



Improving the Creativity of 4-5 Years-Old Children through Jumputan Batik Making Activities at TK Dharma Wanita Persatuan Malang

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Abstract

This classroom action research aims to improve the creativity of early childhood 4-5 years old at Dharma Wanita Persatuan Kindergarten Malang through traditional batik jumputan (tie-dye) art activities with a 4P creativity approach (Person, Process, Press, Product). The research was conducted in three stages: pre-cycle, Cycle I, and Cycle II, using the Kemmis and Taggart model which includes planning, action, observation, and reflection. Data were collected through observations of 13 children, consisting of 6 girls and 7 boys. The results showed a significant increase in all creativity indicators after the implementation of jumputan activities using textile fabrics and dyes. In the final cycle, 92.30% of children showed initiative in creating patterns and combining colors (Person), 84.60% were able to overcome technical challenges during the process (Process), 92.30% felt comfortable and confident in expressing their artwork (Press), and 84.60% were able to express the ideas behind the batik works they made (Product). These results indicate that tie-dye batik provides a stimulating, enjoyable, and culturally relevant medium for developing creativity, imagination, self-confidence, and problem-solving skills in early childhood. Recommendations for further research include increasing dye concentration, using faster-drying materials, and simplifying tools to better suit children's fine motor skills.

Keywords: Creativity, Early Childhood Education, Tie-Dye Batik

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INTRODUCTION

Early childhood education is the earliest stage of education, so it requires guidance to stimulate growth and development. Children's potential must be nurtured through appropriate stimulation, enabling them to develop their character, potential, and creativity. According to Amini & Aisyah (2014), early childhood is deeply interested in the world around them. They possess a strong curiosity about everything that happens around them. This can be used to train children to hone their sensitivity to various developmental stimuli, including creativity. Creativity, as an aspect of cognitive development, plays a significant role in helping children express themselves, solve problems, and develop their imagination and creativity. Maulana & Mayar (2019) state that creativity is essential in education, especially in early childhood education. Practicing creativity will benefit young children, as it can help them discover new ideas that will be useful in their future. A child's creativity can generate new ideas and help them solve problems they face in everyday life. According to Miranda (2016), children's creativity is unique in its imagination and fantasy. This means

that children have the freedom to create and explore their activities. Essentially, the development of artistic creativity in early childhood is not limited to beauty but also to the child's courage in expressing their creative ideas, their courage to create, their confidence in their work, and their pride in the work they have created.

However, the reality on the ground shows that children's creativity is often neglected in daily educational practices. Based on initial observations at the Dharma Wanita Persatuan Kindergarten in Malangsko, it appears that the creative potential of children aged 4–5 has not yet developed optimally. This is evident in the lack of variety in children's artistic expression, limitations in imagination, and a lack of products or activities that reflect freedom of exploration and creativity. Children tend to exhibit passive and repetitive behavior when given creative activities such as drawing or role-playing, which should be the primary medium for stimulating their creativity. Therefore, a systematic, structured, and enjoyable approach is needed to develop children's creativity through age-appropriate activities. One alternative that is considered effective and contextual is the practice of tie-dye batik. Tie-dye batik is a traditional batik technique that involves tying cloth with string and then dipping it in dye to create unique and expressive patterns (Fajrin and Khoyimah, 2020). The jumputan (tie-dye) batik activity was chosen because it not only introduces children to local art and culture from an early age, but also provides space for sensory exploration, fine motor skills, pattern understanding, and the development of imagination and aesthetics. By actively involving children in the tie-dye batik process, they are given the freedom to choose colors, determine patterns, and view their own creations. This activity also helps children build self-confidence and pride in their work. Based on this background, this study aims to examine and prove that tie-dye batik activities can be an effective strategy in increasing the creativity of children aged 4-5 years at Dharma Wanita Persatuan Kindergarten, Malangsko.

METHOD

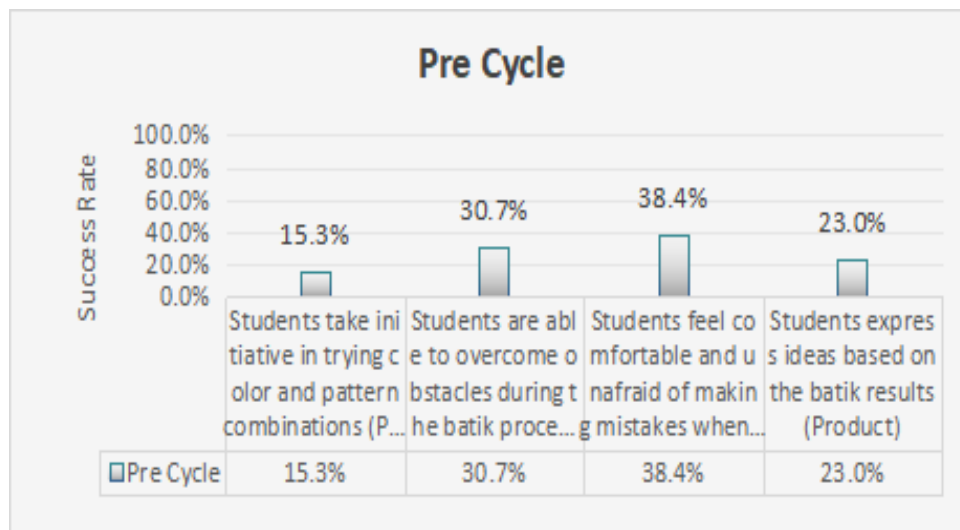
This study uses a classroom action research (CAR) method which is carried out in 3 stages, namely, pre-cycle, cycle I and cycle II. The research model used is the Kemmis and Taggart model (1998). The Kemmis and Taggart model has four stages, namely the planning stage, the implementation stage, the observation stage and the reflection stage. This research was conducted collaboratively between researchers and class teachers of group A. The data source for this study was group A students at Dharma Wanita Persatuan Malangsko Kindergarten, totaling 13 children consisting of 6 girls and 7 boys. The data source taken in this study is related to the level of children's creativity through jumputan batik activities. The indicators used to observe the level of students' creativity in this study are based on the 4P theory of creativity by Rodhes, namely: person, process, press and product (Nirwana, 2018). In the person indicator, children are expected to have initiative in trying color and pattern combinations. In the process indicator, children are expected to be able to overcome obstacles during the batik process. As for the press indicator, researchers expect children to feel comfortable and not afraid of making mistakes when expressing themselves. In the product indicator, it is hoped that children can express ideas based on the results of their batik work.

RESULT AND DISCUSSION

This research was conducted through three stages: pre-cycle, cycle I, and cycle II. The pre-cycle activity was used to introduce the concept of batik in a simpler and more child-friendly way. At this stage, children were introduced to the basic technique of tie-dye using folded kitchen towels and colored with food coloring. Each child was given a sheet of kitchen towel and then instructed to fold and tie the towel using a rubber band or string. Next, they colored the surface of the towel by slowly dipping it into a bowl of dyed liquid so that the color spread and formed tie-dye motifs. This activity was designed as an initial simulation

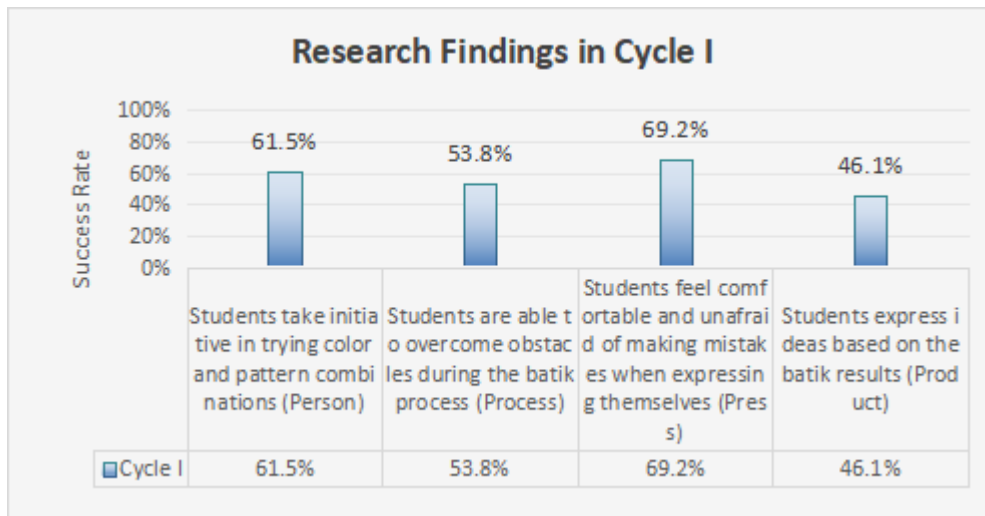
so that children understood the principles of folding, tying, and color distribution before using real fabric. In this process, the children appeared enthusiastic because the tissue medium was very easy to color and the process was quick. In terms of creativity, they began to understand that color can change and spread to form different motifs depending on the folding pattern and the position of the ties. The resulting motifs were quite interesting and could spark children's curiosity. However, the use of kitchen towels in tie-dye batik has several significant drawbacks. One drawback is that the tissue easily absorbs water, so the dye liquid easily spreads through the gaps in the ties, making it difficult to create tie-dye motifs. Furthermore, tissue paper doesn't reflect the texture and characteristics of actual batik fabric, so the children's experience of batik-making isn't optimal. The results of this pre-cycle activity are shown in the following graph:

Figure 1. Graph of Pre-Cycle Research Results



From the graph, it can be seen that in the pre-cycle stage, only 15.30% of children showed initiative in trying color combinations and patterns in the jumputan batik activity. Children appeared passive and tended to imitate friends or teacher's instructions rigidly. In this pre-cycle, only 30.70% of children appeared to be able to overcome obstacles independently, such as shifting fabric, spilled dye, or errors in folding or tying the fabric. In this initial stage, only 38.40% of children appeared comfortable and unafraid of making mistakes while batik-making. Most children appeared hesitant, afraid of making mistakes, and simply followed the teacher's instructions. In the indicator that children can demonstrate their ability to explain or tell stories about their work, only 23.00% of children were able to convey ideas from their batik. Therefore, although this pre-cycle activity was quite effective in introducing the basic concept of jumputan and practicing initial skills in a simple way, the researcher decided to continue to cycles I and II using unbleached cloth and textile dyes so that the children's batik-making experience would be more authentic and able to develop creativity more deeply and comprehensively. The first cycle of tie-dye batik activities was carried out on Monday, May 26, 2025. This activity involved 13 students from group A of Dharma Wanita Persatuan Kindergarten Malangsuko. The steps used in this first cycle include planning, implementation, observation, and reflection. First, the researcher and teacher made a plan for the activity by determining the topic and creating an appropriate teaching module. The topic chosen was the colors of my school. Next was the implementation activity. In this activity, children carried out batik activities using the tie-dye technique. The results of the observations are as follows:

Figure 2. Graph of Cycle I Research Results



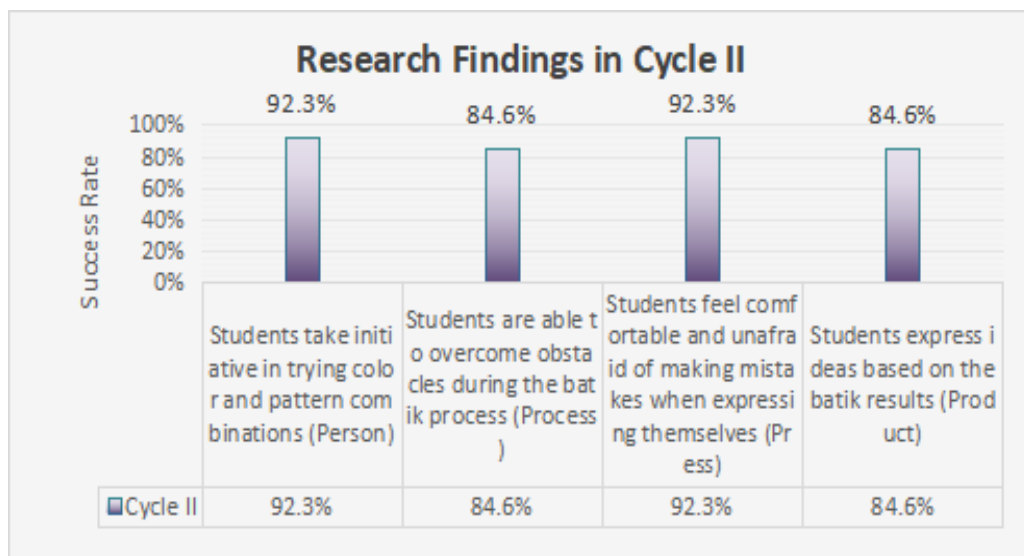
Based on the data in the graph, the Person indicator, or children's initiative in trying color and pattern combinations, reached 61.50%. This indicates that more than half of the children have begun to dare to make their own decisions in choosing colors and jumputan patterns. Although some children still imitate the colors from the teacher's examples, there are early indications of the emergence of divergent thinking, as stated by Guilford (in Nirwana, 2018), namely when children begin to show a variety of choices and the courage to try something different from their surroundings. Forms of concrete behavior that appear in this indicator include: children mix two or three primary colors provided by the teacher to form a new color. Children mix primary dyes and confidently say, "I want to mix yellow and blue." In addition, some children have begun to fold the cloth with their own variations of ikat techniques, although not yet symmetrical. This indicates that children have begun to develop exploratory abilities. The Process indicator, which refers to children's ability to face and overcome technical obstacles during the jumputan batik process, reached 53.80%. Most children still appear to need teacher assistance when the string is too loose, the dye spills, or the cloth does not absorb the color evenly. However, some children have begun to be able to solve small problems independently, such as cleaning up spilled dye or asking for replacement tools. Vygotsky's theory in Hildayani (2017) is very relevant in this context, where the teacher's role as a scaffolding (support) is still dominant in assisting children to overcome challenges, but can begin to be reduced as the child's independence grows. Real behaviors observed include children saying, "Teacher, Reyhan spilled his dye, I'll wipe it with a tissue, okay?" or children asking for more rubber bands because the previous ties were too loose and did not produce a pattern. This shows that the learning process does not only occur visually, but also kinesthetically and reflectively.

In the Press indicator, which refers to children's comfort in expressing themselves, a score of 69.20% indicates that most children feel safe enough to try, although some still show a fear of making mistakes or are reluctant to try new colors. Torrance (in Suratno, 2005) states that a psychologically conducive environment is an important key in fostering children's creativity. Teachers who praise children's efforts without judging whether they are right or wrong are able to create a positive emotional climate, where children feel valued. Several children were seen laughing, discussing with friends, and even expressing their joy while dipping cloth in dye. One child also clapped and said, "My color is so cute!" This indicates increasing confidence and comfort in the process of expressing themselves through art. Meanwhile, in the Product indicator, namely children's ability to express ideas

or meanings from their tie-dye batik creations, a score of 46.10% indicates that this ability is still in its early stages. Some children only mentioned colors or shapes without explaining their meanings. However, some children began to associate motifs with everyday experiences. For example, a child stated that his work resembled a blooming flower because a circular pattern was formed in the center of the fabric and several other circular patterns surrounded it. This demonstrates symbolic development according to Piaget's theory (1951), that at preschool age, children begin to be able to use symbols and language to represent concrete ideas (Hildayani, 2017). The second cycle of research was conducted on Monday, June 2, 2025, involving 13 children. Before the implementation of the jumputan batik activity, the children were invited to watch videos and pictures about how to make batik and various types of batik that are characteristic of the Indonesian nation. Next, the children carried out batik activities using the jumputan technique.

In this second cycle of observations, the researcher used the same steps as the first cycle, including planning, implementation, observation, and reflection. This observation was collaborative between the researcher and the Group A class teacher at Dharma Wanita Persatuan Kindergarten, Malanguko. The table below shows the results of the second cycle of observations:

Figure 3. Graph of Cycle II Research Results



In cycle II, after corrective actions such as providing more color choices, simplifying tools, and providing time for reflection, significant improvements were observed across all indicators. In the Person indicator, achievement increased to 92.30%. Children demonstrated greater confidence in choosing colors, folding techniques, and tying fabric. Some even began creating personal patterns based on their imagination, such as the shape of a bear, a sleeping snake, or a magic ball. This improvement aligns with Gardner's (2011) theory on Multiple Intelligences in his book, *The Theory of Multiple Intelligences*, which states that children have different potentials in various aspects of intelligence, including creativity. Providing opportunities for creativity in fun and open-ended activities is crucial in facilitating the development of their creativity (Pratiwi et al., 2024). Concrete behaviors observed included children selecting colors without direction, creating patterns with spiral-twisted string, and confidently naming their creations. For example, "I made a magic ball, like in the cartoon."

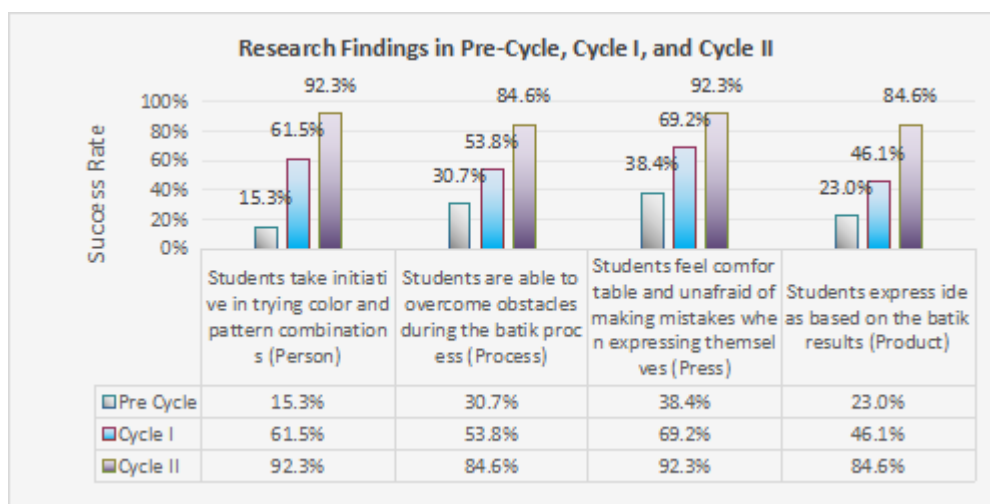
In the Process indicator, children became increasingly skilled at overcoming obstacles. The percentage increased to 84.60%, indicating that most children were able to overcome minor obstacles without direct teacher assistance. Children began to adjust the

strength of the bond, reselect colors if the initial dye was too light, and even help friends who were having difficulty. This improvement demonstrates the importance of providing opportunities for experimentation, supporting children's creative thinking, and providing space for them to explore various ideas. As explained by Runco (2014), creativity can be fostered through in-depth experiences and appropriate guidance, enabling children to overcome obstacles and find creative solutions to challenges (Nuryanti, 2009). Concrete behavior was demonstrated when children said, "My color didn't come out, so I added more," or "You should use two rubber bands so the bond is stronger." This demonstrates more mature collaboration and self-control than in the previous cycle.

In the Press aspect, the increase to 92.30% indicates that almost all children felt comfortable, free, and happy during the tie-dye batik process. The classroom environment transformed into a fun, exploratory space, where children showed each other their work and provided positive feedback. According to Munandar (in Vebianti, 2013), intrinsic motivation is the core of the creative process, and in cycle II, this motivation appears dominant in children. They are no longer afraid of making mistakes and begin to proudly express their color and style preferences. Examples of behaviors include some children singing while working, cheering when patterns are formed, and declaring, "I like all the colors, it's like a party at school!"

In the Product indicator, achievement increased to 84.60%. Children are able to express ideas more clearly, both verbally and through symbolic narratives. They begin to associate the shapes and colors of batik with personal stories or imagination. This demonstrates the development of children's reflective and representational abilities, supporting Eisner's (2002) view that visual art can be a medium for thinking and communication for children. This is because when children display an art product, they will ask questions, be asked questions, and answer questions from others (Hildariya, 2017). Observable behaviors include children saying, "This is called the night sky. I made it because I like looking at the stars," or "I made this for my grandmother because my grandmother likes purple." These expressions show that children are able to use batik as a medium for expressing emotions and ideas.

Figure 4. Graph of Pre-Cycle, Cycle I and Cycle II Research Results



Based on the graph above, it can be said that the learning outcomes of tie-dye batik using the 4P approach indicate that activities based on exploration, reflection, and open expression can significantly improve all aspects of early childhood creativity. The development from pre-cycle to cycle II shows that when children are given space to take initiative, manage challenges, and feel emotionally safe, they are able to produce meaningful

works containing personal ideas. This process not only produces artistic products but also forms a growth mindset, courage to try, and self-confidence that are essential in early childhood education.

CONCLUSION

Based on the results of a three-stage classroom action research study, it can be concluded that the implementation of the 4P approach (Person, Process, Press, Product) of the jumputan batik activity effectively enhances creativity in early childhood. This is demonstrated by a significant increase in the percentage of each creativity indicator. Children demonstrated high initiative in selecting and combining colors and patterns according to their imagination, without relying on teacher examples (Person). Furthermore, children were able to face and overcome challenges in the batik process, such as difficulty tying the fabric or pouring dye (Process). A pleasant and pressure-free learning environment enabled children to feel comfortable expressing themselves without fear of making mistakes (Press), and ultimately, children were able to express their ideas and personal stories about their batik creations both verbally and visually (Product). This improvement demonstrates that the jumputan batik activity not only enriches children's aesthetic experiences but also stimulates creative thinking skills, fosters courageous decision-making, and fosters independence and self-confidence in a gradual and structured manner.

Based on the obstacles that emerged during the research, several issues warrant attention and recommendations for further research. One of the most significant obstacles is the tendency for the colors of the jumputan batik to be too pale, possibly due to insufficient dyeing time or suboptimal dye dosage. Therefore, future researchers are advised to first test the dye intensity or use stronger, child-safe textile dyes. Furthermore, the drying process, which is not completed in one day, is a barrier to the continuity of the activity. It is recommended that future researchers consider using thinner, faster-drying fabrics or arrange the activity time so that the batik process is divided into two days. Another obstacle is that the binding materials used by children are often loose, resulting in less than optimal motif results. To address this, it is important for future researchers to provide binding materials that are easier for children's small hands to control, such as elastic and non-slip rubber bands, and to provide gradual and more intensive guidance on tying techniques. This way, the effectiveness of jumputan batik activities in enhancing children's creativity can be optimized without being hampered by technical constraints.

REFERENCES

- Amini, M. (2014). *Hakikat Anak Usia Dini*. Perkembangan Dan Konsep Dasar Pengembangan Anak Usia Dini, 65. repository.ut.ac.id/4697/1/PAUD4107-M1.pdf
- Dewi, N.S. , Aulina, C. N. (2021) *Penerapan Kegiatan Bajumput Mambatik Jumputan) Dalam Meningkatkan Keterampilan Motorik Halus Anak Usia 5-6 Tahun*. Jurnal pendidikan PAUD 2685-0281
- Hildayani, R. (2017). *Psikologi Perkembangan Anak*. Banten: Uniersitas Terbuka.
- Kemendikbudristek. (2022). *Panduan Implementasi Kurikulum Merdeka pada PAUD*.
- Kumparan.com. (2023). Pengertian Batik, Karakteristik dan Jenisnya. Diakses pada 7 Mei 2025 dari <https://kumparan.com/pengertian-dan-istilah/pengertian-batik-karakteristik-dan-jenisnya-21ISdhUbPoC/full>
- Maulana & Mayar. (2019). *Pengembangkan Kreativitas Anak Usia Dini Di Era Revolusi 4.0*. Jurnal Pendidikan Tambusai, 3(5), 1141–1149.

- Milagsita, Anindya. 2024. "Apa Pengertian Batik? Ini Sejarah, Jenis, Motif hingga Maknanya" diakses pada 7 Mei 2025 dari <https://www.detik.com/jateng/budaya/d-7543925/apa-pengertian-batik-ini-sejarah-jenis-motif-hingga-maknanya>
- Miranda, D. (2016). *Upaya Guru Dalam Mengembangkan Kreativitas Anak Usia Dini di Kota Pontianak*. Jurnal Pembelajaran Prospektif 1, 1(1), 60–67. <http://jurnal.untan.ac.id/index.php/lp3m>
- Munandar, U. (2009). *Pengembangan Kreativitas Anak Berbakat*. Jakarta: Rineka Cipta.
- Nirwana., Oktavia, E. (2018). *Buku Ajar Pengembangan Kreativitas Untuk PAUD dan SD*.
- Nuryanti, B. L. (2009). *Model pembelajaran e learning melalui homepage sebagai media pembelajaran sehingga diharapkan dapat meningkatkan minat dan kreativitas siswa*. Jurnal ABMAS (Media Komunikasi dan Informasi Pengabdian Kepada Masyarakat), 9, 1-7
- Pratiwi, A. M., Muslih, H. Y., & Loita, A. (2024). *Teknik-Teknik Melukis untuk Anak Usia Dini*. JURNAL PAUD AGAPEDIA, 8(1), 130-140.
- Priyanto, Aris. (2014). *Pengembangan Kreativitas Pada Anak Usia Dini Melalui Aktivitas Bermain*. Jurnal Ilmiah Guru "COPE", No. 02/Tahun XVIII/November 2014
- Suratno. (2005). *Pengembangan kreativitas Anak Usia Dini*. Jakarta: Departemen Pendidikan Nasional
- Trianto A. (2010). *Mendesain Model Pembelajaran Inovatif-Progresif*. PT Kenca Media Grup
- Vebianti, I. N. (2013). *Meningkatkan Kreativitas Anak Melalui Permainan Konstruktif Pada Siswa Kelompok B2 di RA Sunan Pandanaran*. Yogyakarta: Universitas Negeri Yogyakarta.

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