Bridging the Performance Gap Through Visual Arts Integration: A Study of Pedagogical Practices in a Secondary School in Imphal East, Manipur

Kumabam Romee Singh[1*], Dr. Telem Kamlabati Devi[2] , Dr. Waikhom Romesh[3]

[1*]Research Scholar, Department of Fine Arts, Manipur International University

[2]Supervisor, Department of Indian Languages, Manipur International University

[3]Co-supervisor, Department of Manipuri, G.P. Women College, Dhanamanjuri University

Abstract

Visual arts education is important for enhancing students' cognitive, emotional, and creative growth, especially when integrated with subjects like Science, Technology, Engineering, Arts, and Mathematics (STEAM). The studies aimed into the teaching methods, resource availability, and challenges affecting visual arts education for students in Grades IX and X in a school in the Khurai constituency of Imphal East, Manipur. The research used a qualitative, descriptive research design and collected data through semi-structured interviews and classroom observations in Science, Social Science, and Mathematics. The research shows a strong dependence on traditional lectures, with a small amount of use of interactive tools like models and flashcards. This limits student engagement and learning flexibility. The main challenges include not enough instructional time, a lack of training in art teaching, and a shortage of basic art materials and facilities. The study highlights the need for innovative teaching methods and better resources to promote creativity, critical thinking, and problem-solving skills. The research provides practical suggestions for improving visual arts education and supporting comprehensive student growth.

Keywords: Visual arts education, pedagogy, STEAM, creative learning, resource gaps, student engagement

Introduction

Visual arts education profoundly impacts pedagogical approaches by fostering authentic meaning-making opportunities that engage students across cognitive, emotional, and physical dimensions (Kock et al., 2024). This integration transcends mere aesthetic appreciation, functioning as a powerful pedagogical tool that enhances critical thinking, problem-solving, and the development of a nuanced understanding of complex subjects (Buruntong et al., 2025). Specifically, incorporating visual arts within a STEAM framework has been shown to enhance creativity, improve problem-solving skills, and increase student engagement, positioning it as a significant pedagogical innovation for developing holistic, future-ready learners (Buruntong et al., 2025).

This integration allows students to construct and demonstrate understanding through artistic expression, connecting an art form to other subject areas and meeting evolving objectives in both (Griffith et al., 2018). Moreover, the deliberate inclusion of contemporary artistic practices within art education curricula contributes significantly to the comprehensive artistic development of students, encouraging lateral thinking, emotional learning, and creative expression through problem-based teaching approaches (Bojc & Potočnik, 2024). This pedagogical shift moves beyond traditional art as solely aesthetic, emphasizing its instrumental role in cultivating analytical skills and a deeper comprehension of the world (Osaigbovo, 2025). This approach shifts the educational focus from mere problem-solving to problem-setting, where students are encouraged to explore novel methods of inquiry without the immediate demand for definitive solutions, thereby fostering critical thinking (Skov & Skov, 2020).

Transactional methodologies, defined as the teaching strategies and approaches employed by teachers to deliver lesson, represent a key factor influencing the performance gap. The effectiveness of these methodologies depends on teacher competency, the availability of instructional resources, the adequacy of school infrastructure, and the level of student engagement. A thorough analysis of the strengths and limitations of these approaches can inform the development of targeted strategies to enhance outcomes in visual art educations.

This research is important because it can help improve school policies and teaching practices. The study aims to give practical suggestions for improving visual art education for Grades IX and X in a school in Imphal East, Manipur by looking at gaps in resources, teacher skills, and teaching methods. Improving visual art education can reduce performance gaps and help students develop the important skills they need for future challenge.

Literature Review

A substantial body of research supports the integration of visual arts into educational frameworks, demonstrating its efficacy in enhancing various cognitive and affective domains (Buruntong et al., 2025; Li & Yu, 2025). For instance, studies consistently indicate that students receiving visual arts instruction exhibit improved critical thinking abilities compared to their counterparts (Lukaka, 2023). The integration of visual arts into educational curricula has been explored as a mechanism to enhance cognitive and socio-emotional development, with researchers arguing that arts are integral to the education of the "whole child" (Dhanapal et al., 2014).

Visual art education fosters creativity and contributes to students' overall personality development by facilitating the expression of human emotions and skills (Bian et al., 2025). Quantitative studies have demonstrated a positive correlation between arts education and the enhancement of critical thinking skills, as students engaged in visual arts programs often exhibit superior creative and problem-solving abilities compared to peers in non-arts disciplines (Li & Yu, 2025). This cognitive activation occurs because visual arts tasks require students to navigate situations where their existing conceptual and technical repertoires are insufficient, compelling them to formulate new strategies and address challenges in innovative ways (Tomljenović, 2020). Furthermore, the "studio habits of mind" framework identifies specific cognitive dispositions, such as the capacity to envision, reflect, and engage and persist, which are explicitly cultivated through visual arts pedagogy and transferable to broader academic contexts (Tyler & Likova, 2012).

The review illustrates the interdependence of pedagogical strategies and resource accessibility in shaping visual arts learning outcomes. Focusing on these dimensions can increase educational effectiveness and support the development of a skilled, scientifically literate population.

The Rationale of the Study

This study aims to investigate the complex interplay between pedagogical methodologies, resource availability, and student outcomes within visual arts education, particularly for Grades IX and X in a school located in Imphal East, Manipur. Specifically, it will assess how current teaching practices and the allocation of educational resources impact students' creative development, critical thinking skills, and overall engagement in visual arts, aiming to identify areas for targeted intervention.

This research endeavors to uncover specific gaps in current educational provisions and pedagogical approaches, thereby laying the groundwork for evidence-based improvements in visual art education. The findings are expected to inform policy recommendations and pedagogical reforms that foster a more robust and effective visual arts curriculum, ultimately enhancing students' cognitive flexibility and problem-solving capacities (Lukaka, 2023). By examining these factors, the study seeks to establish a comprehensive understanding of the mechanisms through which visual arts education can be optimized to cultivate higher-order cognitive abilities and foster sustained academic achievement (Tomljenović, 2020).

Objectives of the study

1. To analyze the teaching methodologies employed in the school.
2. To identify the challenges faced in teaching and learning through visual arts.

Methodology

This study adopted a qualitative research approach, using a descriptive research design to investigate visual arts education for Grades IX and X at a school in the Khurai constituency of Imphal East, Manipur. This approach enabled an in-depth exploration of the interplay between teaching practices, available resources, and student engagement in this context. Data were collected through semi-structured interviews and classroom observations, providing rich insights into teachers' experiences, students' perceptions, and the practical implementation of visual arts curricula, especially in three subjects: Science, Social Science, and Mathematics. This methodology was selected to capture the inherent complexities of visual arts education, which often involve subjective interpretations and creative processes that cannot be easily measured quantitatively.

Findings

Objective 1: To examine the teaching methodologies employed in the school.

Table 1: Methods adopted in teaching-learning

Teaching Method	Science (%)	Social Science (%)	Mathematics (%)	Overall Average (%)
Lecture	100	100	100	100
Diagram	70	80	60	70
Flashcard	50	60	30	46
Model	60	40	40	46

The data indicates that while traditional lectures remain the dominant pedagogical tool across all disciplines, visual aids such as diagrams and models are utilized with varying frequency to support conceptual understanding. However, the relatively low usage of flashcards and models, averaging 46 percent, suggests that interactive and tactile learning tools are underutilized despite their potential to enhance student engagement and clarify abstract concepts (Buruntong et al., 2025). The limited integration of these interactive resources may hinder the development of adaptive cognitive skills that are essential for navigating complex learning environments (Asare et al., 2023). The reliance on conventional instruction is particularly problematic given the growing consensus that traditional STEM approaches are insufficient for preparing students for the demands of the future workforce, necessitating the integration of the Arts through the STEAM framework to foster interdisciplinary thinking (Buruntong et al., 2025). This integration is supported by evidence that visual arts tasks facilitate the understanding of complex scientific content, such as structures and material properties, by allowing students to observe and experiment from an artistic perspective (Holloway & Qaisi, 2022).

Objective 2: To identify the challenges faced in teaching and learning through visual arts.

Qualitative analysis of the interview transcripts and observation records revealed that the primary obstacles include insufficient instructional time allocated to creative exploration, a systemic overemphasis on standardised testing that marginalizes artistic endeavors, and a lack of specialized physical infrastructure such as studios or adequate materials (Altuğ & İlhan, 2021; BAHADIR & Berkant, 2022).

Teachers reported that the scarcity of basic art supplies compels them to rely heavily on theoretical instruction rather than practical application, thereby limiting opportunities for students to develop technical proficiency and creative confidence (Çakmak & Türkcan, 2019). Furthermore, participants expressed concerns regarding inadequate training in visual arts pedagogy, which resulted in a reliance on rigid, step-by-step teaching approaches that failed to accommodate diverse learning styles (Leung et al., 2024). This rigidity in instructional delivery is further compounded by a perceived lack of resources, as the absence of essential materials for "making" and building activities significantly constrains the implementation of integrated approaches (Shernoff et al., 2017).

Discussion

The study found that teaching in Imphal East mainly depends on lectures. This reflects a wider pattern in education where the teacher does most of the talking and controls the lesson, while students mainly listen without actively participating. Because of this, students may become bored and gradually lose their ability or motivation to think independently as they move to higher classes.

Specific pedagogical shifts toward project-based learning and model building have been shown to bridge thisgap by transforming abstract concepts into tangible experiences, fostering both engagement and a more profound understanding of complex subjects across disciplines (Tsakeni, 2024).

Beyond intellectual growth, the hands-on manipulation of diverse media during these sessions allows student artists to bridge the gap between their personal reality and the objects they represent, effectively translating the real world into new entities through the constraints of their chosen materials (Russo-Zimet, 2017).

Furthermore, these artistic processes enhance concentration and problem-solving abilities while simultaneously fostering a stronger sense of cultural identity through the act of creating (Luan & Luen, 2025). Despite these benefits, the integration of such practices is frequently obstructed by gaps in teachers' own subject-specific knowledge, which can lead to a lack of confidence when attempting to link different disciplinary contents within an integrated curriculum (Naidoo & Chirwa, 2016). This intrinsic anxiety is often exacerbated by extrinsic pressures, such as an overloaded national curriculum that prioritizes academic subjects like mathematics and language over the visual arts (Kock et al., 2024).

Conclusion

The research indicates that visual trades education for students in Grades IX and X in Imphal East is predominantly lecture-based, which restricts opportunities for student participation, creativity, and critical analysis. Although traditional methods prevail, the limited use of interactive aids such as models and plates hinders the understanding of abstract concepts and the development of problem-solving skills. Resource shortages, insufficient instructional time, and a lack of teacher training further obstruct hands-on and integrated literacy approaches. Despite these obstacles, the results underscore the potential of visual trades to promote cognitive flexibility, artistic awareness, and interdisciplinary thinking when effectively implemented in the classroom. It is essential to address deficiencies in teaching strategies, resource distribution, and teacher training to transform visual trades education into an engaging, student-focused process that fosters both intellectual development and creative expression, equipping learners for their futures.

References

Abdelnour-Nocera, J., Nielsen, L., Christensen, L. R., & Clemmensen, T. (2017). Socio-technical HCI for Ethical Value Exchange: A Case of Service Design and Innovation 'at the Margins' in Resource Constrained Environments. *Research portal Denmark,* 254 https://local.forskningsportal.dk/local/dki-cgi/ws/cris-link?src=itu&id=itu-a251092c-fca4-40f5-93b7-0447df5a6dec&ti=Socio-technical%20HCI%20for%20Ethical%20Value%20Exchange%3A%20A%20Case%20of%20Service%20Design%20and%20Innovation%20%2018at%20the%20Margins%2019%20in%20Resource%20Constrained%20Environments

Alfayez, M. Q. E. (2023). Availability of STEAM Approach Requirements among Intermediate-Stage Mathematics Teachers and Their Attitudes towards It. *International Journal of Instruction* 17(1), 215. https://doi.org/10.29333/iji.2024.17112a

Altuğ, N. Ü., & İlhan, A. C. (2021). Ortaokul Görsel Sanatlar Dersinin Öğrenme-Öğretme Sürecine İlişkin Öğretmen Deneyimleri. *Ankara Universitesi Egitim Bilimleri Fakultesi Dergisi*, 835. https://doi.org/10.30964/auebfd.912337

Asare, S., Walden, P., Aniagyei, E., & Emmanuel, M. K. (2023). A Comparative Study of Traditional Art Techniques versus Digital Art Techniques in the Context of College Visual Art Education. *American Journal of Arts Social and Humanity Studies*, 3(1), 21. https://doi.org/10.47672/ajashs.1556

De Kock, M., Marais, E., & Botha, C. (2024). Enhancing pedagogy for teaching visual arts in the South African Foundation Phase classroom: A collaborative endeavor. *Journal of Education*, *93*, 64–88. https://doi.org/10.17159/2520-9868/i93a04

Luan, S., & Luen, L. C. (2025). Implementing Printmaking in Junior High Schools under the New Curriculum: Practices, Challenges, and Pedagogical Responses. *International Journal of Academic Research in Progressive Education and Development*, *14*(3). https://doi.org/10.6007/ijarped/v14-i3/26224

Luo, Z., Tahir, R. (2025). ChatGPT-Assisted Lesson Planning for Children's STEAM Arts Education: An Experimental Study on Benefits, Challenges, Methods, and a Prompt Framework. *International Journal of Artificial Intelligence in Education* https://doi.org/10.1007/s40593-025-00513-6

Naidoo, D. & Chirwa, G. W. (2016). Productive pedagogies in expressive arts lessons in Malawi. *Journal of Education*, 64 https://doi.org/10.17159/i64a07

Russo-Zimet, G. (2017). Artist-Teachers' In-action Mental Models While Teaching Visual Arts. *Journal of Education and Training Studies*, 5(5), 171. https://doi.org/10.11114/jets.v5i5.2378

Tsakeni, M. (2024). Exploring Design Principles for STEAM Learning Activities Development by Science and Technology Teachers. *Educational Research for Social Change*, 13(1), 85. https://doi.org/10.17159/2221-4070/2023/v13i1a6

Shernoff, D. J., Sinha, S., Bressler, D. M., Ginsburg, L. (2017). Assessing teacher education and professional development needs for the implementation of integrated approaches to STEM education. *International Journal of STEM Education*, 4(1). https://doi.org/10.1186/s40594-017-0068-1