

Utilization of Waste Plastic through the Collage Method in Elementary Schools in Jiput Village, Jiput Sub-district, Pandeglang Regency

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Abstract

Purpose: This study investigates how the collage method can foster creativity and environmental awareness among elementary students in Jiput Village by utilizing plastic waste—a persistent environmental issue.

Method: Using a qualitative, participatory approach, students engaged in collecting, cleaning, and repurpose plastic waste into collage art. Data was gathered through observation and documentation of student work.

Practical Application: The activity reduced plastic waste in schools and enhanced students' creativity, fine motor skills, and environmental consciousness. This method can be applied in other schools as a practical environmental education tool.

Conclusion: The collage method effectively promotes creativity and early environmental awareness while offering a sustainable approach to managing plastic waste in educational settings.

Introduction

160) Utilization of Waste Plastic through the Collage Method in Elementary Schools in Jiput Village, Jiput Sub-district, Pandeglang Regency, Juanto, A., Syifa, F., Putri, S. S., Rivaldo, A., Alfiansyah, Arianna, Aji, B., Maulana, E., Wahyudi, F., Jalis, Robi, Insiyah, S. A., Umiroh, Hayat, Z., Fanani, K.

The problem of plastic waste is a growing global issue that urgently needs to be addressed (Aqilla et al., 2023). Plastic is used in many aspects of daily life and has a significant environmental impact due to its resistance to natural decomposition. As a result, the amount of plastic waste continues to rise, pollutes land, rivers, and oceans, and poses a threat to living beings. On a local level, such as in Jiput Village, Pandeglang, plastic waste is also a problem that requires creative and educational solutions.

The accumulation of waste can serve as an indicator of the community's low awareness regarding proper waste management. The slogan "Dispose of waste properly" has not had a significant impact on daily behavior. Many people still throw garbage carelessly—on roads, in rivers, and at river mouths (Suwarsih, Joesidawati, and Sriwulan, 2019).

Elementary education plays a key role in shaping the attitudes and behaviors of the younger generation toward the environment (Hulukati and Hulukati, 2015). Elementary schools are ideal settings to introduce the concept of waste management and the importance of environmental preservation from an early age. However, in practice, teaching methods in schools often remain conventional and do not actively engage students in environmental care activities. One creative way to recycle plastic waste into useful objects is by turning it into crafts using the collage method.

According to Tumurang (2006) in Putri et al. (2023), the aim of art education in schools is to continue and develop children's creative abilities in visual arts that they may already have before entering school. Artistic creativity is essential for student development, as it enables them to produce and create new works based on their creativity and imagination. However, the cultivation of creativity in students today varies and is often limited to activities such as drawing or coloring. Students can quickly become bored if they are only exposed to such activities, which is why this study introduces collage-based creativity (Putri et al., 2023).

College is an art technique that involves combining various elements—such as images, paper scraps, and other materials—to create a new and unique artwork. By using plastic waste as collage material, students can express their creativity while also learning about the importance of waste management and recycling. This activity can be a medium to enhance environmental awareness and build a caring attitude toward waste issues among students.

In Jiput Village, Pandeglang, applying the collage method using plastic waste in elementary schools can serve as an effective model for environmental education. According to Hajar et al. (in Susiani et al., 2020), collage art is created by attaching fragments or pieces of recycled materials—such as paper, glass, shells, leather, leaves, seeds, fabric, and others—to form visual artwork. These materials are used not only for color, as in mosaics, but also as integral parts of the image, and their sizes do not need to be uniform across the artwork (Fiyanto, 2018; Putri, 2021). Through this activity, students are expected to become more sensitive to environmental issues and actively participate in solving the waste problem in their community. This approach also aims to inspire other villagers to care more about their environment and take concrete action to reduce single-use plastic. Therefore, utilizing plastic waste through the collage method in elementary schools serves not only as a learning tool but also as a concrete effort to reduce the negative impact of plastic waste and to shape a generation that is more environmentally conscious.

Method

This study employs a qualitative descriptive method to describe and analyze the phenomenon of utilizing plastic waste through college in elementary schools. This method focuses on collecting in-depth descriptive data through observation and documentation. Through this approach, the researcher can understand students' experiences, perceptions, practical outcomes, and attitudes toward collage activities using plastic waste. The collected

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data will be analyzed qualitatively to provide a comprehensive overview of the activity's impact on students' creativity and environmental awareness.

Result

The collage method is an art technique that involves combining various elements, such as images, paper scraps, and other materials, to create a new and unique artwork. In the context of utilizing plastic waste, the collage method can be an effective medium for transforming plastic waste into valuable works of art. Students can collect various types of plastic waste, such as plastic bags, plastic bottles, and food packaging, which are then cut into pieces and arranged into attractive shapes on a drawing surface.

According to Putri (2021) in Dewi et al. (2024), collage is a form made from several parts or pieces of a material, which are joined together with glue. Through collage activities, students can develop their creativity in creating unique designs and compositions. They can experiment with the colors, textures, and shapes of plastic waste to produce interesting artwork. Additionally, this activity can also train students' fine motor skills, such as cutting, gluing, and arranging plastic pieces neatly.

In developing children's creativity, teachers play an important role in the creation of collages. Teachers must be able to choose and utilize every learning opportunity to foster creativity in children. Teachers can encourage children to develop their creativity both indoors and outdoors (Khasanah and Ichsan, 2019). According to Gallagher in Putri et al. (2023), "Creativity is related to the ability to create something new that has never existed before."

According to Adi (2019), collage has several stages in the creative process: 1) determining the idea, 2) choosing the subject theme, 3) choosing the style, 4) selecting materials and media, 5) deciding on the method, and 6) applying creativity.

1. Determining the Idea

In creating a work, the artist draws ideas from daily activities and nature (Ubaidillah, 2018). After observing and studying various aspects of waste and paper, the author began exploring how to utilize living media such as plastic and paper, intending to apply it to visual graphic arts with a monoprint technique.

2. Choosing the Subject Theme

The theme serves as the main idea, the foundation of the story (the basis for writing, poetry modification, etc.). The topic of plastic and paper waste presents a new concept for visual art, particularly graphic arts, which has traditionally been limited to mainstream media. In this case, the author presents waste and paper in various symbols and values, which are implemented in the form and concept of graphic work (Anggraini and Tarmizi, 2017).

3. Choosing the Style

What the author imagines is a very expressive and slow-moving style influenced by motivation and emotions during the performance. Most of the author's works use the same writing method. Monograph is one of the greatest discoveries and innovations in printmaking. A monograph can be defined as a type of writing created exclusively with color or as a replacement for hybrid methods such as engraving, etching, and so on, all in a single process. Monographs are different from works of art. An artist is free because they can break away from the constraints of traditional artistic values within their society, as these values are no longer relevant to the current situation and should be allowed to evolve (Rinawati, n.d.).

4. Selecting Materials and Media

The author uses plastic and paper as media in creating the work. This is further emphasized by Dwi Marianto, who states that media refers to the materials or tools used by artists to express their ideas and concepts into various art forms such as painting, sculpture, and video art. Media can be understood as the specific

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materials used by artists in the creation of works. In art creation, the choice of tools and materials greatly influences the final outcome of a painting. The author uses materials such as plastic and paper.

5. Determining the Method

In graphic works, the author uses the collage technique in the creative process. Collage is an art composition made from various materials such as paper, fabric, glass, metal, wood, and others, which are glued onto a surface. In this work, the author focuses on creating collages using plastic and paper media (Adi et al., 2019).

6. Applying Creativity

This work is created by altering designs, reworking, and illustrating them on plastic and paper. This means that significant changes sometimes occur in the thought process of the original design sketch, as the creative process is deeply involved in thinking to create new developments in different situations. The aspects discussed include composition processing, color application, texture use, surface segmentation, or spatial composition to express aesthetic and functional needs, ultimately resulting in the artwork as imagined.

Here are the steps applied in utilizing plastic waste through the collage method at the Elementary School in Jiput Village, Jiput District, Pandeglang Regency:

1. Collecting Plastic Waste

First, we provide socialization to teachers, students, and parents about the importance of plastic waste management. We then create an agenda and tasks with the students for utilizing plastic waste. Students are tasked with bringing plastic waste, scissors, HVS paper, and glue from home and collecting them at school. The plastic waste is sorted by type, color, and size to facilitate the collage-making process.

2. Cleaning and Preparing Plastic

Clean the collected plastic waste with water and detergent to remove dirt or residue. Then, dry the cleaned plastic by sun-drying or wiping it with a clean cloth. Cut the plastic waste into small pieces according to the size and shape needed for the collage.

3. Planning the Collage Design

Create a simple sketch of the collage design. Involve the students in this process to encourage their creativity and sense of ownership. Then, choose plastic colors and shapes that match the designed collage.

4. Making the Collage

Students begin attaching plastic pieces to the prepared medium (e.g., cardboard or canvas). Use strong glue to ensure the plastic pieces stick well. Add details to the collage using smaller plastic pieces or different colors according to the original sketch. Don't forget to check the completed collage, add elements if necessary, and allow it to dry thoroughly.

5. Processing the Finished Work

Hold an exhibition of the collage works in front of the class to showcase the students' creations and appreciate their efforts. Guide the students to discuss their experiences in making the collages and provide feedback on the process.

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Figure 1. Process of Making Collages from Plastic Waste



Figure 2. Results of Collage Made from Plastic Waste



6. Waste Management and Environmental Impact

Use leftover plastic scraps for other projects or save them for the next collage. Continue educating about the importance of recycling and plastic waste management in the surrounding environment.

7. Program Evaluation

Conduct an assessment of the collage results and the positive impact of this program on students' awareness of waste management. Based on the evaluation, plan follow-up activities that involve using plastic waste or other recycled materials.

The results of this study show that using plastic waste as collage material can enhance students' creativity and environmental awareness. Below are some significant findings from this study:

a. Student Creativity

Initially, only 36% of students achieved a creative rating. Observations indicated that students still struggled to combine various materials into creative work. After improving the learning process by providing more specific instructions and motivating students to be more creative, the result increased to 80%. Students found it easier to combine various materials and create unique and creative forms.

b. Environmental Awareness

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The level of students' environmental awareness was still not optimal. Only 40% of students could explain the benefits of using plastic waste as collage material. After conducting the collage activity more systematically and interactively, the level of environmental awareness increased to 90%. Students were better able to explain the importance of reducing plastic usage and reusing plastic waste.

c. Student Involvement

Students tended to be less involved in the learning process due to a lack of motivation and clear instructions. After the learning process was improved, students became more engaged in the collage activities. They were more active in sourcing materials, combining materials, and evaluating their own work.

d. Student Skills

Students still had difficulty combining various materials into a cohesive artwork. After the learning process was improved, students were better able to combine various materials and create complete and creative works.

Discussion

The use of waste plastic through the collage method in elementary schools in Jiput Village offers an innovative way to address both environmental issues and creativity. By transforming plastic waste into artistic pieces, students not only learn about recycling but also develop their creativity and fine motor skills. Initially, many students lacked awareness of the importance of reducing plastic waste, but through hands-on involvement in the collage-making process, their understanding and involvement significantly improved. The project also allowed students to experiment with different textures and shapes, fostering their creative expression while providing valuable skills in art and waste management.

This initiative highlights the importance of integrating environmental education with creative activities, offering a unique way to engage students in sustainability. The role of teachers in guiding and motivating students was crucial, and while the project faced challenges like limited resources and initial disengagement, its positive impact on students' environmental awareness and creativity shows its potential for replication in other communities. By combining artistic expression with environmental responsibility, the project serves as a model for promoting sustainable practices and fostering a more environmentally conscious generation.

Conclusion

The students who participated were able to create art pieces from materials that were previously considered useless, demonstrating that plastic waste can be transformed into valuable items. Furthermore, the students' ability to engage in every aspect of the project, from collecting and cleaning to creating the collages, showed that they have become more aware of their responsibility toward the environment. This study demonstrates that utilizing plastic waste through the collage method in the elementary schools of Jiput Village, Jiput Sub-district, Pandeglang Regency can effectively serve as an educational approach to address plastic waste issues and enhance students' environmental awareness. The collage method not only succeeded in reducing plastic waste in the school environment but also had a positive impact on developing students' creativity, fine motor skills, and ecological awareness.

The steps applied to the utilization of plastic waste through the collage method in the elementary schools of Jiput Village, Jiput Sub-district, Pandeglang Regency are as follows: 1) collecting plastic waste, 2) cleaning and preparing plastic, 3) planning the collage design, 4) making the collage, 5) processing the final artwork, 6) managing waste and its environmental impact, 7) program evaluation.

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