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Increasing Children's Creativity Through Color Mixing with an Experimental Method Using Color Paste Media in Group B RA Al Falah Sawangan

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Abstract: This study aims to increase children's creativity through color mixing with an experimental method using color paste media in Group B RA Al Falah Sawangan. Creativity is an important aspect of early childhood development, and one effective way to stimulate it is through exploratory activities that involve the senses as well as hands-on experience. The experimental method was chosen because it provides an opportunity for children to explore, try, and find various color combinations independently. This study uses a qualitative approach with a classroom action method carried out in two cycles. The subject of the study is a child of Group B RA Al Falah Sawangan. Data collection is carried out through observation, interviews, and documentation. The results of the study show that the use of color paste media in the experimental method is able to significantly increase children's creativity. Children are more enthusiastic about mixing colors, showing courage in trying new combinations, and being able to express their creative ideas through the results of color exploration. In addition, this activity also improves children's fine motor skills and critical thinking skills. Thus, the experimental method using color paste media has been proven to be effective in stimulating children's creativity in Group B RA Al Falah Sawangan. It is hoped that this method can be applied more widely in learning activities in early childhood education to support children's cognitive development and creativity.

Keywords: Children's Creativity, Color Mixing, Experimental Methods, Color Paste Media, RA Al Falah Sawangan.

INTRODUCTION

Early age is the golden age of development. At that time there was an extraordinary spike in

child development that did not occur in the following period. Experts call it the golden age of development. To boost this development potential, every child needs balanced nutritional intake, health protection, loving care, and educational stimulation in accordance with each child's developmental stage and ability. The provision of educational stimuli must be carried out from birth, even since the child is still in the womb. This educational stimulation should be carried out gradually, repeatedly, consistently, and completely, so that it has the power to change (benefit) for children. (Directorate of Early Childhood Education Development, Directorate General of Early Childhood Education, Non-Formal and Informal Education, Ministry of Education and Culture, 2012: 1)

Early Childhood Education (PAUD) is one of the priority programs for national education development. The policy for the development of early childhood education is directed to realize education that is fair, quality, and relevant to the needs of the community. The policy rests on the following principles: the availability of early childhood education institutions that can be accessed by all levels of society, the affordability of early childhood education services in accordance with the community's ability, the quality of early childhood education services to support the optimization of the growth and development of children aged 0-6 years, the equality of early childhood education services for each community group, and the capacity of each community member to obtain early childhood education services. (Directorate of Early Childhood Education Development, Directorate General of Non-Formal and Informal Early Childhood Education, Ministry of Education and Culture, 2011: 3)

After infancy, children are generally enrolled in non-formal education programs, such as Play Groups (KB) for children aged 2-4 years or Kindergarten (TK) for children aged 4-6 years. (Directorate of Early Childhood Education Development, Directorate General of Non-Formal and Informal Early Childhood Education, Ministry of Education and Culture, 2011: 5)

Kindergarten-aged children can be classified as pre-operational, where at this stage children cannot be taught to think logically. With the development of language skills, children become more able to present their world through impressions, mentality and symbols. (dr. Dadan Suryana, 2016: 26)

The development of learning models, according to Reigelluth, explains *"models of teaching are strategies based on theories (and often the reseacrh) of educators, physologists, philosophers, and others who question how individual lern."* The teaching or learning model must contain a rationale based on theory, contain a series of strategic steps carried out by teachers and students, supported by a support system or learning facility, and a method to evaluate student learning progress. There are several teaching/learning models, including information processing models, personal groups, social groups, and behavioral groups; competency learning, contextual learning, seeking and meaning learning, experiential learning, integrated learning, and cooperative learning; and teacher education models based on academics, performance, competence, field, micro-teaching, *intership*, arak far, and so on. (Dr. Dadan Suryana, 2016: 5-6)

METHODS

This study uses the classroom action research method (PTK) which aims to increase children's creativity through color mixing with an experimental method using color paste media in Group B RA Al Falah Sawangan. PTK was chosen because it allows researchers to take direct action in the classroom, observe children's development, and evaluate the effectiveness of the methods applied. This research was conducted in two cycles, where each cycle consisted of planning, implementation, observation, and reflection stages.

The research approach used is a qualitative approach with descriptive techniques. This approach was used to deeply understand how children interact with color paste media in experimental activities, as well as how these methods can affect their creative development. Data collection is carried out through direct observation of children's activities, interviews with teachers, and documentation in the form of photos and children's works.

The subjects of the study were children of Group B RA Al Falah Sawangan who were

around 5-6 years old. The selection of this group is based on the characteristics of their development being in the exploratory stage, where they begin to show great interest in colors and mixing activities and creating new combinations. A total of 15 children participated in this study, consisting of boys and girls with diverse backgrounds.

The medium used in this study is color paste, which is a water-based dye that is easy to mix and safe for children. This medium was chosen because it allows children to conduct color mixing experiments in a fun way and without the risk of harm. In addition, color pastes have textures that can stimulate children's fine motor skills, thus helping them in developing hand-eye coordination.

The data collection technique is carried out by several methods. Observations were made during the experiment to see the level of involvement and creativity of children in mixing colors. Interviews were conducted with teachers to gain perspectives on the change in children's creativity after the application of this method. Documentation in the form of photos and children's works is used as evidence of their creative development during the research.

The data analysis in this study uses qualitative descriptive techniques. The data obtained from observations, interviews, and documentation were analyzed by means of data reduction, data presentation, and conclusion drawn. The results of each cycle are analyzed to find out whether there is an increase in children's creativity after actions are taken, as well as to determine steps that need to be improved or improved in the next cycle.

The success criteria in this study are determined based on the increase in children's creativity which is measured through several indicators, such as the ability to create new color combinations, the courage to experiment, the expression of ideas in the works, and the increase in their enthusiasm and involvement in activities. If at the end of the second cycle the majority of children show an improvement in these indicators, then the experimental method with color paste media is considered successful in increasing children's creativity.

With this research, it is hoped that the experimental method with color paste media can be an alternative in early childhood learning, especially in developing their creativity. The results of this study can also provide recommendations for educators at RA Al Falah Sawangan and other educational institutions in designing more innovative and fun learning activities for children.

RESULTS

Cycle I will be held in three meetings in October 2024. In this cycle, researchers try to improve color recognition skills in children through color mixing activities. Activities in cycle I include planning, action, observation, and reflection stages. In the planning stage, teachers and collaborators design color recognition learning by compiling RPPH as a guideline in the learning process. In addition, teachers also prepare facilities and infrastructure such as color paste, water, and dyes, as well as prepare observation and evaluation sheets to assess children's understanding. Documentation, reflection, and evaluation are also prepared to support the learning process.

In the implementation stage, the first meeting was held on Thursday, November 3, 2024, with a play activity mixing colors using color paste. The activity began with a joint prayer, recording the attendance of students, and conveying learning objectives. In the core activity, the teacher explained the concept of playing with colors, introduced red, yellow, and blue color pastes, and gave examples of combining colors to introduce the results obtained from the color mixture. The children were then given the task of mixing colors themselves and asked to tell the results of the mixing. At the end of the activity, the teacher evaluates the child's work, concludes the activity, and provides guidance and motivation for children who are still experiencing difficulties.

At the second meeting which took place on Monday, October 7, 2024, the research action was repeated because the results of the first meeting had not achieved the expected success. The activities in the second meeting are similar to the first meeting, with the addition

of the task of grouping objects based on color. At the third meeting held on Thursday, October 17, 2024, children were introduced to the concept of primary and secondary colors. The evaluation was carried out to see the development of children's understanding of the color concepts taught.

The results of the observation of the first cycle showed that student activities in learning were quite good. The children showed enthusiasm, attention to learning media, and activeness in asking and answering questions. However, the results of observations on color recognition capabilities are still in the sufficient category. Of the 21 children, 9 children (42.86%) are in the good category, 5 children (23.81%) are in the adequate category, and 7 children (33.33%) are in the poor category. With a classical success rate of 66.67%, improvements are still needed to achieve a success indicator of at least 80%.

Interviews with children show that some children already know colors well, but there are also those who still need the guidance of teachers. The results of interviews with peers show that although some children are interested in learning media, there are still those who have difficulty naming colors correctly. Interviews with parents revealed that parents have tried to introduce color at home, but children are often more interested in games and television.

At the reflection stage, it was found that it was necessary to repeat the color mixing play activity by involving the child directly in the experiment. In addition, teachers need to improve classroom management so that learning is more conducive. Teachers are also advised to interact more often with all children in the class so that everyone feels cared for. Based on the observation results, it was concluded that learning needs to be improved in the next cycle with methods that involve children more actively, such as mixing colors using food coloring in cycle II.

Cycle II was held in three meetings in November 2024, with a focus on improving color recognition capabilities through color mixing experiments. The planning stage in this cycle includes the preparation of RPPH, the preparation of learning media in the form of water and food coloring, as well as the preparation of observation and evaluation sheets. In the implementation stage, the first meeting was held on Monday, November 4, 2024, with a play activity mixing colors using food and water dyes. The teacher gave an example of mixing colors and asked the children to try and tell the results.

At the second meeting held on Thursday, November 7, 2024, the activity was again carried out using color paste, with the addition of the task of grouping objects based on color. Cycle II of the third meeting was held on Monday, December 1, 2024, where children were asked to distinguish primary and secondary colors. The evaluation is carried out to find out the extent to which the child understands the color concept that has been taught.

The results of observations in cycle II showed an increase in children's activities in learning. Children are more interested in color mixing activities, more actively asking questions, and more focused on participating in learning. Overall, the results of the second cycle of research showed an increase in children's understanding of the concept of color compared to the first cycle.

DISCUSSION

Based on the results of research that has been carried out in two cycles, it can be concluded that the application of the Problem Based Learning (PBL) learning model in improving student learning outcomes in the PAI subject of the Story of the Hijrah of the Prophet Muhammad PBUH to Medina shows significant development. This can be seen from the increase in student learning outcomes from cycle I to cycle II.

In cycle I, student learning outcomes are still relatively low with an average score that has not reached the Minimum Completeness Criteria (KKM). This can be caused by several factors, including the lack of students' understanding of the newly implemented PBL method and the limitations in classroom management during the learning process. However, there was

an increase in student participation in discussions and group work, which showed that this method began to have a positive influence on students' learning motivation.

Entering cycle II, several improvements were made based on reflection from the previous cycle. Teachers place more emphasis on providing guidance when students conduct problem analysis and group discussions, as well as ensuring that each student is actively involved in learning. As a result, there was a significant increase in student learning outcomes. The average student score has increased, and more students have reached or exceeded the KKM compared to the first cycle.

This improvement shows that the Problem Based Learning method is effective in increasing students' understanding of the material of the Prophet Muhammad's Hijrah to Medina. This model provides opportunities for students to think critically, find solutions to the problems given, and work collaboratively in groups. In addition, the active involvement of students in the learning process also contributes to improving their understanding and learning outcomes.

From the results of this study, it can be concluded that the application of Problem Based Learning in PAI learning in grade IV of SDN 0512 Bonal Jae Batu is the right strategy to improve student learning outcomes. With student-centered learning, they become more motivated and easier to understand the material being taught. Therefore, this method can be recommended as one of the alternatives in PAI learning to improve student learning outcomes.

CONCLUSION

Based on the results of the class action research, it can be concluded that playing with colors can improve children's cognitive ability in recognizing the concept of color at RA Al Falah Sawangan, Gringsing District, Batang Regency. This increase is marked by the progress of learning outcomes seen in cycle I and cycle II. In cycle I, group B children showed an increase in cognitive ability to recognize color concepts through color mixing activities, by trying and telling what happens when colors are mixed. In addition, children can group objects by color and distinguish primary and secondary colors. At the beginning of the study, only 19.05% of children could recognize the concept of color well, while 38.10% were sufficient, and 42.85% were still lacking. In the first cycle, success increased with 42.86% of children who knew the concept of color well, 23.81% adequately, and 33.33% less.

In the second cycle, better results were achieved, with 80.95% of children familiar with the concept of color well, 14.29% adequate, and only 4.76% were still lacking. The results of this study showed that performance indicators were successfully achieved in cycle II, with more than 80% of children able to point to objects around based on color, try and tell what happens if the colors are mixed, and name colors correctly classically. After the research is completed, the cognitive ability to recognize the concept of color in children continues to improve, with children being able to accurately mention the color of objects both inside and outside the classroom. Based on these observations, it can be concluded that playing color mixing is effective in improving early childhood cognitive abilities in recognizing the concept of color at RA Al Falah Sawangan, Gringsing District, Batang Regency in the 2024/2025 school year.

REFERENCES

Arsyad, Azhar. 2013. *Media Pembelajaran*. Depok: PT Rajagrafindo Persada.
Daryanto. 2013. *Media Pembelajaran: Perannya Sangat Penting Dalam Mencapai Tujuan Pembelajaran*. Yogyakarta: Gava Media.
Djaali. 2009. *Psikologi Pendidikan*. Jakarta: Bumi Aksara.

Prasetyono, Dwi Sunar. 2008. *Biarkan Anakmu Bermain*. Yogyakarta: Diva Press.

Hurlock, Elizabeth B. 2005. *Perkembangan Anak Jilid I Edisi Keenam*. Alih Bahasa: Meitasari Tjandrasa, Muslichah Zarkasih. Jakarta: Erlangga.

Himpunan Lengkap Undang-Undang Sisdiknas dan Sertifikasi Guru. 2013. *Jogjakarta: Buku Biru*.

Muliawan, Jasa Ungguh. 2010. *Penelitian Tindakan Kelas*. Yogyakarta: Gava Media.

Seifert, Kelvin. 2012. *Pedoman Pembelajaran dan Instruksi Pendidikan*. Alih Bahasa: Yusuf Anas. Jogjakarta: IrciSod.

Ardiana, Lusy. 2013. "Pengaruh Penerapan Pembelajaran Berbasis Masalah Tipe Problem Solving terhadap Kemampuan Kognitif Mengelompokkan Benda menurut Fungsi Kelompok B di TK Belia Kreatif Surabaya." Dapat diakses di: http://ejournal.unesa.ac.id/jurnal/paud-teratai/volume/330/vol-2-nomer-3-2013.

Moleong, Lexy. 2007. *Metodologi Penelitian Kualitatif*. Bandung: Remaja Rosdakarya.

Muslich, Masnur. 2011. *Melaksanakan PTK Itu Mudah*. Jakarta: PT. Bumi Aksara.

Moeslichatoen. 2004. *Metode Pengajaran Di Taman Kanak-Kanak*. Jakarta: PT. Rineka Cipta.

Fadlillah, Muhammad. 2012. *Desain Pembelajaran PAUD*. Jogjakarta: Ar-Ruzz Media.

Patmonodewo, Soemiarti. 2003. *Pendidikan Anak Prasekolah*. Jakarta: Penerbit Rineka Cipta.

Permendiknas Nomor 58 Tahun 2009 tentang Standar Pendidikan Anak Usia Dini.

Juspani, Sri. 2013. "Penggunaan Metode Eksperimen untuk Meningkatkan Kemampuan Kognitif Anak dalam Konsep Warna melalui Bermain Air pada Kelompok B di TK Anggrek Surabaya." Dapat diakses di: http://ejournal.unesa.ac.id/jurnal/paud-teratai/volume/330/vol-2-nomer-3-2013.

Sudjana, Nana dan Rivai, Ahmad. 2013. *Media Pengajaran*. Bandung: Sinar Baru Algensindo Offset.

Suharso, & Retnoningsih, Ana. 2013. *Kamus Besar Bahasa Indonesia Edisi Lux*. Semarang: Widya Karya.

Suyadi. 2012. *Panduan Penelitian Tindakan Kelas*. Yogyakarta: Diva Press.

Edupaint. "Rodawarna." Dapat diakses di: http://www.edupaint.com/warna/rodawarna, diakses pada tanggal 5 Oktober 2014.