

ASEAN Journal of Science and Engineering Education



Journal homepage: http://ejournal.upi.edu/index.php/AJSEE/

Material Experimentation in Student Illustration: Enhancing Creativity and Expression

Pritha Fitria Natasha Bekti^{*}, Yully Ambarsih Ekawardhani, Achmad Deptian Djenuari Rizky

Universitas Komputer Indonesia, Bandung, Jawa Barat, Jawa Barat *Correspondence: E-mail: pritha@email.unikom.ac.id

ABSTRACT

This study explores the role of material experimentation in enhancing creativity and visual expression among illustration students. By encouraging the use of both traditional and unconventional materials (including mixed media, textiles, digital tools, and found objects), students were able to develop unique visual effects and deepen their illustrative styles. Using an explorative qualitative approach, the study observed, conducted, and gathered data through interviews and visual analysis. The findings revealed that freedom to explore materials fosters innovation, critical thinking, and symbolic interpretation, allowing students to create meaningful narratives. Material selection was found to influence not only aesthetic outcomes but also conceptual clarity. The integration of hands-on material exploration into art education supports the development of originality and deeper engagement with the artistic process. This research underscores the importance of material experimentation as a pedagogical tool to cultivate expressive, reflective, and adaptable visual storytellers.

ARTICLE INFO

Article History:

Submitted/Received 10 Feb 2025 First Revised 19 Mar 2025 Accepted 26 May 2025 First Available online 26 May 2025 Publication Date 01 Mar 2026

Keyword:

Art education, Artistic expression, Creativity, Illustration, Material experimentation, Mixed media, Originality, Storytelling, Visual effects, Visual vocabulary.

© 2025 Universitas Pendidikan Indonesia

1. INTRODUCTION

Illustration functions as a powerful form of visual communication, allowing artists to express complex ideas, emotions, and narratives. Traditionally associated with pencil, ink, or watercolor, illustration has evolved significantly due to technological advancements and access to diverse materials. In contemporary art and design education, students, particularly those studying illustration, are encouraged to explore a wider range of materials and techniques, fostering greater creativity, innovation, and personal expression (Prasetyo, 2016; Lizama et al., 2024; Khimmataliev & Omonova, 2025).

This shift toward material experimentation offers students opportunities to break away from conventional methods and discover new visual languages. Through hands-on engagement with both traditional and unconventional media (such as fabric, found objects, recycled materials, and digital tools), students can explore symbolic meanings, refine technical skills, and strengthen the conceptual foundation of their work (Jupri & Sispiyati, 2020). However, despite its growing relevance, research on how material experimentation influences the creative process and visual outcomes in illustration education remains limited.

This study investigates how material experimentation supports the development of creativity, narrative depth, and visual identity in student illustration works. It highlights the relationship between material selection and expressive intention, emphasizing how materials shape both the aesthetic and conceptual qualities of artwork. The novelty of this research lies in its focus on materiality as an instructional and expressive strategy in art education. By exploring the pedagogical value of material exploration, the study aims to contribute to more reflective, adaptive, and innovative practices in illustration learning.

2. LITERATURE REVIEW

Material experimentation plays a crucial role in the development of creativity, innovation, and personal expression within visual arts education. In the context of illustration, such experimentation allows students to explore new ways of thinking and making through direct engagement with diverse media. The integration of hands-on processes encourages students to develop problem-solving abilities, critical thinking, and technical flexibility, skills essential for artistic growth and professional adaptability.

Art educators have long supported the idea that material engagement enriches the learning experience. It aligns with the constructivist theory of learning, which posits that knowledge is built through active exploration. When students interact with various textures, tools, and media, they not only refine their technical skills but also deepen their understanding of symbolism and visual storytelling. This process encourages affective and sensory responses, enhancing emotional connection to the work and expanding visual vocabulary.

For illustration students, material experimentation also provides opportunities to transcend traditional boundaries. The use of unconventional media, such as fabric, recycled objects, clay, or digital software, fosters the development of mixed-media compositions that reflect contemporary visual culture (Mauleti, 2023; Witabora, 2012). These practices allow students to critically examine how materiality influences the message, tone, and narrative depth of their work.

Despite its pedagogical value, material experimentation in art education is often underexplored in formal academic research, particularly in Southeast Asian contexts. Most existing studies focus on fine arts or design theory without addressing how material-based exploration specifically supports the growth of illustrators. This research aims to address that gap by highlighting how material experimentation shapes student creativity and conceptual clarity, contributing to a more dynamic and contextually relevant illustration practice.

3. METHODS

This study employed an explorative qualitative approach to investigate the role of material experimentation in the creative development of illustration students. The research was conducted by analyzing the illustration works of second-year students enrolled in the Illustration 1 course at Universitas Komputer Indonesia. Using purposive sampling, participants were selected based on their active engagement in practicum sessions and prior experience in producing illustration works. The research focused on how students interpreted selected adjectives into visual form and how they responded to peers' works through further material exploration.

Data collection involved direct observation of students during the creative process, documentation of their artworks, and semi-structured interviews to gain insights into their experiences, motivations, and challenges related to material usage. Students used both traditional materials—such as pencil, ink, watercolor, and oil paint—and unconventional materials, including fabric, collage, recycled items, and natural elements.

The data analysis combined content analysis and visual analysis. Content analysis was applied to interview transcripts to identify recurring themes concerning material selection, problem-solving strategies, and personal expression. Visual analysis was conducted to examine formal elements such as line, color, texture, and composition, assessing how materials influenced the visual outcome and symbolic intent of the artworks.

Following the completion of their work, students were asked to reflect on their processes, emphasizing the connection between material choices and the meaning conveyed. These selfreflections, along with observations and instructor feedback, were triangulated to ensure data validity and reliability. The study also incorporated aesthetic theory to interpret how the use of various materials affected sensory perception and the visual impact of the artworks, particularly in expressing abstract concepts such as "wither," "adiwarna," or "amerta." By grounding the analysis in aesthetic philosophy and educational practice, the study offers a comprehensive understanding of material experimentation as a creative and pedagogical process in illustration education.

4. RESULTS AND DISCUSSION

Figure 1 explains the illustration work by Raghib Maliki, which depicts the concept of *akrasia*, the inability to achieve one's desires. The image portrays a dove embracing a fallen human figure, symbolizing protection after failure. The use of black tones emphasizes adversity, while a subtle blue light suggests hope. This work, created with colored pencils on A3 drawing paper, integrates symbolic elements to communicate emotional tension and resilience.

Figure 2 shows the same artwork after being responded to by Najla Mumtaza, who chose the adjectives "wither" and "safety." She added wilted black flowers and curtains to intensify the somber atmosphere and re-colored the dove in yellow to signify protection. The material intervention not only enhanced the symbolic weight of the piece but also created a contrast between despair and reassurance using texture and color.

Figure 3 explains the original artwork by Shafira Azizah, which illustrates the adjectives *adiwarna* (extraordinary color) and *kalestin* (secretive). The image presents a half-faced woman with red curls flowing through water, referencing the hidden struggles of women

silenced by traditional norms. The artist used oil paint on canvas to blend vivid colors with symbolic imagery, such as butterflies and flowing water, to represent transformation and hidden identity.

Figure 4 shows the response by Dimas Apriayan Anugrah, who interpreted the adjectives *amerta* (eternal) and *lindap* (protective). He replaced the butterfly with a *blangkon* (a traditional male headpiece) stuffed with flowers, symbolizing growth, protection, and masculine presence. Fabric materials were added to the canvas to create three-dimensional texture, reinforcing the transition from vulnerability to empowerment.

These material interventions demonstrate how students used visual symbolism and tactile media to respond creatively to abstract concepts. Their experiments with form and texture extended the narrative possibilities of illustration, transforming static images into layered visual commentaries. The collaborative nature of the assignment, where artworks were exchanged and reinterpreted, fostered deeper critical engagement and adaptive thinking. Overall, material experimentation proved effective in expanding students' aesthetic vocabulary, allowing them to convey complex emotional and cultural ideas through both form and substance.

The impact of this study extends beyond the development of individual creative skills, offering valuable insights into how material experimentation can reshape the pedagogical framework of illustration education. By engaging with diverse materials, students not only refined their technical execution but also cultivated a deeper awareness of how visual elements communicate meaning. This process nurtures autonomy, critical reflection, and the ability to interpret abstract concepts into tangible forms, skills that are essential for future professional illustrators. Moreover, the collaborative aspect of exchanging and responding to peers' work enriched interpersonal learning and broadened interpretive possibilities. As a result, this study highlights material experimentation as a transformative practice that enhances both individual creativity and collective discourse within the studio classroom environment. It provides a model for art educators to integrate hands-on, material-based inquiry as a core strategy in fostering innovation, adaptability, and contextual sensitivity in contemporary visual arts education.

This study demonstrates that material experimentation significantly enhances the creativity, narrative depth, and conceptual clarity of student illustration works. The integration of diverse materials allowed students to interpret abstract concepts more expressively, while the exchange of works fostered peer learning and adaptive thinking. Material choice emerged as a critical factor influencing both visual impact and symbolic meaning, enabling students to develop personal styles grounded in reflective practice.

In light of these findings, it is recommended that art and design curricula actively incorporate structured material experimentation projects across illustration courses. Educators should provide access to a wide range of materials (including sustainable, recycled, and locally sourced media) to promote responsible artistic production in line with SDG 12. Additionally, teaching strategies should emphasize critical reflection and collaboration, supporting the development of innovative problem-solvers and visual communicators as envisioned in SDG 4 and SDG 9. This study adds new information regarding SDGs, as reported elsewhere (Nurramadhani et al., 2024; Krishnan et al., 2024; Djirong et al., 2024; Kerans et al., 2024; Makinde et al., 2024; Gemil et al., 2024; Haq et al., 2024). By embedding material exploration within formal art education, institutions can cultivate a generation of illustrators who are not only creatively skilled but also environmentally conscious and socially responsive.

5 | ASEAN Journal of Science and Engineering Education, Volume 6 Issue 1, March 2026 Hal 1-8



Figure 1. Raghib Maliki Artwork before responded By Najla Mumtaza.



Figure 2. Raghib Maliki's Art work after responded By Najla Mumtaza (definition).



Figure 3. Shafira Azizah artwork.





5. CONCLUSION

This study demonstrates that material experimentation plays a significant role in enhancing the creativity, visual expression, and conceptual development of illustration students. Through the integration of traditional and unconventional materials, students were able to interpret abstract adjectives with greater symbolic clarity and emotional depth. The process of exchanging and responding to peers' works further stimulated critical thinking and

7 | ASEAN Journal of Science and Engineering Education, Volume 6 Issue 1, March 2026 Hal 1-8

artistic adaptability. The analysis shows that material choices directly influence both the aesthetic and narrative dimensions of illustration, serving not only as technical components but as narrative agents. By engaging with diverse media, students expanded their visual vocabulary and developed stronger personal styles. These findings underscore the importance of embedding material exploration into illustration curricula as a means to cultivate originality, problem-solving, and contextual awareness. Ultimately, material experimentation proves to be not merely a creative exercise but a vital pedagogical tool for producing reflective and innovative illustrators in contemporary art education.

6. ACKNOWLEDGMENT

This research was supported through the EU special program devoted to all the desain Communication design lecturers in the Faculty of Design at Universitas Komputer Indonesia.

7. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

8. REFERENCES

- Djirong, A., Jayadi, K., Abduh, A., Mutolib, A., Mustofa, R.F., and Rahmat, A. (2024). Assessment of student awareness and application of eco-friendly curriculum and technologies in Indonesian higher education for supporting sustainable development goals (SDGs): A case study on environmental challenges. *Indonesian Journal of Science and Technology*, 9(3), 657-678.
- Gemil, K.W., Na'ila, D.S., Ardila, N.Z., and Sarahah, Z.U. (2024). The relationship of vocational education skills in agribusiness processing agricultural products in achieving sustainable development goals (SDGs). *ASEAN Journal of Science and Engineering Education*, 4(2), 181-192.
- Haq, M.R.I., Nurhaliza, D.V., Rahmat, L.N., and Ruchiat, R.N.A. (2024). The influence of environmentally friendly packaging on consumer interest in implementing zero waste in the food industry to meet sustainable development goals (SDGs) needs. *ASEAN Journal of Economic and Economic Education*, *3*(2), 111-116.
- Jupri, A., and Sispiyati, R. (2020). Students' algebraic proficiency from the perspective of symbol sense. *Indonesian Journal of Science and Technology*, *5*(1), 86-94.
- Kerans, G., Sanjaya, Y., Liliasari, L., Pamungkas, J., and Ate, G., Y. (2024). Effect of substrate and water on cultivation of Sumba seaworm (nyale) and experimental practicum design for improving critical and creative thinking skills of prospective science teacher in biology and supporting sustainable development goals (SDGs). *ASEAN Journal of Science and Engineering*, 4(3), 383-404.
- Khimmataliev, D.O., and Omonova, N.P.Q. (2025). Encoding schemes for image and symbol classification in religious traditions. *ASEAN Journal of Religion, Education, and Society*, *4*(1), 23-36.
- Krishnan, A., Al-Obaidi, A.S.M., and Hao, L.C. (2024). Towards sustainable wind energy: A systematic review of airfoil and blade technologies over the past 25 years for supporting

sustainable development goals (SDGs). *Indonesian Journal of Science and Technology,* 9(3), 623-656.

- Lizama, M.G., Huesa, J., and Claudio, B.M. (2024). Use of blockchain technology for the exchange and secure transmission of medical images in the cloud: Systematic review with bibliometric analysis. *ASEAN Journal of Science and Engineering*, 4(1), 71-92.
- Makinde, S.O., Ajani, Y.A., and Abdulrahman, M.R. (2024). Smart learning as transformative impact of technology: A paradigm for accomplishing sustainable development goals (SDGs) in education. *Indonesian Journal of Educational Research and Technology*, *4*(3), 213-224.
- Mauleti, E. K. (2023). Narasi ilustrasi kontemporer: Sebuah pendekatan eksperimen. Jurnal Nawala Visual, 5(1), 34–39.
- Nurramadhani, A., Riandi, R., Permanasari, A., and Suwarma, I.R. (2024). Low-carbon food consumption for solving climate change mitigation: Literature review with bibliometric and simple calculation application for cultivating sustainability consciousness in facing sustainable development goals (SDGs). *Indonesian Journal of Science and Technology*, 9(2), 261-286.
- Prasetyo, E. (2016). Detection of mango tree varieties based on image processing. *Indonesian Journal of Science and Technology*, 1(2), 203-215.
- Witabora, J. (2012). Peran dan perkembangan ilustrasi. Humaniora, 3(2), 659–667.