

International Journal of Ethno-Sciences and Education Research

Vol. 5, No. 1, pp. 20-24, 2025

Utilization of Flora in the School Environment as a Drawing Medium for Reading Children's Creativity

Setyo Luthfi Okta^{1*}, Dhika Surya², Amanatullah Pandu Zenklinov³

¹Communication in Research and Publications, Bandung, Indonesia ²Research Collaboration Community, Bandung, Indonesia ³Statistics Study Program, Faculty of Science, Computer and Mathematics, Matana University

*Corresponding author email: setyoluthfill@gmail.com

Abstract

This study examines the use of flora in the school environment as an alternative media to develop children's creativity through drawing activities. Using qualitative methodology with a descriptive approach, the study involved 19 elementary school students in an experiment based on the exploration of natural elements. The research instruments included participatory observation, documentation of work, and structured interviews. The results showed a significant increase in the dimensions of creativity, with indicators: a 40% increase in the quality of geometric patterns, 40% in color exploration, and 40% in abstract composition. Student involvement reached 90% with a high level of enthusiasm in the creative process. The findings indicate that flora media can stimulate imaginative capacity, encourage artistic experimentation, and broaden students' creative perspectives in the context of continuing art education.

Keywords: Children's creativity, alternative art media, environmentally based education, educational innovation.

1. Introduction

Creativity is the ability to create something new, either in the form of ideas or real work, by connecting several existing things (Mazla et al., 2020). Children of an early age certainly need learning activities that can stimulate talent and creativity. Creativity in education is the ability of students to produce something new, either in the form of ideas or real work (Brown et al., 2024). In addition, in learning, creativity is an approach that encourages students to develop creative, innovative, and solution-oriented thinking skills. Creativity in learning does not only focus on factual knowledge, but also on the development of cognitive and emotional skills.

The art of drawing is one of the effective approaches to stimulate children's creativity (Timotius and Mulyani, 2024). The drawing process not only includes visual and motor activities, but also involves imaginative abilities and emotional reflection. In art learning, the introduction of alternative media, such as natural environmental elements, can enrich the learning experience and provide a new dimension to students' creative activities (Halool, 2024).

The school environment is a strategic place to integrate natural elements into the learning process (Falzon & Conrad, 2023). Flora available in the school environment, such as leaves, flowers, twigs, and seeds, can be used as natural and ecological drawing media. The use of flora as a creative medium not only offers new variations in art activities, but also creates a learning experience based on exploration and direct interaction with nature (Sachdev, 2019).

The results of Yuanyuan and Shunli's (2024) study stated that the perception of environmental art significantly promoted creativity in fine arts students by increasing their interaction and appreciation of artistic elements in their campus environment. Furthermore, emotional development was identified as an important mediator in this relationship, indicating that a deeper understanding and management of emotions can make a significant contribution to creative endeavors.

The results of Lukaka's research (2023) state that arts education plays an important role in developing creativity and critical thinking skills in students. Arts education not only improves their cognitive abilities but also contributes to their overall well-being and personal growth. By fostering creativity and encouraging originality, arts education prepares students for success in the 21st century workforce, where innovation and problem-solving skills are highly valued.

Previous research has shown that integrating environmental elements into art learning can increase student engagement and have a positive impact on the development of divergent thinking skills. Furthermore, nature-based art

activities can be a means to strengthen ecological values in students, including awareness of the importance of environmental conservation (Komarovska et al., 2024). In the long term, this approach not only develops creativity but also builds responsible behavior towards environmental sustainability.

The use of environmental elements in art learning in schools is still relatively minimal. Most art activities in schools are still dominated by conventional media, such as paper, pencils, and paint, without any exploration of natural materials. In fact, these conventional media often do not motivate students to be actively involved in creative activities. Therefore, innovation is needed in art learning that utilizes the potential of the surrounding environment as a learning medium.

This study aims to explore the potential of flora in the school environment as a natural medium in drawing activities. This study also wants to analyze the impact of the use of flora-based media on students' creativity in producing artwork. In addition, this study is expected to be able to identify strategic approaches to integrating environmental elements into the art education curriculum, which is in line with the principles of experiential learning.

2. Methodology

This study uses a qualitative method with a descriptive approach. This method was chosen to describe in depth the process, involvement, and results of students' work in the art of drawing using flora as a medium. With this approach, researchers can observe and analyze students' direct interactions with the surrounding environment and express their experiences during the activity. The steps of this research method can be seen in Figure 1 below:

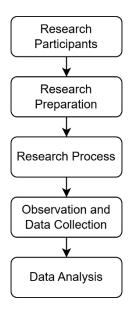


Figure 1. Research flowchart

2.1. Research participants

Participants in this study were elementary school students selected based on certain criteria. These criteria include basic drawing skills, level of interest in art, and willingness to actively participate in research activities. The selection of participants aims to ensure that the students involved have potential that can be developed and provide relevant data related to their creativity and involvement.

2.2. Research preparation

Before the activity began, the researcher prepared various needs that would be used in the art learning process. Flora available in the school environment, such as leaves and flowers, were collected and arranged in such a way that they could be used as inspiration and direct materials for drawing. In addition, drawing tools such as drawing paper, watercolors, and brushes were also prepared to ensure that students had adequate equipment during the activity.

2.3. Research process

In the research activity, students were invited to explore the school environment and choose flora that caught their attention. The selected flora, such as leaves or flowers, were used as objects or inspiration in creating artwork. This process provided a different learning experience for students, where they could utilize natural elements in drawing.

This activity not only involved creativity, but also student interaction with the surrounding environment, thus encouraging them to appreciate the beauty of nature more.

2.4. Observation and data collection

During the drawing process, the researcher conducted observations to record every detail of the students' activities. Observations included how students used flora, their level of involvement in the activity, and the final results of the artwork produced. In addition, short interviews were conducted to obtain direct responses from students regarding their experiences in drawing using flora. The data were collected in the form of photographs of artwork, systematic observation notes, and recorded interview results for further analysis.

2.5. Data analysis

The collected data were analyzed descriptively to identify improvements in student creativity and involvement during the activity. The researcher assessed the students' artwork based on aspects of uniqueness, courage in experimenting with color and shape, and the level of depth of expression displayed. In addition, student involvement was observed from the level of enthusiasm, activeness in asking questions, and how they interact with each other during the activity. The results of this analysis provide an overview of the positive impact of drawing activities using flora on the development of student creativity.

3. Results and Discussion

3.1. Student work

Students demonstrated outstanding ability in producing artwork using flora as a medium. The artworks reflected each student's unique creativity, ranging from simple print patterns to more complex abstract compositions. Some students used leaves to print geometric patterns, while others utilized the texture of flowers to create dynamic, colorful effects.



Figure 2. Example of student artwork using flora as a drawing medium

Figure 2 shows some of the students' creative and interesting artworks. The first artwork is a symmetrical pattern made using mango leaves, creating a harmonious and aesthetic composition. The second artwork is a flower print with rainbow-like color variations, giving a cheerful and dynamic impression. The third artwork is a collage that combines leaves and flowers to form a beautiful natural scenery. These results show that the use of flora-based media can encourage students' creative exploration, provide new experiences in art learning, and enrich the visual results of their artworks.

3.2. Increasing student creativity and engagement

Observation results show that most students are actively involved and show high enthusiasm during the activity. This is reflected in their enthusiasm when choosing flora in the school environment, experimenting with various drawing techniques, and collaborating with classmates. The main findings revealed that around 90% of students (17 out of 19 students) showed a high level of engagement, from the process of selecting flora to completing the artwork. In addition, innovation in the use of flora is seen through students' creativity in creating unique patterns by mixing various types of leaves and flowers, as well as efforts to create color gradations using various flower petals. The resulting work also reflects increased creativity, where students are able to integrate natural elements into art with a

critical and innovative approach. Figure 2 documents students' moments of drawing, showing their creative process in using flora as an art tool.



Figure 3. Documentation of the drawing process using flora by students

Figure 3 shows documentation of student activities during the drawing process using flora, where students appear enthusiastic and actively participate in learning. They utilize various leaf shapes as the main media to create artwork while selecting and arranging leaves independently, which shows direct interaction with the surrounding environment and the use of natural media as a creative educational tool. This activity also provides space for students to explore their creativity by combining cat colors and making leaf prints on paper. In addition, some students work independently, while others discuss with peers, reflecting collaboration and independence to create more innovative results.

3.3. Results of short interviews with students

Short interviews were conducted to understand students' experiences during the activities. The results are summarized in Table 1 below:

Question	Number of students (n=19)	Main response
Did you enjoy this activity?	17	"Sangat menyenangkan," "Beda dari kegiatan lain"
Does this activity help creativity?	16	"Makes me think more," "Very creative!"
What was your favorite part?	19	"Using leaves for patterns," "Color experiments"

Table 1. Results of short interviews with students about drawing experiences using flora

Table 1 summarizes the results of short interviews with 19 students who participated in the flora drawing activity. The first question asked whether the students enjoyed the activity. Most students, 17 out of 19, responded enthusiastically that they found the activity very enjoyable and different from other art activities. They felt more interested and involved because the use of flora was something they had rarely tried before.

In the second question about whether the activity helped improve creativity, 16 students (almost all participants) admitted that the activity made them more creative and think more in making artwork. Several students mentioned that they felt that the activity gave them the freedom to experiment and create artwork in a more interesting way.

The last part of the interview asked about the students' favorite part of the activity. All 19 students chose using leaves to create patterns or experiment with colors as the part they enjoyed the most. They felt that the leaves provided a unique texture and provided various possibilities for creating creative patterns and designs.

3.4. Analysis of work results and creative process

Figure 3 shows a comparison of the artwork before and after this activity. The analysis shows significant improvements in pattern quality, color selection, and students' overall creativity.

Table 2. Analysis of the quality of students' work before and after drawing activities using flora

Category	Before Activity (%)	After Activity (%)	Increase (%)
Geometric patterns	30%	70%	40%
Color exploration	25%	65%	40%
Abstract composition	20%	60%	40%

Table 2 shows a comparison of the quality of students' work before and after participating in the drawing activity using flora. Based on the observed categories, the increase in the quality of the work is very clear. Before the activity, only 30% of the work showed good geometric patterns, while after the activity, the number jumped to 70%, showing an increase of 40%. This indicates that students are more creative in arranging floral elements to create more structured and interesting patterns.

The color exploration category also showed a significant increase. Before the activity, only 25% of the work showed a diverse and creative use of colors. However, after the activity, 65% of the work showed a more varied use of colors, with students daring to mix colors from various types of flowers and leaves to create a more dynamic visual effect. This increase also reached 40%.

Abstract compositions also experienced a significant increase, from 20% of works containing abstract compositions to 60% after the activity. This shows that students are not only focused on realistic representations of flora, but also begin to explore freer and more imaginative forms and structures. This is clear evidence that this activity has succeeded in motivating students to think more creatively and expand the way they see the world through art.

4. Conclussion

This study proves that the use of flora in the school environment as a drawing medium has a significant positive impact on student creativity. Through activities that involve exploration and direct interaction with natural elements, students not only produce unique works of art, but also develop creative and innovative thinking skills. The increase in the quality of work in terms of geometric patterns, color exploration, and abstract compositions shows that an environment-based approach in art education can broaden students' perspectives on art and creativity. This can be seen from the results. The results showed a significant increase in student creativity, with 90% of students showing high involvement and enthusiasm in the creative process. Analysis of student work revealed a 40% increase in the quality of geometric patterns, color exploration, and abstract compositions. Short interviews revealed that students enjoyed the activity and felt that this activity helped improve their creativity.

References

Brown, N., Ince, A., & Ramlackhan, K. (Eds.). (2024). Creativity in Education: International Perspectives. UCL Press.

- Falzon, D., & Conrad, E. (2023). Designing primary school grounds for Nature-based learning: A review of the evidence. *Journal* of Outdoor and Environmental Education, 1-32.
- Halool, F. (2024). Relationship between Educational Environments and the Creativity Learning Index in Children. *Journal of Social and Political Science*, 7(2).
- Komarovska, O., Vlasova, V., Pet'ko, L., Voloshenko, A., Holinska, T., & Prodius, O. (2024). The influence of arts education on love of the natural environment. In *E3S Web of Conferences* (Vol. 538, p. 05004). EDP Sciences.
- Lukaka, D. (2023). Art Education and its Impact on Creativity and Critical Thinking Skills: A Review literature. *International Journal of Arts and Humanities*, 1(1), 31-39.
- Mazla, M. I. S. B., Jabor, M. K. B., Tufail, K., Yakim, A. F. N., & Zainal, H. (2020, September). The roles of creativity and innovation in entrepreneurship. In *International Conference on Student and Disable Student Development 2019 (ICoSD* 2019) (pp. 213-217). Atlantis Press.
- Sachdev, G. (2019). Engaging with plants in an urban environment through street art and design. *Plants, People, Planet, 1*(3), 271-289.
- Timotius & Mulyani, S. (2024). Enhancing Children's Creativity Through Drawing and Coloring. International Journal of Multidisciplinary and Current Educational Research (IJMCER). 6(6).
- Yuanyuan, S., & Shunli, L. (2024). Effects of environmental art perception on students' creativity and emotional development. *International Journal of Evaluation and Research in Education (IJERE)*, 13(6). https://doi.org/10.11591/ijere.v13i6.29961