though there are advantages to contemporary pedagogical methods, their implementation remains problematic. In the view of Dammers (2012), teachers often do not have the professional development opportunities and competencies necessary to effectively integrate innovative teaching methods and budgetary and infrastructure constraints in schools, particularly in developing countries, also discourage the use of student-centered methods. (Krause et al., 2021)

The Need for a Hybrid Instructional Model

There is increasing evidence for an educational hybrid model that integrates traditional andnew pedag ogical approaches (Jellison,2015. Although integration recent strategies to increase participation and performance, this model retains structural and cultural fidelity of music learning. (Koopman, 2020). Hybrid models facilitate both technological application and novel research while offering learners structured support, as prescribed by Schmidt (2020).

Research Problem

Students' creativity, technical skill and overall artistic growth are all greatly helped by music education. The efficacy of contemporary teaching practices comes into question, nevertheless, in the context of a palpable decrease in the learning success of music students. While traditional methods like teacher-led instruction and rote memorization yield technical and structural fundamentals, they don't foster students' desire to learn more intensely and creatively. Yet, newer, more student-centered methods, including technology integration and collaborative learning, have been shown to enhance student performance and engagement. In spite of this, there is little understanding of the impact of different pedagogical methods on learning outcomes, particularly in the context of music education.

Research Objectives

- To examine the relationship between pedagogical methods and learning outcomes in music education.
- To compare the effectiveness of traditional and modern teaching approaches in enhancing students' musical knowledge, creativity and performance skills.
- To analyze students' engagement and achievement levels under different instructional methods.
- To identify challenges faced in implementing modern, student-centered teaching methods in music education

Materials and Methods

This study employed a mixed-methods design that blended both the quantitative and qualitative research approaches in order to study the relationship between pedagogic practices and music learning. Comparative analysis of traditional and modern pedagogies was done to find out their role in the interest, creativity, technical competence and overall performance of students.

Participants in the study included 250 grade 6 to 11 students and 20 music teachers who worked in schools within the Western Province, Sri Lanka. Participants were selected through purposive sampling to involve various learning environments and pedagogies. This helped develop a greater understanding of the influence of diverse pedagogical approaches on music education learning outcomes.

Survey, interview, focus group discussion (FGDs), classroom observation and performance test were utilized to collect data. Questionnaires and student and teacher surveys provided quantitative data on teaching strategies, extent of student participation and students' learning experience. Semi-structured interviews of teachers provided data on their opinions about teaching techniques, issues and effectiveness of different pedagogical practices. Focus group discussions with students also provided their learning choices, motivation and classroom music class experience. Classroom observations were

conducted to analyze real-time interactions between teachers and students, offering a direct understanding of how different teaching methods were applied. Furthermore, students' musical abilities, including technical Using standardized criteria, performance evaluations were conducted to device theoretical knowledge, skills and creativity. Ensuring a complete analysis of the effect of pedagogy on learning outcomes was this combination of data collection methods.

To identify the extent of success of various approaches to teaching, quantitative performance and survey data were statistically quantified using descriptive and inferential statistics such as mean scores, standard deviations and correlation analysis. At the same time, thematic analysis of qualitative interview, observation and focus group discussion data revealed emergent trends, difficulties and best practices in music teaching.

The study was conducted with proper adherence to ethical guidelines. Participants' informed consent was collected prior to data collection once they had been fully briefed on the purposes of the research. All responses were anonymized and protection of data procedures were employed in order to ensure confidentiality and privacy. Ethical permission was also procured from appropriate research and education authorities prior to undertaking the research.

This study guarantees a thorough investigation of pedagogical methods' effect on learning results in music education using a strict methodological design, which gives important data towards teaching improvement.

Results and Discussions

Using traditional methods.

Table 1: Distribution of Student Marks (Grades 6–11) Under Traditional Teaching Methods

Marks Range	**Number of Students**					
	Grade 6	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**
0 - 9	4	6	5	3	4	3
10 - 19	8	11	9	8	14	10
20 - 29	3	4	2	6	8	5
30 - 39	5	2	4	4	5	4
40 - 49	2	3	3	3	4	6
50 - 59	1	2	4	0	2	0
60 - 69	0	0	2	0	0	1
70 - 79	2	0	0	0	0	0
80 - 89	0	0	1	0	0	1
90 - 100	0	0	0	0	0	0

The analysis of student performance from grades 6 to 11 under traditional teaching methods reveals that the majority of students scored below 30 marks. The highest concentration falls within the 10–19

mark range across all grades, with grade 10 showing the highest number (14 students) in this range. Only a few students achieved between 40–59 marks and notably only few students scored above 60.

Using Modern methods

Table 2: Distribution of Student Marks (Grades 6–11) Under Modern Teaching Methods

Marks Range	**Number of Students**					
	Grade 6	**Grade 7**	**Grade 8**	**Grade 9**	**Grade 10**	**Grade 11**
0 - 9	0	0	0	0	0	0
10 - 19	0	1	0	0	1	0
20 - 29	1	0	0	0	0	1
30 - 39	0	2	1	1	0	0
40 - 49	2	3	2	1	2	1
50 - 59	4	3	3	4	2	1
60 - 69	5	4	6	5	4	6
70 - 79	6	8	5	7	6	7
80 - 89	5	7	6	8	9	5
90 - 100	7	5	8	6	8	9

Through classroom observation, I assessed student engagement levels by closely monitoring indicators such as eye contact with the teacher, responsiveness to questions, participation in activities, facial expressions and body language, including gestures and posture. When observe class rooms I used following Likert chart to gather information.

Likert Scale for Assessing Student Engagement in Classroom Observation

Observation Criteria	**Strongly Disagree (1)**	**Disagree (2)**	**Neutral (3)**	**Agree (4)**	**Strongly Agree (5)**
a) Students maintain eye contact with the teacher.	☐	☐	☐	☐	☐
b) Students respond actively to questions.	☐	☐	☐	☐	☐
c) Students participate in class activities.	☐	☐	☐	☐	☐
d) Students show interest through facial expressions.	☐	☐	☐	☐	☐
e) Students use positive gestures and body language.	☐	☐	☐	☐	☐
f) Students avoid distractions and stay focused .	☐	☐	☐	☐	☐

Below is the final outcome of the Likert scale assessment, which was used to assess student involvement based on a range of obvious classroom behaviours.

Table 3: Likert Scale Findings on Comparative Student Engagement Levels by Teaching Approach (Modern vs. Traditional).

Grade	Traditional Methods	Modern Methods
6	Medium	High
7	Medium	High
8	Low	High
9	Low	High
10	Low	High
11	Low	High

A test was administered to students to assist their performance and their results were marked accordingly. A graphic illustration of pupils' performance in relation to their evaluation scores is provided in the subsequent table.

Table 4: Average Scores by Class and Teaching Method

Grade	Average Marks (Traditional Methods)	Average Marks (Modern Methods)	Difference (Modern - Traditional)
6	62	71	9
7	56	73	17
8	51	74	23
9	48	62	14
10	41	74	33
11	39	74	35

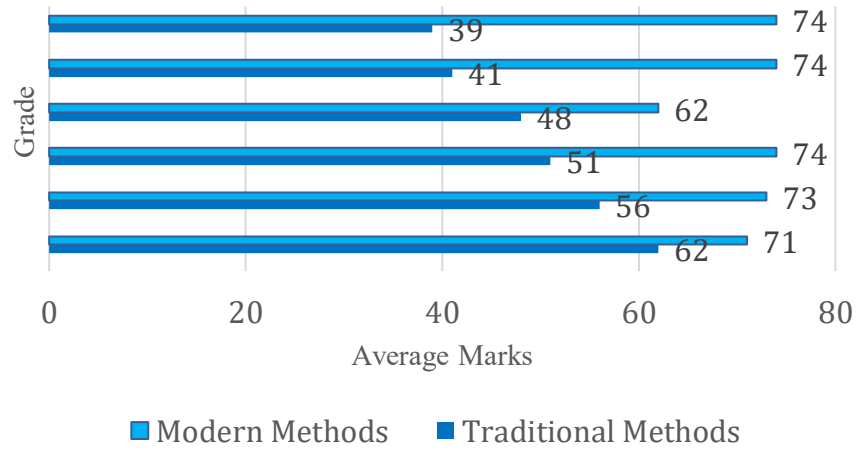

Figure 1: Average Marks by Grade and Teaching Method

Based on interviews and surveys with educators, the research identifies several challenges that hinder effective music teaching.These barriers highlight those structural issues that might disturb the advancement of teaching and learning in the area. When teachers take innovation into curriculum design that rests on a conventional base, they will face resistance from the institutions, nonavailability of modern technology, or obstacles to their professional development. An apparent exception between the special needs of the oriental music curriculum and those digital materials currently on offer appears to be a major concern. The chart below summarizes the generality of these obstacles as reported by the respondents, thereby helping to understand why students may have become disengaged and instructional strategies have experienced decrease of development.

a. Lack of professional growth opportunities

b. Insufficient access to modern technology

c. Due to traditional methods preferences Resistance to adopting new teaching methods.

d. Digital resources may not fit the oriental music curriculum.

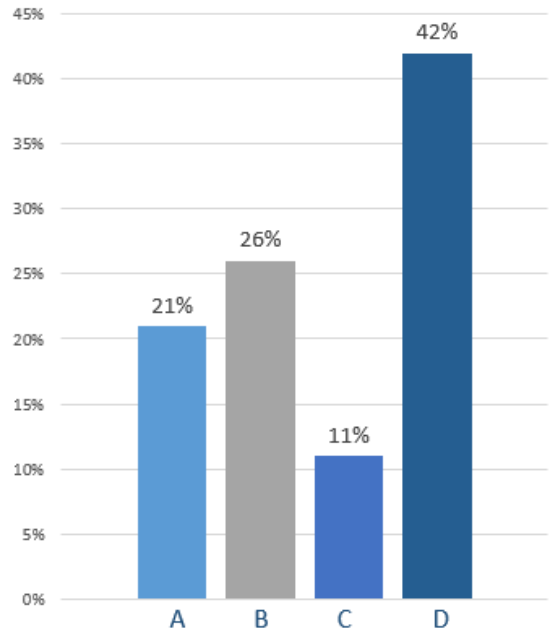

Figure 2: Barriers as perceived by Participants

Conclusion

The relationship between instructional strategies and learning objectives in music education was studied by considering both traditional and modern methods. The findings unequivocally present that, unlike traditional teaching methods, modern student-centered approaches greatly improve students' academic

performance, creativity, and involvement. Traditional methods may provide strong foundations in theory, but they rarely inspire interest among students or encourage them to express themselves. Modern methods, including group learning, technology integration, and experiential activities, helped students achieve higher marks, with increased levels of instead of engagement across all grades.

But the study revealed obstacles that restricting the widespread applicability of these technologies and practices. They mostly included a lack of technological resources; lack of a professional development opportunity for educators; and old-fashioned attitudes resisting change. A significant barrier is the incompatibility of presently available digital resources with the curriculum concerning to oriental music. To reform music education and ensure a beneficial and stimulating learning experience for all students, there exist certain relevant challenges in need of solution.

Research in the future should struggle to renovate the oriental music curriculum for a digital, modernized form of teaching the subject while retaining its cultural essence. Further, there is an expansion of practice through comprehensive study of a variety of digital tools and materials which reflect the unique needs of oriental music education. In addition, future studies may help identify successful models of teacher training - allowing teachers to develop relevant skills and confidence in implementing multiple forms of student-centered teaching as well as a guide to understanding these implementations. Longitudinal studies can also give important information of the impact of educational shifts upon performance, engagement, and retention over time. The use of edutainment offers unique contexts through a hybrid learning and entertainment focused on increasing interest and motivation of students in grades 6-11. Finally, researching and developing a deeper understanding of the world through multi- and intercultural music contexts through studies, compare successful practices from bottom-up strategies that allow for local adaptations which contribute to more universal music education.

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