

College from Dry Leaf Waste as a Form of Creativity for Early Childhood (AUD)

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ABSTRACT

This study aims to enhance the creativity of 5–6-year-old children through the creation of collage art from dry leaf waste at TK Muslimat NU 12 Az–Zahra Jabung. This study employs a qualitative approach, utilizing a classroom action research (CAR) method conducted in two cycles. Each Cycle consists of four stages: planning, implementation, observation, and reflection. In Cycle I, the children were still passive and lacked confidence in their work. However, in Cycle II, after implementing a more exploratory and enjoyable learning approach, there was a significant improvement in imagination, courage to express ideas, and the ability to arrange shapes. The research results indicate that the use of dried leaf waste as an art medium is effective in stimulating children's creativity and fostering environmental awareness. This activity also encourages independence and cooperation among children.

Keywords:

children's
creativity, collage,
dried leaves, art,
early childhood
education

INTRODUCTION

Childhood, especially between the ages of 5 and 6, is a crucial period often referred to as the golden age. During this stage, children experience accelerated development in various aspects, including cognitive, motor, social-emotional, and language skills. This period serves as a vital foundation for a child's future personal growth and character development. Children at this age have a high capacity for absorbing environmental stimuli, making it essential for educators and parents to provide meaningful learning experiences that stimulate all aspects of their development, particularly in terms of creativity and imagination.

Creativity is one of the main aspects that must be developed in early childhood. Creativity encompasses not only artistic creation but also original thinking, problem-solving skills, and the ability to express ideas effectively. Creative children tend to be more flexible in their thinking, more independent, and able to see things from various perspectives. According to Mayesky (2011), children who are actively engaged in art activities tend to exhibit open-minded thinking and are willing to experiment, making art a valuable medium for fostering creativity naturally and enjoyably.

One practical learning approach for developing children's creativity is through art activities, particularly collage art. Collage is a technique of arranging pieces of material into a cohesive visual work, such as an image or specific pattern. This activity encourages children to make choices, organize ideas, and explore various possibilities in form. Besides being enjoyable, collage also sharpens fine motor skills, concentration, and

hand-eye coordination. The diversity of collage materials provides opportunities for children to express their imagination and personal expression in concrete form.

Collage art becomes more meaningful when it is associated with materials from the surrounding environment, such as dry leaves. The use of dry leaf waste as collage material provides tremendous educational value. Children are not only trained to think creatively, but are also encouraged to recognize, collect, and utilize natural objects that were previously considered worthless. Rosnani & Rahman (2019) state that the use of natural materials in art education can enhance aesthetic sensitivity, curiosity, and environmental awareness from an early age.

Dry leaf waste is readily available, inexpensive, and environmentally friendly. Leaves come in various shapes, colors, and textures that can stimulate children's visual and imaginative exploration. Through collage activities using these materials, children are trained to observe, select, cut, arrange, and paste—all of which are important skills in active learning. Yuliani (2020) demonstrated that nature-based art significantly enhances the productivity and creativity of preschool children in various dimensions, both in terms of the process and the final product.

TK Muslimat NU 12 Az-Zahra Jabung is one of the early childhood education institutions that has the potential to integrate environment-based learning into daily activities. However, initial observations indicate that creativity development in this institution is not yet optimal. Art activities are still limited to coloring and drawing techniques using conventional media. Nurhalimah (2021) highlights that a lack of media variety in learning can limit children's exploration and reduce their motivation and courage to express themselves.

Several studies have proven the effectiveness of natural media in early childhood art education. Lestari (2021) states that collages made from natural materials encourage children to be freer in expressing their ideas and enriching the visual composition of their works. Additionally, Utami & Handayani (2018) state that children who are active in collage using dried leaves show improved abilities in designing, organizing, and arranging visual elements more systematically. This demonstrates that even simple media can become a powerful learning tool when used with the right approach.

In terms of learning experiences, collage activities using dried leaves create an active and enjoyable atmosphere. Children can touch, smell, and observe the colors and shapes of different leaves. This multisensory experience enriches children's engagement in the learning process. Maharani (2017) revealed that nature-based art activities also have a positive impact on improvements in children's concentration, self-confidence, and independence in completing tasks. This is important because the development of creativity must go hand in hand with the formation of positive character.

Not only cognitive and motor skills, but also collage activities also have a significant impact on children's social and emotional development. Through interaction with friends in group activities, children learn to take turns, work together, and appreciate their friends' work. They can also express their feelings through the colors and shapes they choose. Safitri (2020) notes that collage art is effective in building empathy, enhancing social interaction, and helping children learn to manage their emotions in a positive manner. Appropriate art activities create a supportive and meaningful classroom environment.

Based on the above, it can be concluded that efforts to enhance the creativity of 5–6-year-old children through the use of dried leaf waste as a collage art medium are highly

relevant and necessary. This approach not only provides an enjoyable learning alternative but also reflects educational, ecological, and social values. Therefore, this study aims to explore the effectiveness of this method in a real-world context at TK Muslimat NU 12 Az-Zahra Jabung, contributing to an innovative, creative, and sustainable environment-based learning approach.

METHOD

This study employs a qualitative method with a descriptive approach, aiming to provide an in-depth description of the efforts to enhance the creativity of children aged 5–6 years through collage art activities using dry leaf waste. The subjects of this study were 18 students from Group B at TK Muslimat NU 12 Az–Zahra Jabung, comprising 10 boys and eight girls. The researcher served as the primary instrument and activity implementer, directly involved in the planning, implementation, observation, and in-depth analysis of data. The research medium consisted of collage activities that utilized dry leaf waste to stimulate children's creativity in terms of imagination, creation, and self-expression through artworks.

RESULT AND DISCUSSION

This classroom action research was conducted in two cycles, each consisting of planning, implementation, observation, and reflection stages.

Cycle I

Planning

At this stage, researchers developed a detailed Daily Lesson Plan (DLP) that included several important activities to improve the understanding and creativity of 5-6-year-old children through the use of dry leaves. The activity began with an introduction to the material, namely dry leaves, which aimed to familiarize children with various types of leaves and their textures and colors. Next, the researcher demonstrates the technique of creating a simple collage using dry leaves as the primary material, presenting the steps in a sequential manner so that children can easily follow and replicate. During this process, the researcher also provides examples of collage artworks made from dry leaves as inspiration for the children, while also showcasing the aesthetic potential that can be achieved from a simple and environmentally friendly material. To support the smoothness of the learning process, the researcher prepared complete and appropriate tools and materials, such as glue, cardboard, scissors, and various types of dried leaves with diverse shapes and colors, so that each child could create optimally and gain a fun yet educational learning experience. With this RPPH design, the researcher aims to create a structured and effective learning activity that enhances children's creativity through artistic exploration using readily available natural materials.

Implementation and Data Collection

The activity of creating collage artworks from dried leaves was conducted in two well-structured sessions to maximize children's understanding and creativity. In the first session, children were introduced to the various textures, shapes, and colors of dried leaves, which served as the primary material for creating collages. Additionally, they were shown examples of simple collage artworks as inspiration and guidance for their future creations. This introductory process aims to help children recognize the

characteristics of the materials and develop their imagination before beginning their work. This activity also includes educational elements that introduce children to the concept of art and the processing of natural materials in a fun and interactive way.

In the second meeting, the children began to directly arrange their collage works based on the understanding they had gained. In this process, observations revealed that some children continued to experience difficulties, particularly in arranging neat patterns and selecting leaves that aligned with the concept of their work. In addition, some children also needed the teacher's help in gluing to make their work stronger and more aesthetically pleasing. These difficulties are a natural part of the learning process for young children, where they hone their fine motor skills and their ability to select and combine materials creatively. Teacher guidance is essential in providing direction and support, so that children can be more confident and able to complete their collage artworks well.

Reflection

Based on the results of the observations conducted, the children's creativity began to show quite positive signs. This was evident from their interest in choosing leaves as the main material for their artwork. The children did not just choose randomly, but began to show preferences for the shape, color, and texture of leaves that they found interesting. In addition, they have also started to name their works, an early indication that they are able to associate their creations with their imagination and personal understanding. The process of trying to create their own patterns, even though the results are not yet perfect, shows that children have begun to dare to experiment and develop their creativity independently. This is an important step in the development of creativity because they have begun to actively involve themselves in creative activities.

However, observations also revealed several challenges that still need to be overcome in order for children's creativity to develop optimally. Children tend to be passive in terms of exploring forms and variations in art. They are not yet fully confident in experimenting with more diverse forms or stepping outside their comfort zone in their work. Their confidence in expressing ideas is also limited, so they often follow existing patterns or examples rather than creating something truly new from their own imagination. This situation highlights the need for further encouragement and guidance to help children feel more confident and motivated to explore their creativity without fear of making mistakes or failing. With the right approach, their creative potential can develop to its fullest and become a strong foundation for their ability to create in the future.

Cycle II

Planning

Planning for Cycle II was developed based on the results of reflections from the implementation of Cycle I, which indicated the need for improvements in the methods of presenting material to make it more engaging and better able to stimulate children's creativity to the fullest extent. Therefore, the learning approach in Cycle II was made more varied and interactive. One form of variation was the use of short videos showcasing art from nature, such as artworks made from dried leaves, rocks, or tree branches. These videos aimed to introduce children to the various creative possibilities sourced from their natural surroundings, while also sparking their initial interest in the

art activities to be conducted. Teachers also transform the learning environment into a more enjoyable and relaxed setting, allowing children to feel more comfortable expressing their ideas and imagination through collage activities.

Additionally, teachers design supporting activities such as ice-breaking games that stimulate imagination and energize children before the main activity begins. These games are designed not only as a means of entertainment but also to broaden children's horizons and sharpen their creative thinking skills. For example, children are invited to role-play as nature artists searching for materials in an imaginary forest or guessing the shapes of leaf and branch silhouettes. These activities indirectly prepare children to be more actively involved in the process of creating collage artworks from dried leaf waste. Through a more enjoyable approach that emphasizes children's active participation, it is hoped that the creativity of 5–6-year-old children can develop more optimally, and they become more skilled in transforming simple materials into meaningful artworks.

Implementation and Data Collection

This activity was conducted in two sessions designed systematically and enjoyably for the children. In each session, the children were given the freedom to choose the form of art they wanted to create, such as animals, flowers, houses, or other shapes according to their imagination. They were also allowed to use various types of leaves with different sizes, shapes, and colors. This freedom was intended to provide a wide space for exploration, while stimulating children's thinking and curiosity in creating something unique. Additionally, the teacher only acted as a facilitator, guiding and directing the children when they encountered difficulties, ensuring that the learning process was active and child-centered.

Observations during the activity showed a significant increase in children's creativity. This was reflected in several indicators, including increased confidence in arranging leaves into the shapes they wanted, diversity in the results in terms of shape and color combinations, and the ability to express ideas through stories about their work. The children appeared more enthusiastic and were able to explain the creation process and meaning of their artworks to teachers and peers. This indicates that the dried leaf collage activity not only stimulates fine motor skills but also promotes the development of creative thinking, communication, and overall self-confidence in children.

Reflection

Cycle II showed that most children experienced a significant increase in creativity compared to their previous condition. Children began to demonstrate the ability to convey ideas not only verbally but also visually through the artwork they produced. They appeared more confident in expressing their ideas and showed high enthusiasm when participating in activities. This improvement is also evident in how they actively participate during the process of creating collages from dried leaves. Children become more confident in translating their imagination into artworks, no longer relying entirely on the teacher's guidance, and begin to develop their own concepts using available materials.

In addition, teachers noted positive developments in terms of independence and originality in their work. The children demonstrated increasingly mature creativity by producing shapes, patterns, and color combinations that had not been previously

considered. They seemed to enjoy the process of creating their work, from selecting leaves, arranging compositions, to attaching pieces of leaves onto the medium. This process encourages children to think critically, try various possibilities, and express themselves freely without fear of making mistakes. The teacher also noted that interactions among children during the activity became more harmonious and cooperative, indicating that the dried leaf collage activity not only enhances creativity but also develops their social and emotional skills.

Research Findings

Based on the results of two cycles conducted in this study, it was found that collage art activities using dry leaf waste effectively increased the creativity of 5-6 year old children at Muslimat NU 12 Az-Zahra Jabung Kindergarten. These activities not only provided enjoyable and challenging stimuli, but also stimulated important aspects of children's cognitive and affective development. The previously worthless dry leaf waste is transformed into a meaningful medium of expression for the children. This process allows them to imagine, explore, and create freely and purposefully, which greatly supports the development of creativity at an early age.

The improvement in children's creativity is clearly evident in three main indicators observed. First, their ability to arrange patterns and shapes shows significant development; children begin to design collage compositions by considering the harmony of shapes and aesthetics. Second, the courage to express ideas in artwork has also increased; they have become more open in expressing their ideas, both spontaneously and after being inspired by their surroundings. Third, the ability to explain their work verbally shows development in communication and self-reflection skills. Children are able to convey the reasons behind their choice of shapes and arrangements of leaves, as well as the meaning they want to convey through their artwork.

In addition to encouraging creativity, this activity also has a positive impact on other aspects of development, such as independence and concentration. Children appear more confident and independent in completing their tasks, from the process of selecting leaves, designing the layout, to pasting and tidying up the final result. Their concentration levels also improve; they are able to focus for longer periods during the activity. This demonstrates that collage activities can be an effective learning method to enhance children's self-regulation skills, which are essential for future academic success.

Furthermore, this activity fosters children's awareness and love for the natural environment. By using leaf waste as the main material, children are introduced to the concepts of recycling and sustainable use of natural resources. They learn that even seemingly useless objects around them can be transformed into something beautiful and meaningful. This not only reinforces values of environmental care but also cultivates gratitude and sensitivity toward nature's gifts. Thus, the art activity of creating collages from dried leaves not only enhances children's creativity but also serves as an enjoyable and grounded means of character and environmental education.

Discussion

Discussion in Cycle I

In Cycle I, the approach used still focused on introducing basic collage materials and techniques, such as introducing various types of textures, shapes, and ways of gluing materials. Children were still guided directly in imitating pre-designed patterns or designs. However, in Cycle II, researchers began to enrich the learning strategies with visual approaches and games designed to stimulate children's imagination. For example, children were given the freedom to choose materials, create their own collage designs, and respond to previously provided visual stories. Findings during the process showed an increase in active participation and diversity of visual expression among children, indicating that the strategies used in Cycle II were more effective in stimulating children's creativity.

These results are reinforced by empirical studies from several previous studies. Utami and Handayani (2022) emphasize the importance of exploratory space in art to optimally encourage children's initiative and creativity. Similar findings were reported by Sari and Lestari (2021), who stated that varied visual media can enhance imaginative capacity in the artistic works of young children. Research by Ramadhani (2020) showed that art-based collage games can develop children's divergent thinking skills. Meanwhile, a study by Nugroho and Arifah (2023) found that an art project-based approach increases children's confidence and autonomy in expressing ideas. In another study, Wulandari and Setiawan (2021) emphasized that children's active involvement in selecting collage materials contributes to strengthening the creative cognitive process. Finally, research by Hidayati (2019) proves that free art activities guided by visual stimulation increase the complexity of children's work compared to instructional approaches. Thus, the strategies used in Cycle II are theoretically and empirically supported in efforts to foster children's creativity.

They were also introduced to examples of simple collage works, such as flower or butterfly shapes, made from the leaf pieces. Although most children showed curiosity, they generally appeared confused in determining patterns and lacked confidence in starting their work. Dependence on teacher guidance remained high, and the exploration process proceeded slowly.

However, the children's enthusiasm began to increase when they were given the freedom to choose the leaves they would use in the collage activity. This process provided space for the children to explore the materials directly, and this was evident in the courage of some children to create arrangements that differed from the examples given, even though their creations were not yet fully perfect. The activity of selecting, arranging, and attaching leaves not only develops fine motor skills but also provides a rich multisensory experience through the texture, color, and natural aroma of the materials used. This experience becomes a crucial moment in fostering a sense of engagement and interest in artistic activities.

This finding is in line with Hidayati's (2021) study, which shows that children's direct involvement in learning about natural materials can foster an early interest in art and create an emotional connection between children and the materials used. Additionally, research by Lestari and Yuliani (2020) found that nature-based art activities encourage positive affective responses in children, such as curiosity, enthusiasm, and enjoyment while creating art. A study by Prasetyo and Anindita (2022) also supports this finding, stating that multisensory experiences through natural media such as leaves and flowers improve concentration and deepen children's aesthetic

experiences. Furthermore, research by Ningsih (2021) mentions that exploring organic materials in art activities helps children develop visual and creative sensitivity. Thus, learning strategies that involve freedom in choosing and using natural materials have been empirically proven to strengthen children's engagement and encourage the development of creativity from an early age.

Observations show that in Cycle I, children still need a lot of guidance in arranging patterns, using glue, and determining the final form of their work. Their creativity has not developed to its full potential due to a lack of stimulation and confidence in expressing themselves. Teachers were more dominant in providing verbal guidance, while children tended to passively follow instructions. Reflection on Cycle I indicated the need for a more enjoyable and interactive approach to facilitate children's creative thinking processes. This was reinforced by Rahmawati's (2020) opinion that young children greatly need visual and kinesthetic stimuli to be able to express ideas more originally and spontaneously.

Based on these reflections, the researcher revised the approach in Cycle II. This activity successfully boosted the children's enthusiasm and confidence before starting the main activity. The researcher also provided more freedom for exploration and did not restrict the children to specific examples, allowing them to express their ideas without pressure. Fitriani (2023) mentions that initial stimuli such as videos or stories can improve children's cognitive and emotional readiness before creating art.

This increase in creativity was accompanied by developments in the children's social and emotional aspects. They began to discuss, exchange materials, and give positive comments on their friends' work. The classroom atmosphere became more lively and collaborative. Teachers noted that children became more active in interacting and showed pride in their work. These findings align with Safitri's (2021) study, which emphasizes that collaborative art activities can enhance empathy, tolerance, and mutual respect among children.

In the final reflection, the researcher concluded that the collage-based approach using dry leaves has great potential in enhancing children's creativity comprehensively. Children not only learn about shapes and colors but are also trained to make decisions, express ideas, and build self-confidence. The aspects of free exploration and teacher support play a crucial role in the success of this process. Additionally, the use of dried leaf waste as a medium also has additional educational value in fostering environmental awareness in children from an early age.

Thus, the dried leaf waste collage art activity is not only a means of developing creativity but also a holistic learning approach that encompasses cognitive, emotional, social, and moral aspects. This study confirms that the right educational approach can bring about significant changes in children's character and abilities. As a recommendation, preschool and kindergarten teachers can incorporate this activity into their regular curriculum, accompanied by variations in materials and contextual themes to keep children motivated to explore and create.

Discussion in Cycle II

The implementation of Cycle II in this study showed a significant increase in the creativity of children aged 5–6 years. Unlike cycle I, which was still dominated by children's doubts and dependence on teachers, in Cycle II children began to show courage in making creative decisions. One indicator of the success of Cycle II is the

increased courage of children in choosing more complex and varied collage forms. Some children chose to create animal shapes such as birds and butterflies, while others created flowers, trees, and even imaginary characters like cute monsters or fairies made from leaves. This diversity reflects the children's ability to connect their imaginary world with the visual representations they create themselves. This phenomenon reinforces the findings of Rizkiah & Astuti (2022), who state that art media made from natural materials are effective in enhancing children's symbolic and abstract thinking abilities.

Collage activities with dried leaves also create a conducive environment for children's cognitive development. Children begin to learn how to arrange patterns, consider colors and shapes, and make visual decisions independently. This process not only stimulates imagination but also trains problem-solving and planning skills. Children are seen to be able to re-evaluate their work, replace leaves deemed unsuitable, or add ornaments to enhance the final result. This demonstrates deep cognitive engagement, where art serves as a bridge to sharpen various aspects of development. They exchange praise, express pride in their own and their peers' work, and explain the meaning behind the shapes they create. Safitri (2021) notes that collaborative art activities can foster empathy, tolerance, and communication skills in children from an early age.

The learning situation in Cycle II is much more lively than in the previous Cycle. Children are no longer passive or merely following instructions, but are actively taking initiative and showing spontaneous and creative expressions. Teachers act as facilitators who accompany and provide freedom. Children look happy when showing their work to teachers and friends, even telling the story behind the shapes they have created. This moment is important in fostering self-confidence, as explained by Ningsih (2023) that children who are actively involved in exploratory activities will show a significant increase in self-confidence.

Teacher reflections and documentation results during Cycle II show that children experience improvements not only in the final results (art products) but also in the process and attitude during the activities. Children's independence is increasingly evident in their decision-making, initiative in using different materials, and courage in expressing their opinions about their work. Some children even begin to take the initiative to create more than one piece with different designs, indicating an intrinsic drive to continue creating.

The dried leaves used as a medium have proven to be effective and efficient as a learning tool. The leaves have unique shapes and textures that stimulate children's sensory exploration. Children learn to recognize smooth, rough, dry textures, and even natural colors that begin to change as the leaves dry. Ramadhani (2022) emphasizes that natural materials such as dried leaves not only attract children's attention but also present aesthetic and educational dimensions that can enrich the learning experience.

From an economic and sustainability perspective, the use of dry leaves as a medium is also very beneficial because it does not require large costs. This activity can be carried out at any time by utilizing materials available in the surrounding environment. Children are also encouraged to appreciate nature and understand that something considered waste can be processed into beautiful and valuable works of

art. These values indirectly shape ecological awareness and environmental responsibility in children from an early age.

In general, waste-based collage art activities using dry leaves have proven effective in enhancing three key aspects of children's creativity: divergent thinking skills, the courage to express oneself, and the ability to connect visual symbols with abstract ideas. This activity encourages children to observe the shapes, textures, and colors of dry leaves, then transform them into meaningful works of art. Research by Suryani et al. (2020) show that nature-based collage activities can improve the flexibility of young children's thinking. Furthermore, research by Mulyani and Prasetyo (2021) found that collage art activities provide space for children to express their ideas without fear of being wrong, thereby encouraging courage and self-confidence. This aligns with findings by Fitriani (2019), which show that children involved in exploring natural materials in art activities exhibit more complex development in imagination and symbolization.

These art activities also make children active subjects in the learning process, not just recipients of information. An exploration-based approach using dried leaf waste as a medium allows children to learn directly from real experiences, strengthening their cognitive and affective processes. Research by Hartati (2020) revealed that learning based on real experiences can significantly increase children's engagement and attention. Additionally, a study by Rahmawati and Setyawan (2022) states that collage art activities help children develop problem-solving skills through the selection and arrangement of materials. This is supported by the findings of Nugroho et al. (2021), who noted positive changes in children's attitudes toward the learning process after participating in an environment-based collage art program. Thus, changes in children's attitudes and mindsets in Cycle II serve as concrete evidence of the effectiveness of creative and exploration-based learning.

Therefore, the implementation of Cycle II provides strong evidence that collage art activities using dried leaves serve as an educational medium that not only enhances creativity but also fosters children's independence, self-confidence, and environmental awareness. This study supports and reinforces previous studies such as Dewi (2021), Lestari (2020), and Maharani (2022), which state that an art- and environment-based approach has a broad positive impact on the development of young children in various aspects.

CONCLUSION

Based on the results of two cycles of activities, it can be concluded that collage art activities using dry leaf waste can effectively enhance the creativity of 5–6-year-old children at TK Muslimat NU 12 Az–Zahra Jabung. This improvement is evident in three main indicators: children's ability to arrange patterns and shapes, their courage in expressing ideas visually, and their ability to explain their work verbally. Additionally, the children also showed progress in terms of independence, concentration, and collaborative skills.

The enjoyable, exploratory learning process that utilizes natural materials from the surrounding environment has proven effective in stimulating children's curiosity and imagination. This study demonstrates that the appropriate approach in art activities can optimize children's potential. Creativity, which was not yet clearly evident

in Cycle I, developed significantly in Cycle II through visual reinforcement strategies, freedom of expression, and a supportive learning environment.

For teachers, it is recommended to continue exploring creative learning methods by utilizing natural materials and waste available in the surrounding environment. Teachers are also encouraged to provide initial stimulating activities, such as picture books, short videos, or imaginative games to spark children's ideas before creating. Such approaches can foster children's interest and make the learning process more meaningful and enjoyable.

For educational institutions, it is recommended to provide facilities that support exploratory art activities and to offer training to teachers on the use of alternative media in learning. Additionally, it is important to build partnerships with parents so that children's creativity can also be developed at home through simple and environmentally friendly activities.

This study recommends that collage art activities using natural waste materials, particularly dry leaves, be incorporated into regular learning programs at kindergartens. This not only enhances children's creativity but also fosters environmental values and a sense of responsibility toward nature from an early age. Learning based on natural materials also reduces dependence on conventional learning media, which are often expensive and environmentally unfriendly.

Additionally, further research is recommended with a broader subject and context to assess the effectiveness of this method in various learning situations. Subsequent studies could also enrich the evaluation of children's creativity using quantitative or mixed-method approaches to provide a more comprehensive understanding of the development of creativity in young children.

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