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## LINO BLOCK PRINTMAKING IN VISUAL ARTS EDUCATION FOR FORM 1 TRANSITION STUDENTS: A PROJECT-BASED APPROACH TO CULTURAL AND ENVIRONMENTAL LITERACY

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### Abstract:

This study explores the effectiveness of Lino Block Printmaking as an innovative pedagogical approach in visual arts education for form 1 Transition students. By integrating themes of flora and fauna, this technique promotes interdisciplinary learning, encouraging students to develop technical proficiency, creative expression, and cultural and environmental awareness. Through a qualitative case study approach, data were collected via classroom observations, student artwork analysis, and semi-structured interviews involving 42 form 1 Transition students. Findings reveal significant improvements in artistic skills and technical mastery, particularly in carving techniques, ink application, and manipulating positive and negative space. Students demonstrated enhanced control over line thickness and motif detailing, resulting in visually appealing and sophisticated prints. Furthermore, the project-based learning framework effectively reinforced students'

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understanding of essential visual arts concepts, including balance, contrast, repetition, and composition. Additionally, the thematic exploration of flora and fauna motifs fostered a deeper appreciation of local biodiversity and cultural heritage. The incorporation of sustainable art practices, such as using eco-friendly materials, heightened students' awareness of ethical and responsible creative practices. This interdisciplinary approach not only promoted artistic growth but also contributed to developing critical thinking, problem-solving, and reflective skills. The study concludes that Lino Block Printmaking serves as a valuable educational tool for enhancing students' artistic and conceptual competencies while promoting cultural and environmental literacy. Recommendations include integrating digital tools, encouraging eco-friendly practices, and organising student exhibitions to maximise learning outcomes.

#### Keywords:

Art Education, Block Printing, Cultural Literacy, Design Skills, Environmental Awareness, Flora Motifs

## Introduction

In today's visual arts education landscape, many students face challenges in developing practical artistic skills due to a curriculum that often prioritises theoretical learning over hands-on engagement. Particularly among Form 1 Transition students, the lack of exposure to tactile and experiential art forms hinders their ability to fully grasp and apply essential visual concepts such as balance, contrast, and composition (Mahsan & My, 2021). This gap in practical learning limits students' opportunities to explore their creativity and develop technical proficiency, making it difficult for them to connect artistic theory with real-world applications.

Furthermore, traditional approaches in the art classroom tend to neglect interdisciplinary themes such as cultural heritage and environmental awareness, which are crucial for fostering well-rounded artistic literacy. According to Keller et al. (2020), integrating local cultural motifs and ecological themes into the art curriculum not only enriches students' creative expression but also deepens their appreciation for biodiversity and societal values. However, many educational institutions have yet to fully embrace such integrative approaches, resulting in a disconnection between students' artistic activities and their cultural and environmental contexts (Buruntong & Kindoyop, 2024).

Lino block printmaking emerges as a dynamic and versatile technique that can address these challenges. This printmaking method involves carving intricate designs into linoleum sheets, applying ink, and transferring the image onto paper or fabric. It offers a highly tactile and visual learning experience, bridging traditional craftsmanship with contemporary artistic practices (Zhang, 2024). When applied within a project-based learning (PBL) framework, lino block printmaking allows students to engage in inquiry-driven, collaborative, and reflective processes that enhance both their technical and conceptual understanding (Zahra et al., 2023).

This study explores the potential of lino block printmaking as an innovative pedagogical tool in visual arts education for Form 1 Transition students. Specifically, it aims to investigate how this technique can enhance students' technical proficiency, foster creative expression, and promote cultural and environmental literacy. By focusing on themes inspired by local flora and fauna, the study seeks to demonstrate how integrating lino block printmaking into the

curriculum can cultivate not only artistic skills but also a deeper awareness of cultural identity and ecological responsibility.

### **Problem Statement**

Despite the recognised importance of practical engagement in visual arts education, many Form 1 Transition students continue to face significant challenges in developing their artistic skills due to limited exposure to hands-on printmaking techniques. Current instructional approaches often favour theoretical content over experiential learning, leaving students with few opportunities to interact directly with artistic processes that could enhance their technical proficiency and creative confidence (Hu & Zhou, 2023). This imbalance results in a superficial understanding of key artistic principles such as texture, contrast, and composition, and inhibits students from realising their full creative potential.

Moreover, the absence of structured, practical activities in printmaking, particularly lino block techniques, restricts students' ability to appreciate the detailed aspects of motif design, pattern creation, and relief printing. Without access to meaningful, tactile learning experiences, their ability to explore and innovate within the realm of visual arts remains constrained. This limitation is further compounded by a lack of integration of cultural and environmental themes within the arts curriculum, which are essential for developing a holistic artistic literacy. As Fethiananda and Ramadhan (2020) argue, the inclusion of ecological and cultural content in art education not only enriches students' creative outputs but also fosters a deeper connection to their community and environment.

Addressing these challenges requires an innovative pedagogical shift towards methods that actively involve students in the artistic process. Lino block printmaking offers a compelling solution, providing a hands-on, interdisciplinary approach that enhances both technical skill and conceptual understanding. This study seeks to evaluate the effectiveness of lino block printmaking in overcoming these educational gaps, by fostering technical proficiency, creative expression, and a richer appreciation of cultural and environmental contexts among Form 1 Transition students.

### **Literature Review**

The role of practical engagement in visual arts education has been widely explored in educational research, highlighting its significance in fostering technical skill development, creativity, and critical thinking among students. According to Dewey's (1938) and Luo (2024), theory of experiential learning, education should be rooted in real-life experiences that allow learners to interact meaningfully with their environment. This principle aligns closely with project-based learning (PBL), which emphasises inquiry-driven tasks that encourage students to apply theoretical knowledge through hands-on activities (Thomas, 2000; Kolb & Kolb, 2022). Within the context of visual arts, such approaches are essential for developing a deeper understanding of artistic concepts and enhancing students' ability to produce original and contextually relevant artworks.

Constructivist learning theory, as proposed by Piaget (1950) in Boeree, C. G. (2007) and further developed by Vygotsky (1978), posits that learners construct knowledge actively through interaction with their surroundings and social contexts. In visual arts education, this means that students benefit significantly from tactile experiences, where the process of creating art becomes a medium for knowledge construction. The integration of lino block printmaking into

the curriculum exemplifies this theory, as students engage directly with materials and tools, facilitating deeper cognitive processing and creative exploration (Adom, 2023).

Moreover, the STEAM (Science, Technology, Engineering, Arts, Mathematics) education framework underscores the value of integrating artistic practices with other disciplines to promote holistic learning. Sigit, Ristanto, and Mufida (2022) argue that incorporating ecological themes in art projects enhances students' environmental literacy, making them more aware of the role art plays in reflecting and shaping societal values. This interdisciplinary approach not only enriches students' creative outputs but also reinforces their critical awareness of cultural and environmental issues.

### Review of Previous Studies on Printmaking in Education

Numerous studies have examined the impact of printmaking on students' artistic development. Vojvodic and Sredanović (2020) found that introducing printmaking techniques in early education stages significantly improved students' manual dexterity, visual analysis skills, and aesthetic judgment. Their findings suggest that the repetitive nature of printmaking tasks allows students to refine their skills over time, leading to greater mastery and confidence. Similarly, Maor et al. (2023) demonstrated that project-based learning environments, where students engage in collaborative and reflective artistic projects, contribute to higher levels of metacognition, creativity, and problem-solving abilities. Their study highlights the importance of feedback and peer critique in refining students' work and deepening their conceptual understanding. Table 1 below shows the summary of past research findings on printmaking techniques and visual arts education.

**Table 1: Summary of Past Research Findings on Printmaking Techniques and Visual Arts Education**

Author(s)	Focus of Study	Key Findings
<b>Vojvodic &amp; Sredanović (2020)</b>	Printmaking in early education	Improved manual skills, visual perception, and creative confidence
<b>Zahra et al. (2023)</b>	STEAM-based eco-print projects	Enhanced environmental literacy and creative thinking in young learners
<b>Maor et al. (2023)</b>	PBL in artistic settings	Promoted critical thinking, metacognition, and collaborative learning
<b>Adom (2023)</b>	Cultural impact of innovative art practices	Art as a tool for cultural reflection and environmental awareness

The literature consistently supports the integration of practical, project-based approaches in visual arts education, particularly those that incorporate cultural and environmental themes. Theoretical perspectives from constructivism and experiential learning provide a strong foundation for adopting lino block printmaking as a pedagogical tool. Prior studies affirm the effectiveness of hands-on techniques in enhancing students' artistic skills and conceptual understanding, while also promoting a deeper appreciation of their cultural identity and ecological context. This study builds upon these insights by focusing specifically on Form 1

Transition students in Malaysia, aiming to fill the gap in local research regarding the practical application of printmaking in enhancing both technical and interdisciplinary competencies.

### **Methodology**

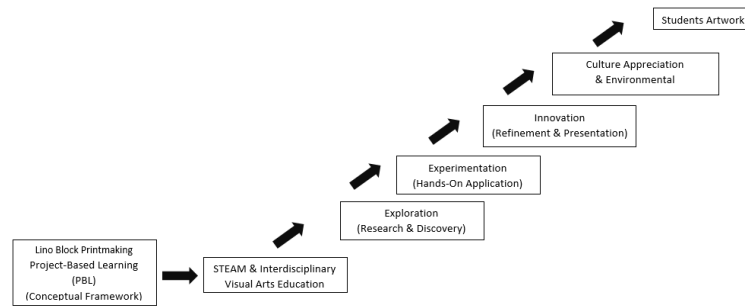
This research employed a qualitative case study approach, focusing on 42 form 1 Transition students from Sekolah Menengah Kebangsaan Kota Marudu Sabah under the Ministry of Education Malaysia. Data collection methods included classroom observations, student artwork analysis, and semi-structured interviews, providing a comprehensive understanding of how lino block printmaking influences students' artistic development. By examining the integration of flora and fauna themes within lino block printmaking, the study aimed to assess how effectively this approach enhances students' technical proficiency, conceptual understanding, and ecological awareness. Thematic analysis was applied to the collected data, ensuring a structured examination of students' creative processes, skill development, and thematic expression (Denny, E., & Weckesser, A. (2022).

### **Research Design**

The study adopted a Project-Based Learning (PBL) framework to facilitate an engaging and process-orientated learning experience. This approach guided students through various stages of creative exploration, including conceptualisation, design, production, and reflection. Students were encouraged to create lino block prints inspired by local flora and fauna, drawing from their observations of the natural environment. This thematic approach allowed them to explore various artistic techniques such as carving, inking, and pattern creation while developing a deeper understanding of design principles like balance, contrast, repetition, and composition. The PBL framework also emphasised collaboration and peer critique, enabling students to reflect on their work, discuss artistic challenges, and refine their techniques through constructive feedback. By fostering a learner-centered environment, this approach promoted independent learning, creativity, and critical thinking.

### **Conceptual Framework**

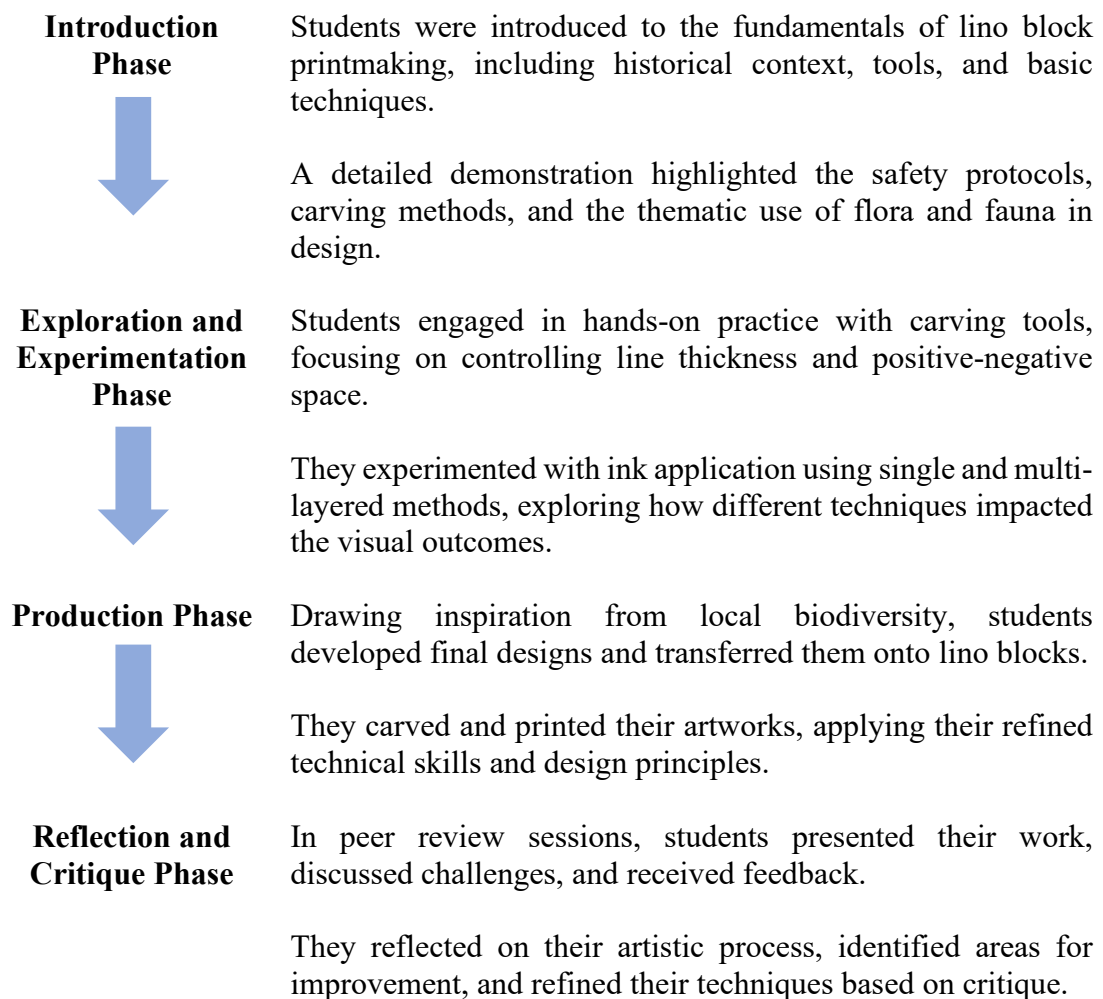
The conceptual framework of this study is rooted in the integration of Project-Based Learning (PBL), visual arts education, and interdisciplinary themes. The objective is to examine how lino block printmaking, when inspired by flora and fauna motifs, can enhance students' artistic competencies and promote cultural and ecological literacy. PBL served as the foundation for this framework, guiding students through a structured yet flexible learning process that encouraged experimentation, reflection, and refinement. The integration of cultural and environmental themes was intended to deepen students' appreciation for local biodiversity and heritage, enriching their artistic expressions and conceptual understanding. Furthermore, the framework sought to bridge the gap between traditional craftsmanship and contemporary art practices, providing students with the skills and knowledge to apply traditional techniques in innovative ways (Amabile, 1997; Hawari, A., & Noor, A. (2020). Figure 1 illustrates a modified conceptual framework for lino printmaking in visual arts education (adapted from Amabile, 1997; Hawari, a., & Noor, a. (2020).



**Figure 1: Modified Conceptual Framework for Lino Printmaking in Visual Arts Education (Adapted from Amabile, 1997; Hawari, A., & Noor, A. (2020))**

### Flow Chart of the Process

The research process was systematically structured into four key phases to ensure that students experienced a comprehensive and progressive learning journey. Each phase was designed to build upon the previous, enabling students to develop their technical, conceptual, and reflective skills throughout the lino block printmaking project. The process can be summarised as follows. Figure2 shows the phases of the lino block printmaking process in visual arts education.



**Figure 2: Phases of the Lino Block Printmaking Process in Visual Arts Education**



This structured approach ensured that students were actively engaged in every stage of the creative process, enhancing their learning outcomes in both technical and conceptual domains.

### ***Participants and Sample***

A total of 42 form 1 Transition students from a national secondary school participated in this study. These students were selected based on their enrolment in the Visual Arts subject and their interest in creative art activities, particularly printmaking. The sample represented a diverse range of artistic abilities, providing a comprehensive perspective on the impact of lino block printmaking. The inclusion of form 1 Transition students was intentional, as this age group is at a foundational stage in their artistic learning journey. Their participation offered valuable insights into how a structured, hands-on approach to printmaking can enhance their creative and technical skills (Suraya, B., 2021).

### ***Research Instruments***

The following research instruments were employed to collect data:

#### ***a). Structured Observation Forms***

These forms documented student engagement, participation, and technical execution during the printmaking process, providing insights into their creative development (Creswell, J. W. 2009; Suraya, B., 2021).

#### ***b). Visual Arts Education Assessment Rubric (KSSM)***

A standardised rubric was used to evaluate the quality, creativity, and technical proficiency of students' lino block prints, ensuring consistent and objective assessments (Kementerian Pendidikan Malaysia, 2015).

#### ***c). Interview Checklist***

Semi-structured interviews provided qualitative insights into students' experiences, challenges, and learning outcomes, enhancing the overall understanding of how lino block printmaking influenced their artistic growth (Creswell, J. W. 2009; Suraya, B., 2021).

### ***Adapted Survey/Interview Questions***

To gain deeper insights into students' experiences and learning outcomes, semi-structured interviews were conducted. The questions were adapted from established qualitative research frameworks and customised to align with the objectives of this study, focusing on artistic skill development, conceptual understanding, and environmental awareness.

#### ***Examples of Adapted Interview Questions:***

1. What were the main challenges you encountered during the lino block printmaking process?
2. How has this project changed your understanding of local flora and fauna?
3. Which technique or stage did you enjoy the most, and why?
4. How do you think your artwork reflects environmental or cultural themes?
5. After completing this project, do you feel more confident in your ability to create visual art? Please explain.

These questions encouraged students to articulate their thoughts on the practical, creative, and reflective aspects of the project, providing valuable qualitative data for analysis.

### ***Data Collection Procedure***

The data collection process was structured into four main phases to provide students with a comprehensive learning experience:

#### ***a). Introduction to Lino Block Printmaking***

Students were introduced to the fundamentals of lino block printmaking, including its history, tools, and techniques. A detailed demonstration was provided, emphasising safety procedures, carving methods, and the importance of precision during the creative process. Students were shown various examples of lino prints inspired by natural motifs, enhancing their understanding of how the technique could be used to express cultural and environmental themes.

#### ***b). Exploration and Experimentation***

During this phase, students were encouraged to experiment with different carving tools and techniques, focusing on the manipulation of positive and negative space. They practiced ink application using various methods, including single-colour and multi-layered printing, to enhance their technical proficiency and creative expression. This stage allowed students to freely explore artistic concepts while developing their skills through trial and error.

#### ***c). Lino Block Print Production***

Inspired by local flora and fauna, students conceptualised their designs and transferred them onto lino blocks. They applied carving techniques to create detailed motifs, considering factors such as symmetry, contrast, repetition, and composition. Once the carving was complete, students applied ink to the blocks and pressed them onto paper or fabric, producing their final prints. This practical approach allowed them to fully engage with the artistic process from conceptualisation to execution.

#### ***d). Reflection and Critique***

Students participated in peer critique sessions where they shared their work, discussed artistic challenges, and provided constructive feedback to their peers. This reflective process encouraged them to assess their work critically, identify areas for improvement, and refine their techniques. Additionally, the critique sessions fostered collaboration and promoted a deeper understanding of how artistic concepts can be effectively applied to achieve desired outcomes. The structured data collection procedure provided students with ample opportunities to explore, experiment, and reflect on their creative process, enhancing their overall learning experience.

### ***Data Analysis***

The collected data was analysed using a thematic analysis approach, which allowed researchers to identify patterns and themes related to students' artistic growth, conceptual understanding, and environmental awareness. Three main categories emerged from the analysis:

#### ***a). Artistic Skill Development***

Students demonstrated substantial improvement in their technical skills, particularly in carving techniques, ink application, and motif composition. As they refined their approach to lino block printmaking, their prints exhibited greater clarity, precision, and aesthetic appeal. Thematic



analysis also highlighted how students adapted their techniques through iterative experimentation. They learnt to control line thickness, enhance contrast, and manipulate positive and negative space to create visually compelling designs. This technical mastery was further reinforced by their ability to layer inks and create intricate textures, showcasing their growing proficiency in relief printing.

### ***b). Conceptual Understanding***

The project-based approach effectively enhanced students' understanding of visual arts concepts. By applying principles such as balance, contrast, repetition, and composition, they demonstrated an increased ability to translate abstract ideas into tangible artworks. The incorporation of flora and fauna motifs provided a thematic structure that encouraged students to think critically about how their artistic choices conveyed meaning. Their ability to analyse and refine their designs through peer critiques demonstrated a heightened capacity for creative problem-solving and conceptual thinking.

### ***c). Cultural and Environmental Awareness***

The integration of local flora and fauna motifs within lino block printmaking served as a valuable tool for promoting cultural and environmental literacy. Students expressed a deeper appreciation for biodiversity through their artwork, actively researching native plants and animals to inform their designs. Moreover, discussions about sustainable art practices encouraged students to consider the ecological impact of their creative choices. This heightened awareness of environmental issues contributed to their ability to make informed decisions about the materials and techniques they used, promoting responsible and ethical art-making practices.

### ***Technique of Analysis***

The data collected from observations, artwork analysis, and interviews were analysed using thematic analysis, following Hole, L. (2023) six-phase framework. This method provided a clear and systematic way to identify patterns and themes within the data, ensuring that the findings were both comprehensive and grounded in the students' actual experiences. Table 2 below shows the thematic analysis process.

**Table 2: Thematic Analysis Process**

<b>1. Familiarisation with Data</b>	Researchers reviewed all data, including notes and transcripts, to gain an overall understanding.
<b>2. Generating Initial Codes</b>	Important segments of data were highlighted and coded according to recurring ideas related to technical skills, creativity, and awareness.
<b>3. Searching for Themes</b>	Codes were grouped into broader themes, such as skill development, conceptual growth, and cultural/environmental insights.
<b>4. Reviewing Themes</b>	Themes were refined and cross checked with the data to ensure consistency and relevance.
<b>5. Defining and Naming Themes</b>	Clear definitions were established for each theme, aligning them with the research objectives.
<b>6. Producing the Report</b>	Detailed descriptions and student quotations were used to illustrate each theme, supporting the study's conclusions.

### **Lino Block Printmaking in Visual Arts Education for Form 1 Transition Students**

Lino block printmaking is a dynamic and high-impact artistic technique that has emerged as a powerful tool in modern visual arts education. This creative process involves carving intricate designs onto linoleum sheets (lino blocks), applying ink to the uncarved surfaces, and pressing them onto paper or fabric to produce vivid and captivating prints. Not only does this method allow students to produce unique images that reflect their imagination, but it also hones their technical and artistic skills through an authentic, hands-on learning experience.

Adom (2023) highlights that in the context of visual arts education, lino block printmaking offers a practical, innovative, and transformative approach, particularly for form 1 Transition students who are at a foundational stage of their artistic development. This technique goes beyond conventional teaching methods by emphasising experiential learning, where students actively engage with materials, tools, and printmaking techniques to explore, experiment, and refine their creative abilities. What sets lino block printmaking apart is its ability to integrate flora and fauna themes, enriching students' learning experiences while promoting cultural awareness and ecological understanding.

By exploring motifs inspired by the natural world, students are encouraged to appreciate the significance of local biodiversity while learning to adapt traditional elements into contemporary artistic expressions. This interdisciplinary approach not only fosters cultural appreciation but also instills a sense of environmental responsibility as students reflect on their surroundings and incorporate sustainable practices into their creative work. (Vojvodic & Sredanović, 2020)

Maor et al. (2023) emphasise that this technique aligns well with the principles of Project-Based Learning (PBL), which promotes creativity, collaboration, and critical thinking. The PBL framework applied in lino block printmaking provides students with the opportunity to plan, produce, evaluate, and refine their work continuously, establishing a deep and meaningful learning process. This iterative approach not only cultivates high levels of technical skill but also builds resilience, self-confidence, and the ability to connect artistic concepts with cultural and environmental contexts.

In an educational landscape that increasingly emphasises creative and holistic learning, lino block printmaking emerges as an effective pedagogical tool for stimulating innovative thinking, technical competence, and cultural literacy among form 1 Transition students. This approach offers a clear pathway to strengthening the foundations of visual arts education while integrating cultural appreciation and environmental awareness into students' creative processes. Furthermore, the application of PBL in lino block printmaking allows students to actively engage in experiential learning. By continuously refining their artwork, they develop critical thinking and problem-solving skills essential for artistic growth. This approach effectively bridges the gap between theoretical knowledge and practical application, enhancing both technical proficiency and creative expression.

## Findings and Discussion

The findings from this study indicate that lino block printmaking is an effective tool for enhancing artistic skills, conceptual understanding, and cultural and environmental awareness among form 1 Transition students. A summary of the key findings is provided in table 3 below.

**Table 3: Summary Impact of Lino Block Printmaking on Artistic Skills, Conceptual Understanding, and Environmental Awareness**

Key Findings	Discussion
<b>Artistic Skills and Technical Mastery</b>	Significant improvement in carving techniques, ink application, and overall artistic proficiency.
	Enhanced control over line thickness and detail, especially when creating intricate motifs inspired by local flora and fauna.
	Ability to layer ink and manipulate negative space to produce visually sophisticated prints.
	Developed creative problem-solving skills by refining designs and overcoming challenges.
<b>Strengthening Visual Arts Concepts</b>	Reinforced understanding of essential visual arts principles: balance, contrast, repetition, and composition.
	Applied artistic concepts effectively to create cohesive and meaningful artwork.
	Peer critique sessions enhanced critical thinking, self-reflection, and the ability to assess and improve artistic work.
<b>Cultural and Environmental Awareness</b>	Thematic focus on flora and fauna encouraged exploration of cultural motifs and ecological themes.
	Fostered a deeper appreciation for natural environments and local biodiversity.
	Promoted awareness of sustainable art practices through the use of eco-friendly materials and techniques.
	Strengthened environmental literacy and cultural appreciation through research and creative expression.

### *Artistic Skills and Technical Mastery*

The introduction of lino block printmaking in visual arts education significantly enhanced students' artistic skills and technical proficiency. As students engaged in the hands-on process of carving linoleum blocks, they developed greater control over their carving tools, allowing them to produce cleaner lines, intricate details, and well-defined motifs. Their ability to manipulate line thickness and adjust pressure during carving improved with consistent practice, resulting in more refined and sophisticated prints. Moreover, the ink application process offered an additional layer of technical mastery. Students learnt to apply ink evenly across the surface of their carved blocks, ensuring consistent coverage that effectively highlighted their designs. By experimenting with different inking techniques, such as rolling, brushing, and dabbing, they discovered how varying ink densities and textures could produce distinct visual effects. Figure 3 illustrates mastery of relief printing from carving to high-quality prints.



**Figure 3: Mastery of Relief Printing From Carving to High-Quality Prints**

The creative possibilities provided by layering ink and manipulating negative space were particularly valuable. Students applied these techniques to achieve depth, contrast, and emphasis within their prints, enhancing the overall aesthetic appeal of their artwork. Through this process, they also learnt to troubleshoot common printmaking challenges, such as ink smudging, uneven coverage, and loss of detail during printing. This continuous experimentation and refinement of techniques fostered creative problem-solving skills, as students adapted their approaches to overcome obstacles and improve their prints. Their growing proficiency in carving, inking, and composing motifs demonstrated their ability to apply technical knowledge effectively, bridging the gap between conceptualisation and execution.

Additionally, the iterative nature of lino block printmaking encouraged students to reflect on their creative process, identify weaknesses, and make informed decisions to enhance their work. This reflective practice contributed to the development of artistic confidence, precision, and control, essential qualities for achieving technical mastery in visual arts. Figure 4 illustrates artistic skill development through lino block printing techniques.



**Figure 4: Artistic Skill Development Through Lino Block Printing Techniques**

### ***Strengthening Visual Arts Concepts***

The experiential learning approach of lino block printmaking played a crucial role in deepening students' understanding of essential visual arts principles. Through the tactile process of designing, carving, and printing, they actively applied concepts such as balance, contrast, repetition, and composition, resulting in cohesive and visually compelling artwork.

#### ***a). Balance***

Students learnt to arrange visual elements within their prints to create a sense of harmony and equilibrium. By carefully distributing motifs inspired by flora and fauna, they were able to



achieve aesthetically pleasing compositions that demonstrated a clear understanding of visual balance.

**c). Contrast**

The manipulation of positive and negative space proved to be a valuable lesson in creating contrast. Students experimented with carving techniques to enhance the visual impact of their prints, making use of bold lines, intricate details, and uncarved areas to highlight focal points and produce striking images.

**d). Repetition**

Creating repeating patterns became a fundamental aspect of their design process, allowing students to explore rhythm and unity within their compositions. By experimenting with motif placement and pattern-making, they gained insights into how repetition contributes to the overall coherence of their artwork.

**d). Composition**

Students refined their ability to organise and structure visual elements effectively. Through the iterative process of designing and reworking their prints, they developed an understanding of how arrangement, scale, proportion, and spacing contribute to the overall composition. The peer critique sessions held during the project were particularly effective in enhancing students' conceptual understanding. By presenting their work to peers and receiving constructive feedback, they developed critical thinking skills and the ability to assess their own artistic decisions. This collaborative environment encouraged them to consider alternative approaches, evaluate their creative choices, and make improvements based on constructive input. Furthermore, their ability to integrate artistic principles into their work demonstrated growth in both technical proficiency and conceptual thinking. This strengthened understanding of visual arts concepts contributed to a higher level of artistic literacy and creative expression. Figure 5 illustrates strengthening visual arts skills through lino block printmaking.



**Figure 5: Strengthening Visual Arts Skills Through Lino Block Printmaking**

**Cultural and Environmental Awareness**

The focus on flora and fauna motifs within lino block printmaking provided students with a valuable opportunity to explore cultural and ecological themes. This interdisciplinary approach not only enhanced their artistic skills but also fostered a deeper appreciation for their natural environment and cultural heritage. Students actively researched local biodiversity to inspire their designs, drawing from plants, animals, and natural landscapes familiar to their surroundings.

This research process encouraged them to observe and study the intricate details of natural forms, enhancing their ability to translate these observations into artistic expressions.

By stylising and incorporating these motifs into their lino block prints, students developed a sense of connection to their environment and a greater appreciation for the beauty and diversity of nature. The process of creating prints inspired by local flora and fauna also promoted cultural literacy, as they learn to recognise the significance of natural elements within traditional art forms and contemporary artistic practices. Figure 6 illustrates promoting cultural and environmental awareness through lino printmaking.



**Figure 6 : Promoting Cultural and Environmental Awareness Through Lino Printmaking**

Moreover, the incorporation of eco-friendly materials and techniques further reinforced their awareness of environmental responsibility. Discussions on the importance of using non-toxic inks, biodegradable substrates, and sustainable art practices contributed to their understanding of ethical and responsible art-making. This awareness was not limited to their own creative process but also extended to their understanding of how art can be used as a tool for promoting environmental sustainability. By integrating cultural and ecological themes into their artwork, students developed a more comprehensive understanding of how visual arts can be used to convey messages about cultural identity, environmental conservation, and social responsibility. Their newfound appreciation for sustainable art practices encouraged them to make informed choices in their creative endeavours, promoting both artistic growth and environmental literacy. Figure 7 illustrates collaborative learning and student engagement through printmaking activities.



**Figure 7: Collaborative Learning and Student Engagement Through Printmaking Activities**

### Recommendations

Based on the findings of this study, several recommendations are proposed to enhance the implementation of lino block printmaking in visual arts education for form 1 Transition students:



### ***Integrating Digital Tools***

To expand creative possibilities, schools should consider incorporating digital design software into the lino block printmaking process. By merging traditional carving techniques with digital tools, students can experiment with hybrid artistic processes, enhancing their creative expression and developing essential digital literacy skills. This approach also offers opportunities for students to refine their designs before transferring them onto lino blocks, minimising errors and improving efficiency.

### ***Promoting Eco-Friendly Printmaking***

Introducing sustainable art practices is essential for fostering environmental awareness among students. Educators should encourage the use of non-toxic inks, biodegradable substrates, and natural dyes as eco-friendly alternatives. Additionally, discussions about the environmental impact of art materials and methods should be integrated into the curriculum, promoting ethical and responsible creative practices.

### ***Establishing Student Exhibitions***

Organising exhibitions to showcase students' lino block prints can significantly enhance their motivation, confidence, and sense of accomplishment. Public displays of their artwork allow them to share their creative expressions with the community, fostering appreciation for the integration of traditional and contemporary art forms. Exhibitions can also serve as a platform for promoting cultural heritage and environmental awareness through visual arts.

### ***Expanding Teacher Training***

For lino block printmaking to be effectively integrated into the Visual Arts curriculum, teachers must be equipped with adequate training and resources. Professional development programmes should be offered to familiarise educators with the technical aspects of lino block printmaking and its interdisciplinary applications. By enhancing teachers' expertise, schools can ensure that students receive high-quality instruction that supports their artistic growth and critical thinking.

### ***Enhancing Project-Based Learning Approaches***

Strengthening the Project-Based Learning (PBL) framework can further enhance students' learning experiences. Educators should consider incorporating collaborative projects, interdisciplinary themes, and reflective assessments to promote creativity, cultural awareness, and ecological literacy. Integrating lino block printmaking with other art forms and subject areas can also provide students with a more comprehensive understanding of artistic concepts and their real-world applications.

### ***Conclusion***

This study highlights the effectiveness of lino block printmaking as an innovative and interdisciplinary approach to visual arts education for Form 1 Transition students in Malaysia. Through a hands-on, process-oriented learning experience grounded in the Project-Based Learning (PBL) framework, students were able to significantly enhance their technical proficiency, artistic creativity, and conceptual understanding. The integration of cultural and environmental themes, particularly through the exploration of flora and fauna motifs, further enriched students' learning experience, fostering a deeper appreciation for local biodiversity and cultural heritage.

The findings indicate that the primary objectives of the study were successfully achieved. Students demonstrated marked improvements in their carving and inking techniques, the application of design principles such as balance, contrast, and composition, and their ability to engage critically with artistic and ecological concepts. Additionally, the reflective and collaborative nature of the learning process encouraged the development of critical thinking, problem-solving, and self-assessment skills, essential for artistic growth.

This study contributes to the field of visual arts education by providing empirical evidence on the value of integrating traditional printmaking techniques within a modern educational context. It supports the argument that practical, experience-based learning approaches can bridge the gap between theoretical knowledge and artistic practice, while simultaneously promoting cultural and environmental literacy.

The implications of these findings suggest that educators should consider adopting lino block printmaking and similar hands-on methods as core components of the visual arts curriculum. Furthermore, the study advocates for the incorporation of sustainable art practices and the organisation of student exhibitions to showcase their work, thereby enhancing their sense of achievement and community engagement. Future research could explore the long-term impact of such pedagogical strategies and the potential for integrating digital tools to further expand creative possibilities.

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