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Exploring the Use of Waste in Illustration: Expressing Personal Emotions through Recycled Materials

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ABSTRACT

This project explores the use of waste materials (metal, paper, plastic) in an illustration class at Universitas Komputer Indonesia to promote environmental sustainability and personal expression. Students from DKV 1 class participated, transforming recycled materials into artworks through a structured process involving thought mapping, sketching, material preparation, and assembly. Some pieces, like Finding a Way Out and When the Brain Stops Thinking, effectively conveyed themes, while others faced challenges in coherence and organization. The study highlights the importance of thematic alignment and mindful material selection in creating impactful art. By integrating sustainability into art education, the research demonstrates how waste can foster creativity, environmental awareness, and responsible artistic practice. It advocates for a more deliberate approach to sustainable art, merging ecological responsibility with individual expression, ultimately reinforcing the value of upcycling in fostering both artistic innovation and environmental consciousness.

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1. INTRODUCTION

The role of art is considered particularly important for students' environmental awareness (Boeckel, 2009). The study highlights waste's potential as a creative medium that fosters both environmental awareness and artistic inventiveness (Chung & Ortiz, 2017). It emphasizes how important thematic alignment and thoughtful material selection are to creating powerful art. To promote more deliberate and sustainable creative practices, the research supports integrating sustainability into art education by fusing ecological responsibility with individual expression (Graham, 2007). According to Cable News Network Indonesia (CNN Indonesia), in 2025, Indonesia's seas were the second-largest producers of plastic waste after China. According to Tuti Hendrawati, Director General of Waste, Hazardous Waste, and Toxic Waste Management at the Ministry of Environment and Forestry (KLHK), the total waste in Indonesia was projected to reach 68 million tons in 2019, with 9.25 million tons being plastic waste (Purwati et al., 2023).

The concept of sustainable development is to have the resources produced that serve human needs preserved instead of destroying the built and natural environment. The preservation is not only to benefit the present but also for future generations (Zorpas et al., 2016). The role of education is not only to educate or create awareness on sustainability but also to nurture a good attitude and promote responsibility among learners. Educational projects could be aimed at educating and exploring the alternative to contemporary human practices, but with additional concerns on nature and ecological interdependent cycles (Illeris, 2012).

Through an experimental approach, students are encouraged to explore how recycled materials like plastic, paper, and metal can serve as tools to convey personal and emotional narratives. In addition to fostering innovation in art, this research also aims to raise awareness about environmental and sustainability issues (Blandy & Hoffman, 1993). Thus, this experiment not only enriches illustration practices but also bridges self-expression with ecological responsibility.

By transforming discarded material into meaningful artistic expressions, this study highlights the intersection of art, emotion, and environmental consciousness. It challenges traditional notions of art materials and encourages students to rethink the value of everyday objects, particularly those often deemed as waste. This approach not only provides a unique platform for self-exploration and storytelling but also fosters a deeper connection between personal creativity and global ecological concerns. Ultimately, this research seeks to demonstrate how art can serve as a powerful medium for both personal expression and advocacy, inspiring a more sustainable and reflective approach to creative practices.

The purpose of this research is to find out the extent to which students can express feelings through art media, as well as to find out and assess the creativity of each student with waste media as a material. In addition, students can know that waste can be recycled into a good and valuable work of art, and also know the term sustainability. Thus, this research article is guided by the following question:

- (i) Can feelings be expressed through artworks?
- (ii) How can producing art stimulate students' consciousness of the importance of sustainable living?

2. LITERATURE REVIEW

In his book *Art Practice as Research: Inquiry in the Visual Arts*, he argues that creative practice and cultural inquiry conducted by artists constitute a legitimate form of research. He emphasizes that valid research objectives can be achieved by selecting methods different from those offered by the social sciences.

He also highlights that artistic practice is not only an object of study but also a way to generate new knowledge and understanding. Thus, art-based approaches are placed at the core of educational practice, positioning visual arts as a crucial form of creative and intellectual development (Ulger, 2016).

Graeme Sullivan's Creative Practice Research Method

- (i) Exploration and inquiry: Begin with curiosity about a visual or conceptual issue; Identify a research question or theme emerging from artistic concerns; and engage in reflective practice to explore personal, cultural, or social contexts.
- (ii) Artistic experimentation: Use various media, techniques, and processes to investigate the chosen theme; Allow for intuitive and iterative creation, embracing the unpredictability of art-making; and Document and reflect on artistic choices and their impact on meaning-making.
- (iii) Critical reflection and contextualization: Analyse the work through theoretical and historical perspectives; Engage in self-reflection and critique the artistic process; and Compare the findings with other artists, movements, or cultural practices.
- (iv) Knowledge generation through art: Recognize the artwork itself as a form of research output; Consider how artistic insights contribute to broader discussions in the field; and explore how visual language communicates knowledge differently from traditional academic discourse.
- (v) Presentation and interpretation: Share findings through exhibitions, publications, or performances; Use visual and written documentation to articulate insights gained from the process; and Encourage audience interaction and multiple interpretations of the work.

Sullivan's approach redefines research by emphasizing that knowledge can be produced through making and experiencing art, not just through textual analysis. His method validates artistic inquiry as an essential and rigorous form of research.

As for the aspects of cultural sustainability, it can be seen through the constructive aspects of human well-being and how adapting to the habit of living sustainability can satisfy the full needs of the people (Thorpe, 2011)

3. METHODS

This study examines an art and design project conducted at the Faculty of Communication, Arts & Media of the International University of Malaya-Wales (IUMW). The artwork from students was selected for in-depth visual analysis due to the illustration class, highlighting its artistic and environmental significance. To further explore the creative process and conceptual framework behind the artwork, semi-structured interviews were conducted with the artists, who were also participants in the broader project. The qualitative data gathered from these interviews provides critical insights into the exploratory dimensions of the study, including material innovation, thematic development, and the intersection of sustainability and artistic practice. The method used in this research is a qualitative method with a descriptive approach. Qualitative research is:

“Research that aims to understand phenomena experienced by research subjects, such as behavior, perception, motivation, actions, etc., holistically and described in words and language in a specific natural context while utilizing various natural methods.”

The research design includes:

- (i) Data collection
- (ii) Learning media design
- (iii) Learning media validation
- (iv) Implementation of learning
- (v) Creative process

4. RESULTS AND DISCUSSION

The implementation of the illustration course at Universitas Komputer Indonesia includes, among other things, the process of creating artwork. The assignments are conducted individually, and the designated class is DKV 1. Each student is required to create one artwork based on their current personal feelings.

The process of creating artwork using waste materials is carried out by students of DKV 1 through the following steps:

- (i) Mind mapping assistance – Students describe their feelings using keywords, which are then selected by the lecturer.
- (ii) Manual sketch assistance – Students create a pencil sketch of their planned artwork on A4 paper.
- (iii) Preparation of tools and materials – Students collect waste materials found around campus or their homes, along with scissors or a cutter, glue, and duplex cardboard as a base.
- (iv) In-class assistance – Students bring the collected materials for guidance during class.
- (v) Final assembly – Once the pattern aligns with the chosen theme, the artwork is assembled and attached to the base for evaluation.

The research location is at Jl. Dipati Ukur No.112-116, Lebakgede, Coblong District, Bandung City. The subjects of this study are students from the DKV 1 class at Universitas Komputer Indonesia (Unikom) Bandung. The research was conducted by the researcher over three weeks, from the beginning to the end.

The data collection techniques and tools used include observation, tests, interviews, documentation, and photographs. Observation involves the researcher’s direct examination of events occurring in the field. The test conducted on students assesses their skills in learning the illustration course. Interviews were carried out directly between the researcher and the informants, namely the illustration lecturer and the Head of the DKV Study Program at Unikom, Dr. Kankan Kasmana, S.Sn, M.Ds. The data obtained from documentation includes files from the university. Photographic data consists of visual records collected directly by the researcher during field activities.

The data analysis process includes:

- (i) Data collection
- (ii) Data reduction
- (iii) Data presentation
- (iv) Drawing conclusions
- (v) Data validity testing.

The works created by DKV 1 students at Universitas Komputer Indonesia include several pieces using various materials. The following are the works produced by students through the

utilization of waste, categorized as maximum experiment, fair experiment, and minimum experiment.

4.1. Work Specifications

Figure 1 is a work by Wucky Fuziana Wijaya about Finding a Way Out. Overall, the student was able to complete all three assisted works well, according to the assessment criteria. Media and materials are dried leaves, vape coil bottle, roots, cards, shuttlecock, cables, old mobile phone, bottle caps, vape battery, and toothpicks. The application of materials as decorative media is well executed. The concept is interesting; however, there is still a lack of refinement in the layout. The tools and materials brought were complete and varied, and the colours applied were highly contrasting and well-balanced.

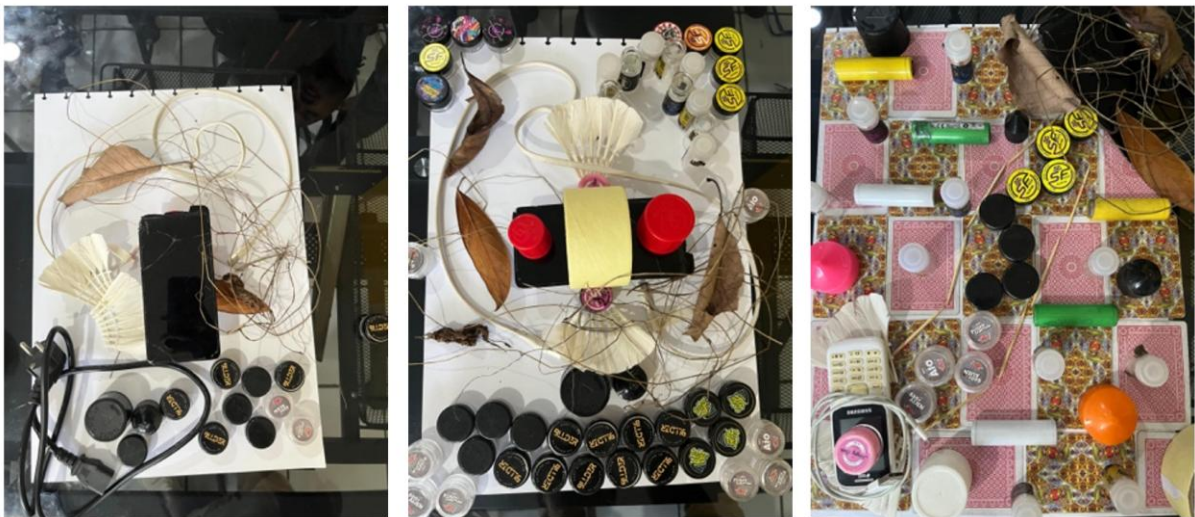


Figure 1. Wucky Fuziana Wijaya finding a way out assisted work.

Among the three works (**Figure 2**), the selected piece is the image shown above. When viewed from the theme, there is a strong connection between the two. The theme of "Finding a Way Out" aligns well with the arrangement of materials. The zig-zag arrangement of vape coil bottles serves as a key point, resembling a narrative. The cards used as a base symbolize the uncertainty of life, and their colours add to the visual appeal of the artwork. The transition from the mobile phone and cables to the dried leaves creates a well-crafted journey story.



Figure 2. Selected work in the maximum experiment category: finding a way out.

4.2. Work Specifications

In **Figure 3**, the image is a work by Priyeta Ananda Agustin. The theme of the work is about when the brain stops thinking. The application of materials is very neat and well-executed. The chosen concept is interesting, and the layout is arranged very cleanly and neatly. The minimalist concept is well applied in alignment with the chosen theme. Media and Materials are CD-R, string, buttons, key, paperclip, old clock, can opener, toy gear, nails, keychain, and old necklace.



Figure 3. Priyeta Ananda Agustin, when the brain stops thinking: assisted work.

Figure 4 is the chosen piece. One important aspect that sets the artwork apart from the chosen topic is how well it matches the minimalist impression. It is in the fair category, nonetheless, because of the poor utilization of the basis. The composition of the artwork is well-structured and has a strong sense of balance and movement. A visually appealing arrangement is produced by combining lines, mechanical components, and circular shapes. Smaller features like gears, chains, and screws create depth and intricacy, while larger focal points like the wheels and CD-R offer stability.



Figure 4. Selected work in the fair experiment category, when the brain stops thinking.

The combination of industrial materials with softer elements like rope results in an interesting contrast, enhancing the overall aesthetic appeal. The colour scheme, featuring black, white, yellow, blue, and metallic tones, is harmonious and allows the objects to stand out against the neutral background. Additionally, the meticulous placement of each element reflects careful planning and attention to detail.

In contrast to the well-organized left side of the artwork, the right side seems a little disorganized, despite its powerful composition. The overall harmony might be enhanced by a more evenly distributed set of components. Conceptual coherence may be impacted by some materials, such as the pink and white buttons, which appear rather unrelated to the main mechanical idea. Nonetheless, the composition effectively communicates concepts of motion, mechanics, and interdependence. The artwork might have an even bigger impact with a few small adjustments to the material selection and balance.

4.3. Work Specifications

Figure 5 is a work by Agung Alghifari Akma. The theme of the work is perseverance. Media and materials are Earphones, an old iPod, a used toothbrush, a single chicken feather, shoelaces, a keychain, a tin cup, used fabric, bottle caps, cards, and old money. In terms of layout, it is somewhat lacking. The concept presented is quite interesting. However, while the concept of "perseverance" was chosen, it does not match the arranged layout. The artwork consists of various everyday objects arranged in a structured yet somewhat scattered composition. The inclusion of items such as a toothbrush, bottle caps, shoelaces, and old money suggests an exploration of material repurposing. However, the overall layout lacks a strong focal point, making it difficult for the viewer to find a clear narrative or thematic direction. The objects appear loosely connected, and while some elements create contrast, the placement of certain materials feels arbitrary rather than intentional. The use of space could be improved to create a more dynamic and engaging visual balance.



Figure 5. Agung Alghifari Akma, perseverance assisted work.

In **Figure 6**, the selected work lacks cohesion, and the arrangement of objects appears random and lacks a clear visual hierarchy. There is no strong focal point to guide the viewer's eye. The elements are scattered without a structured layout, making the overall design feel cluttered and disorganized. The placement does not effectively convey the intended theme of "perseverance." Inconsistent colour scheme, the colours used in the composition do not create harmony. Some elements stand out too much, while others fade into the background, reducing overall visual appeal. The chosen materials lack a sense of unity. The combination of everyday objects, such as an old toothbrush, shoelaces, and money, appears forced rather than creatively integrated. While the theme "perseverance" is compelling, the execution does

5. CONCLUSION

This research at Universitas Komputer Indonesia explores the use of waste materials in illustration courses, demonstrating their potential as a creative medium for expressing emotions and personal experiences. Through structured processes like mind mapping, sketching, and material assembly, students transformed discarded items into meaningful artworks, with varying success—some achieving cohesive, visually compelling results while others faced challenges in layout and thematic consistency. Overall, it highlights the value of waste materials in fostering creativity, environmental awareness, and emotional expression, while calling for further guidance to refine students' technical and conceptual skills, bridging personal artistry with sustainability in creative practices. Learning through art not only able to increase students' handwork skills but also affects their empathy and mindfulness. As a conclusion, this project is a positive and useful approach to sustainability.

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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.

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