



Improving Basic Color Recognition Skills Through Drawing Activities in Playgroups at Sahabat Galaxy Kindergarten Bekasi

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Abstract

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This classroom action research was motivated by the low ability of children in the Sahabat Galaksi Bekasi kindergarten playgroup to recognize basic colors, distinguish mixed colors, and understand the results of mixing primary colors. This study aimed to determine the improvement in the ability of 3-4-year-old children to recognize basic colors through drawing activities. The method used was Kemmis and McTaggart's classroom action research model, which was carried out in two cycles. The research subjects consisted of 10 children, namely 3 boys and 7 girls. Data were collected through observation, interviews, and documentation, then analyzed descriptively and quantitatively with an emphasis on comparing the average scores for each cycle. The results showed an increase in children's basic color recognition skills, from 33% in the pre-cycle to 73% in Cycle I and 86% in Cycle II. These findings prove that drawing activities are effective in improving basic color recognition skills in early childhood.

Keywords: Color Recognition Ability, Drawing Activities, Learning Media.

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INTRODUCTION

One of the essential cognitive aspects to be introduced from an early age is the understanding of color concepts. Colors are not only visual elements but also conceptual tools that help children distinguish, categorize, and make sense of their surroundings. According to the National Association for the Education of Young Children (NAEYC), the age of 0–8 years represents a golden period for children's cognitive development, and proper stimulation during this stage is crucial for their future learning ability (NAEYC, 2020).

Introducing colors in early childhood is not merely about memorizing names but also about enabling children to connect colors with concrete daily experiences. Primary colors such as red, blue, and yellow serve as the foundation for children's understanding of their environment. In addition, color exploration plays a role in enhancing creativity, memory, and more complex visual abilities (Papalia & Martorell, 2021; Sung et al., 2023).

In practice, however, color learning in early childhood education institutions often remains passive, such as through memorization or direct instruction. This limits children's active involvement in the learning process. In fact, early childhood education emphasizes active, sensory, and manipulative learning suited to the characteristics of child development (Maiyida & Suryana, 2022; Dina et al., 2023).

The limitations of passive methods lead to low levels of children's ability to recognize and apply colors. Many children struggle to differentiate primary colors, understand color mixing, or apply color concepts in daily life. This shows a gap between the theory of active learning and its application in practice (Ai Dina et al., 2024).

Several previous studies highlight that drawing is one of the most effective strategies for introducing colors. Through drawing, children not only practice fine motor skills but also gain opportunities to explore, experiment, and discover relationships among colors directly. This way, children are actively engaged in meaningful and enjoyable learning (Fitriani, 2020; Chen et al., 2022).

Fitriani (2020) and Sari (2021) found that children who engaged in drawing activities showed significant improvement in recognizing basic colors compared to those who only received verbal explanations. Similar findings were reported by Khilma et al. (2023), who emphasized that color mixing activities during drawing enhanced both creativity and children's understanding of color concepts.

Preliminary observations at TK Sahabat Galaksi Bekasi further confirmed the urgency of such strategies. Of the 10 children observed, only 3 were able to recognize basic colors well, while 7 still experienced difficulties. This aligns with the findings of Zahrah & Winarti (2024), who revealed that color mixing experiments could stimulate scientific process skills while improving children's color recognition.

This study therefore focuses on implementing drawing activities as a strategy to teach colors to early childhood learners. By drawing, children connect visual experiences with motor activity, thus deepening their conceptual understanding. This strategy is considered highly relevant as it matches children's characteristics of learning through play, exploration, and hands-on experience (Fitria et al., 2024).

The novelty of this research lies in several aspects. First, the research subjects are playgroup children aged 3–4 years at TK Sahabat Galaksi Bekasi, which differs from earlier studies that mainly involved older children or other learning activities. Second, the research is conducted during the 2024/2025 academic year, bringing different social contexts and educational policies into play. Third, the study takes place in Bekasi, whose unique school environment and cultural context may influence the outcomes (Khilma et al., 2023; Dina et al., 2023).

Thus, this study is expected to contribute to the development of color learning strategies in early childhood education. Moreover, the findings are expected to serve as a reference for educators in designing active, enjoyable, and developmentally appropriate learning activities. Implementing drawing activities is believed to bridge the gap between theory and practice while supporting children's optimal cognitive development (Ai Dina et al., 2024; Sung et al., 2023).

METHOD

This study employed a Classroom Action Research (CAR) approach using the spiral model of Kemmis and McTaggart. This model was chosen because it is suitable for improving the quality of learning through recurring cycles consisting of planning, action, observation, and reflection. The selection of this method was based on the need to improve classroom learning in a practical way while allowing the researcher to conduct continuous evaluation of the outcomes achieved (Khilma et al., 2023; Ai Dina et al., 2024).

The purpose of this study was to gradually improve children's ability to recognize basic colors through repeated cycles. The research subjects were playgroup children aged 3–4 years at TK Sahabat Galaksi Bekasi. The choice of this age group was based on the importance of early cognitive development as a foundation for understanding color concepts (Maiyida & Suryana, 2022; Fitria et al., 2024).

The research instruments included observation sheets to record children's engagement in drawing activities and their ability to recognize basic colors, a color

recognition test in the form of simple tasks requiring children to identify and name colors on given objects, and documentation in the form of photos and field notes to support observational data. These instruments were validated by both the teacher and the collaborator researcher to ensure their suitability for early childhood characteristics (Dina et al., 2023).

Data collection techniques included direct observation during learning activities, recording children's scores in color recognition, and reflective notes from teachers and researchers after each cycle. Quantitative data were obtained from children's achievement percentages, while qualitative data were gathered from field notes and documentation. Data analysis used descriptive quantitative and qualitative approaches. Quantitative analysis involved calculating the mean scores of color recognition across cycles, while qualitative analysis examined behavioral changes and children's responses during drawing activities (Lily Yuntina, 2024; Zahrah & Winarti, 2024).

The study was conducted in two cycles, each consisting of four meetings. The first cycle aimed to examine the initial effectiveness of drawing activities in improving color recognition, while the second cycle sought to reinforce results and ensure consistent improvement. The researcher's role was participatory, directly involved in planning, implementing drawing activities, and conducting reflections. The classroom teacher acted as a collaborator to ensure activities were carried out as planned and to assist with data collection (Chen et al., 2022; Sung et al., 2023).

RESULT AND DISCUSSION

Learning activities conducted at TK Sahabat Galaksi Bekasi showed positive and gradual development in improving early childhood's ability to recognize basic colors. In this context, the researcher established a success criterion, where the action is considered successful if at least 75% of children achieve the expected outcome. According to Arikunto, in the learning process an indicator is considered achieved if students' scores reach or exceed the minimum mastery criteria (for example, ≥ 75). Conversely, if the score falls below this threshold, the indicator is declared incomplete.

In the pre-cycle stage, the results showed that the average score of children's ability to recognize basic colors only reached 33%, which falls into the low category. This indicates that most children were still unable to differentiate and name colors correctly. Based on initial observations through learning activities using the Daily Lesson Plan (RPPH) with the theme "Professions" and the sub-theme "Types of Jobs," it was found that children still had difficulties identifying red, blue, yellow, and green in the presented media. This condition reflects that previous stimulation had not been optimal, highlighting the need for a more engaging, contextual, and child-centered learning strategy. The pre-cycle achievement confirmed that children were still at the early stage of cognitive development in color recognition. Therefore, reflection results encouraged the researcher to design the action plan for Cycle I by emphasizing more varied drawing activities, incorporating color media related to daily life, and providing opportunities for exploration, with the expectation of gradually improving their abilities.

In Cycle I, after revising the learning strategies through a more structured approach, children's ability to recognize basic colors showed a significant improvement, with the average score reaching 73%, categorized as "developing as expected." The core learning activities using RPPH with the theme "Professions" were conducted continuously for several days with sub-themes "Types of Jobs," "Work Tools," and "Young Farmers." In each sub-theme, teachers integrated color recognition through pictures, teaching aids, and drawing activities related to professions, such as coloring a police uniform blue, a farmer's hat green, or a construction worker's helmet yellow. Observation results indicated that children began to identify and name basic colors according to the presented context. Learning achievement at this stage indicated improved cognitive understanding as well as

the development of creativity through drawing activities. Reflection from Cycle I emphasized that the strategy was effective, although further stimulation was still needed for all children to reach mastery, for instance by expanding color exploration through role play, group games, or more varied creative projects.

In Cycle II, observations showed higher improvement compared to the previous cycle, with the average score reaching 86%, exceeding the minimum mastery criterion (KKM) of 75% at the class level. This achievement demonstrated that the refined learning strategies were increasingly effective in enhancing children’s ability to recognize basic colors. The core learning activities used RPPH with the theme “The Universe,” divided into several sub-themes: “The Moon and Stars,” “The Warmth of the Sun,” and “Cardinal Directions.” Through drawing and coloring activities connected to natural phenomena, children were guided to recognize basic colors in real-life contexts, such as coloring the sun yellow, the sky blue, or stars with bright color combinations. Observations indicated that children were able to identify and name basic colors accurately and even began experimenting creatively with color mixing. Reflection results confirmed that the classical success criterion had been achieved since more than 75% of children reached the learning indicators according to KKM. Additional stimulation was provided through enriched exploration-based activities, such as educational games themed around nature, simple light-and-color experiments, and collaborative mural coloring projects, further enhancing children’s cognitive development, fine motor skills, and creativity.

Table 1. Research Achievement Results

Research Stage	Average Score (SR)	Value (%)	Category
Pre-cycle	33	Low	
Cycle I	73	Medium	
Cycle II	86	High	

The table above shows that based on the average scores obtained at each stage, there was a consistent increase in children’s ability to recognize basic colors. At the pre-cycle stage, the average score was only 33%, indicating that children’s ability was still low. After the intervention through drawing activities in Cycle I, the score increased to 73%, showing significant progress.

This improvement continued in Cycle II, with the average score reaching 86%, reflecting the success of the implemented learning strategies. These data confirmed that the learning approach through drawing activities effectively fostered children’s competence gradually, systematically, and successfully.

The findings of this study indicate that learning through drawing activities can gradually improve early childhood’s ability to recognize basic colors. At the pre-cycle stage, the children’s average ability only reached 33%, which confirms that the initial stimulation was not yet optimal. This is consistent with NAEYC, which emphasizes that ages 0–8 represent a golden period for cognitive development, requiring active learning methods based on real experiences to help children better recognize color concepts. This study reinforces earlier observations at TK Sahabat Galaksi Bekasi, where monotonous and instructive strategies made it difficult for children to differentiate basic colors, thus highlighting the need for a more interactive and sensory approach (Sari, 2021).

The significant improvement in Cycle I, with an average of 73%, demonstrates that children’s involvement in drawing activities can activate cognitive functions while also fostering creativity. This finding supports the research of Fitriani (2020) and Maiyida & Suryana (2022), which showed that drawing activities enhance children’s visual ability in color recognition. In this study, the integration of color recognition into the theme “Professions” allowed children to learn contextually. These findings are also in line with

Zahrah & Winarti (2024), who emphasized the importance of theme-based learning in connecting abstract knowledge to everyday experiences, making it easier for children to understand color concepts.

In Cycle II, the study results revealed an average achievement of 86%, which means the children had reached the minimum mastery criteria ($KKM \geq 75$). This success confirms that drawing activities with the theme "The Universe" enriched children's learning experiences through real-life contexts, such as coloring the sun yellow or the sky blue. These findings are consistent with constructivist theory, which argues that children build knowledge through direct experience (Chen et al., 2022). In addition, the results are supported by Khilma et al. (2023), who proved that activity-based exploratory methods effectively improve early childhood cognitive abilities.

The effectiveness of drawing strategies was also reflected in behavioral changes, as children began experimenting with color combinations. This indicates the development of conceptual thinking as well as creativity. This study aligns with Sung et al. (2023), who stressed the importance of creative stimulation in building children's imagination. Furthermore, the involvement of children in exploring colors based on their daily experiences reinforces the idea that concrete, sensorimotor learning is more effective than passive memorization (Ai Dina et al., 2024).

Overall, this discussion confirms that drawing activities are an effective learning strategy to improve early childhood's ability to recognize basic colors. The improvement from the pre-cycle to Cycle II illustrates a gradual, consistent, and developmentally appropriate learning process. The findings of this study also complement previous research by presenting a new context, namely its application at TK Sahabat Galaksi Bekasi, which has unique socio-cultural characteristics. Practically, these results provide recommendations for early childhood educators to enrich their teaching methods with varied, contextual, and exploratory drawing activities, enabling children to develop their cognitive abilities, fine motor skills, and creativity simultaneously (Fitria et al., 2024).

CONCLUSION

The conclusion of this study shows that drawing activities can significantly enhance early childhood's ability to recognize basic colors. Through a learning process that is active, enjoyable, and developmentally appropriate, children are better able to identify and name basic colors. In addition, drawing activities have a positive impact on creativity, fine motor skills, and children's engagement in the learning process. Therefore, drawing-based learning strategies can serve as an effective alternative for early childhood educators to gradually and sustainably improve children's cognitive competencies.

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