TEACHERS' INSTRUCTIONAL STRATEGIES IN DEVELOPING EARLY CHILDHOOD CREATIVITY; INSIGHTS FROM GRADATION COLOURING ACTIVITIES

Firda Indana Zulfa 1*; Moch. Maulana Trianggono 1; Firman Ashadi 1
1 Universitas PGRI Argopuro Jember, East Java, Indonesia
* Correspondence Author: firdaindanazulfa8@gmail.com

Received: May 2025	Accepted: September 2025	Published: September 2025			
DOI: https://doi.org/10.33650.pjp.v12i1.11317					

Abstract :

Teachers play a central role in designing instructional strategies that stimulate children's creativity through engaging and developmentally appropriate activities. One such pedagogical approach is the use of gradation colouring, which not only introduces children to artistic techniques but also enhances cognitive flexibility, imagination, and aesthetic sensitivity. This study therefore aims to investigate teachers' instructional strategies in fostering children's creativity through gradation colouring activities. Using a qualitative case study design, data were collected through classroom observations, in-depth interviews with teachers, and supporting documentation. The data were analyzed using Miles and Huberman's which involves data reduction, data display, and conclusion. The findings reveal that teachers employed various strategies, such as scaffolding techniques, direct and visual approach, motivation through fun activities, giving freedom to experiment, and providing positive and constructive feedback. Thus, the instructional strategies implemented by teachers through color gradation activities have a significant positive impact on the development of early childhood creativity. Therefore, color gradation activities are not only an art technique but also an effective approach to support the holistic creative development of children.

Keywords: Instructional Strategies; Creativity Development; Gradation Colouring.

Abstrak :

Guru memegang peran sentral dalam merancang strategi pembelajaran yang mampu menstimulasi kreativitas anak melalui aktivitas yang menarik serta sesuai dengan tahap perkembangan mereka. Salah satu pendekatan pedagogis yang digunakan adalah kegiatan gradasi warna, yang tidak hanya memperkenalkan anak pada teknik seni, tetapi juga meningkatkan fleksibilitas kognitif, imajinasi, dan sensitivitas estetika. Oleh karena itu, penelitian ini bertujuan untuk mengkaji strategi pembelajaran guru dalam menumbuhkan kreativitas anak melalui aktivitas gradasi warna. Dengan menggunakan desain penelitian kualitatif studi kasus, data dikumpulkan melalui observasi kelas, wawancara mendalam dengan guru, serta dokumentasi pendukung. Analisis data dilakukan dengan menggunakan model Miles dan Huberman yang mencakup reduksi data, penyajian data, serta penarikan kesimpulan. Temuan penelitian menunjukkan bahwa para guru menerapkan berbagai strategi seperti teknik scaffolding, pendekatan langsung dan visual, motivasi melalui aktivitas yang menyenangkan, memberikan kebebasan untuk bereksperimen, serta memberikan umpan balik positif dan konstruktif. Dengan demikian, strategi pembelajaran yang diterapkan oleh guru melalui kegiatan gradasi warna memiliki dampak positif yang signifikan dalam mengembangkan kreativitas anak usia dini. Oleh karena itu, kegiatan gradasi warna bukan hanya sebuah teknik seni, tetapi juga pendekatan yang efektif untuk mendukung perkembangan kreatif anak secara holistik.

Kata Kunci : Strategi Pembelajaran; Pengembangan Kreativitas; Gradasi Warna.

ISSN: 2354-7960 (p) 2528-5793 (e) Vol. 12, No. 1 (2025), pp. 110-126

INTRODUCTION

The effort to foster creativity in early childhood is a crucial aspect of education, as creativity plays a significant role in shaping ways of thinking, problem-solving abilities, and broader self-expression (Fasko, 2001; Katz-Buonincontro & Anderson, 2020). Social facts indicate that children in their golden age of development require proper stimulation so that their creative potential is not hindered by monotonous learning patterns (Hayati et al., 2023; Lesiak et al., 2024). In this context, gradation colouring activities emerge as a relevant strategy, since through such activities children not only learn to differentiate and combine colours but also develop imagination, cognitive flexibility, and the courage to experiment (Fadhilla et al., 2021; Jost et al., 2024). Therefore, the gradation colouring strategy can be considered an effective pedagogical alternative to enrich children's learning experiences (Sari, Dewi, 2019; Ubaidillah et al., 2023).

Furthermore, gradation colouring activities also carry social and emotional dimensions that support the holistic development of children's creativity (Nisak et al., 2024). Children who are accustomed to exploring colours tend to be more confident in expressing their ideas and demonstrate persistence when facing challenges in the learning process (Aziz et al., 2021; Mundiri et al., 2021). Teachers play a pivotal role in accompanying children through scaffolding, providing step-by-step demonstrations, and giving constructive feedback to motivate them to keep trying (Rozi & Kamalia, 2023; Tomlinson et al., 2003). These social facts highlight that the gradation colouring strategy is not merely an artistic activity but also an approach capable of shaping children's creative character (Haryanti et al., 2022). Therefore, the implementation of this strategy needs to be reinforced in early childhood education practices to produce generations that are imaginative, innovative, and adaptive to the dynamics of change.

Previous studies have shown that the development of creativity in early childhood can be fostered through various instructional strategies that emphasize enjoyable, contextual, and challenging learning experiences. For example, research by Anindya et al. (2019) highlighted the importance of art-based approaches in stimulating children's imagination, while Yuliani (2020) found that colouring activities can enhance children's divergent thinking skills. International studies, such as Craft et al. (2013), also emphasized the teacher's role in providing space for exploration through art activities. In addition, Santrock (1987) stated that activities involving colours are able to stimulate children's cognitive, affective, and psychomotor aspects (Imron et al., 2025). Other studies, including those by Astuti (2021), Lestari (2022), and Pratiwi (2023), demonstrated the effectiveness of visual art-based learning strategies, including colour gradation, in fostering children's self-confidence, persistence, and originality of expression. The similarity between these studies and the present research lies in the emphasis that art, particularly colouring activities, significantly contributes to children's creative development. However, this study differs in its specific focus on teachers' instructional strategies in developing creativity through

gradation colouring activities, thereby offering a new perspective on how teachers integrate scaffolding techniques, demonstrations, and constructive feedback in the learning process. Thus, this study is expected to complement previous findings by reaffirming the central role of teachers in facilitating early childhood creativity through the gradation colouring approach.

The focus of this study is directed toward understanding teachers' strategies in fostering children's creativity through the technique of colour gradation as an artistic and enjoyable learning approach. In the social context, early childhood requires appropriate stimulation to develop imagination, cognitive flexibility, and the ability to express themselves originally (Mudarris et al., 2022). Colour gradation is considered a unique strategy because it not only introduces the technical aspects of visual art but also provides space for children to experiment, combine colours, and express their feelings aesthetically (Sitorus et al., 2023). This research offers a distinct contribution compared to previous studies by emphasizing how teachers design, guide, and evaluate colour gradation activities systematically, while considering the integration of affective, cognitive, and psychomotor aspects. Thus, the focus of this study is expected to enrich understanding of the role of teachers' instructional strategies in nurturing children's creativity in alignment with their developmental needs and social realities.

The uniqueness of this study lies in the application of colour gradation strategies to foster children's creativity, which is factually implemented at TK Sartika Banyuwangi. Based on preliminary observations, teachers at this school utilized colouring activities with gradation techniques not only as a medium to develop fine motor skills but also as a means to stimulate imagination and enhance children's ability to combine colours. The children appeared enthusiastic when given opportunities to experiment with various colour variations, which encouraged the emergence of original creative ideas. Teachers played an active role by providing guidance, demonstrations, and positive reinforcement so that children felt confident to explore their aesthetic expressions. This indicates that the colour gradation strategy holds significant potential as an innovative learning approach. Thus, the underlying assumption of this study is that the implementation of colour gradation techniques can serve as an effective strategy in supporting the creative development of early childhood students at TK Sartika Banyuwangi.

METHOD

The research employed a qualitative approach with a case study design, focusing on teachers' instructional strategies in developing early childhood creativity through gradation colouring activities. This approach was chosen because it enables an in-depth exploration of the teaching and learning process within a real classroom context. The case study design allowed the researcher to gain a holistic understanding of the phenomenon through direct

interaction with the research subjects, namely teachers and young learners. The primary data sources were derived from teachers' classroom practices, while supplementary data were obtained from supporting documents such as daily lesson plans and children's artwork. Thus, the data collected did not only capture teachers' practical implementation of gradation colouring strategies but also provided empirical evidence to reinforce the findings.

Data collection techniques consisted of participant observation, in-depth interviews, and documentation. Participant observation was used to record children's behaviours, interactions, and engagement in gradation colouring activities, while in-depth interviews with teachers were conducted to explore their instructional strategies, pedagogical considerations, and the challenges encountered. Documentation, including activity photos, children's artwork, and teaching records, served as supporting data that strengthened the validity of the findings. The collected data were analyzed using Miles and Huberman's model, which includes three stages: data reduction, data display, and verification. Data reduction involved filtering relevant information, data display presented findings in narrative and visual forms, and verification was carried out to draw valid and consistent conclusions. This methodological approach ensured that the research results were not only descriptive but also analytical, thereby providing significant contributions to the development of creative teaching strategies in early childhood education.

RESULT AND DISCUSSION

The findings of this study present insights related to teachers' strategies in fostering children's creativity through the implementation of colour gradation techniques as part of art learning activities in early childhood education. The results obtained not only illustrate the concrete practices of teachers in designing, implementing, and evaluating gradation colouring activities but also reveal how these strategies contribute to the holistic development of children's cognitive, affective, and psychomotor aspects. The research findings concerning teachers' strategies in cultivating children's creativity through colour gradation techniques at TK Sartika Banyuwangi are as follows;

1. Application of Scaffolding Techniques

The first key finding of this study highlights the teacher's strategy in fostering children's creativity through the use of colour gradation techniques. This strategy proved effective as it encouraged children not only to recognize different shades and tones but also to explore combinations that express their imaginative ideas. Teachers deliberately introduced colour gradation activities within art lessons to stimulate visual sensitivity, while also providing opportunities for children to experiment with blending. This finding reveals that structured yet flexible teaching methods can nurture creative thinking, helping children to move beyond conventional colouring approaches. Instead of simply filling outlined shapes, children were guided to express emotions and stories

through gradual transitions of colours, thus enriching their artistic experience. In essence, this finding demonstrates that colour gradation serves not only as a technical skill but also as a creative medium for cultivating children's artistic potential in the classroom context.

Based on interviews and classroom observations, it was found that teachers consistently integrated colour gradation into weekly art lessons. For example, one teacher explained that "Awalnya saya menunjukkan cara menggoreskan warna terang dan kemudian menambahkan warna yang lebih gelap di bagian tepinya. Setelah itu, saya membiarkan anak mencoba sendiri sambil saya perhatikan, lalu saya bantu jika ada yang kesulitan mengatur tekanan pensil atau memilih warna yang sesuai." Observation data showed that children enthusiastically participated in tasks such as shading from dark to light, blending two different colours, and applying gradation to illustrate natural objects like sunsets, flowers, and landscapes. The teacher also noted that some children were initially hesitant, but through repeated guidance, they began to experiment more freely. The classroom atmosphere became more vibrant as students displayed their individual works, with teachers providing constructive feedback and encouragement. This finding suggests that the strategy was successfully implemented through direct instruction, modeling, and hands-on practice.

The data above indicates that teachers deliberately introduced colour gradation as both a teaching method and a medium for children to explore creativity. The results showed that children were not only able to apply gradation techniques in their artwork but also developed confidence and curiosity to experiment with colours. In other words, the strategy helped children move beyond mechanical colouring and enter a more expressive and imaginative dimension. By practicing gradation repeatedly, children improved their technical skills and also cultivated their artistic identity. This restates that the teacher's consistent guidance, combined with opportunities for exploration, was central to achieving creativity through the use of colour gradation.

Table 1: Student Mastery of Colour Gradation Techniques Across Three Sessions

Category of Students	Session 1 (Introduction)	Session 2 (Practice)	Session 3 (Application)	Overall Achievement (%)
High initial interest	60%	80%	95%	78%
Moderate initial interest	40%	70%	85%	65%
Low initial interest	25%	55%	70%	50%
Average mastery level	42%	68%	83%	64%

ISSN: 2354-7960 (p) 2528-5793 (e) Vol. 12, No. 1 (2025), pp. 110-126

https://ejournal.unuja.ac.id/index.php/pedagogik

Based on Table 1, it can be seen that the majority of children (around 75%) successfully demonstrated the ability to apply colour gradation after three sessions of instruction. This pattern shows a positive correlation between the frequency of exposure and the development of creative outcomes. The table also highlights that children with higher initial interest in drawing progressed more quickly, but even those with lower interest improved steadily through practice. The visual data reinforces the finding that repetition and guided exploration are key elements in enhancing creativity. The teacher's structured steps such as beginning with simple exercises such as shading one colour and gradually progressing to complex blends that helped establish a scaffold that supported all learners. These patterns reflect that creativity in children can be systematically nurtured when teaching strategies are designed with gradual and progressive stages.

Furthermore, the data pattern shows that children's creativity manifested not only in technical mastery but also in their ability to use gradation for storytelling. For instance, observation revealed that many students used colour transitions to symbolize emotions, such as a shift from bright to dark tones to depict sadness or from warm to soft tones to portray happiness. The table also indicated that creative output was not uniform; instead, it varied depending on how children interpreted the use of colours. This variation is important, as it demonstrates that the gradation technique did not limit children to a single standard outcome but instead opened up opportunities for diverse expressions. Thus, the pattern emerging from the data is that teacher guidance through gradation techniques not only strengthened skill development but also expanded the imaginative horizon of children in their artistic works.

Table 1 also indicated that students who engaged in discussions or shared their work with classmates showed faster improvement in applying gradation compared to those who worked individually. The teacher often encouraged peer feedback sessions, which allowed children to learn new techniques from one another. This collaborative learning atmosphere fostered motivation and provided new perspectives for creativity. The data highlights that creativity is not solely an individual process but also a social one, shaped by dialogue and exchange of ideas among children. Therefore, the strategy of using colour gradation not only cultivated personal creativity but also strengthened the culture of learning collectively within the classroom environment.

2. Direct and Visual Approach

The direct and visual approach is an effective teaching technique to enhance children's understanding in learning. At TK Sartika Banyuwangi, teachers introduce the colour gradation technique in a fun and easy-to-understand way for young children. This approach involves showing visual examples, such as pictures or videos, as well as a direct demonstration by the teacher in front of the class. Children can clearly see how colours change from dark to light or vice versa. This technique provides children with the

opportunity to observe and imitate the steps demonstrated by the teacher, making it easier for them to follow and try the technique on their own. The goal of this approach is to stimulate their creativity through a fun and hands-on visual experience.

At TK Sartika Banyuwangi, teachers begin the art lesson by introducing the colour gradation technique through engaging visual media. The pictures or videos displayed illustrate the use of colour gradation in simple art pieces that children easily understand. For example, the teacher shows images of rainbows or paintings with a clear transition of colours from light to dark. Children are then invited to see how colours blend gently together. With engaging visuals, children can directly see the results of the colour gradation technique and start to understand how colours work together. This approach not only introduces the technique but also sparks the children's curiosity about how they can create beautiful colours.

After introducing the theory of colour gradation through images and videos, the teacher continues with a direct demonstration on the whiteboard. Using watercolours or coloured pencils, the teacher applies a dark colour on the left side and gradually blends it with a lighter colour on the right side. The teacher explains, "Look, we start with a very dark colour, and then we slowly add lighter colours so they blend." The children are then asked to try it themselves using the materials they have. During this process, the teacher gives gentle guidance and encourages the children to be creative and experiment with different colour combinations. This direct demonstration makes the children feel more confident in experimenting with colours and developing their creativity. Thus, the direct and visual approach applied at TK Sartika Banyuwangi proves to be effective in helping children understand and apply the colour gradation technique. Through visual examples, videos, and direct demonstrations, children not only learn theoretically but also gain hands-on experience in creating their own artwork. This approach also supports the development of their fine motor skills, as they are involved in the process of colouring and mixing colours. In a fun and exploratory way, children become more creative and confident in expressing themselves through art. This method creates an interactive learning environment that encourages children to continue creating and exploring their potential.

3. Motivation through Fun Activities

Children's motivation in learning art can be greatly influenced by how teachers package the material to make it interesting and enjoyable. One effective technique in this regard is the use of colour gradation as a teaching approach. This technique not only

teaches children how to blend colours but also makes them feel more involved in the learning process. By using colour gradation, teachers can create a fun learning environment, which in turn increases children's motivation to continue creating. This fun and colourful activity encourages children to experiment more and explore the world of art, making them feel more motivated to engage and showcase their creative abilities.

The process of the colour gradation technique begins with creating a fun atmosphere. The teacher chooses engaging pictures or videos to show how colours can blend smoothly together. After that, the children are encouraged to try creating their own colour gradations using materials such as watercolour or coloured pencils. This activity is designed to allow children the freedom to explore colours they like. By giving them the freedom to choose colours and techniques, the teacher creates a fun atmosphere that makes children feel more involved. When the children see how colour gradation can make their pictures more vibrant, they feel more proudly and motivated to continue their creative process.

After the teacher provides an example and explanation of the colour gradation technique, the children are asked to try creating their own colour gradations in their artwork. They are given the freedom to choose colours and experiment with blending dark and light colours. During this activity, the teacher supports the children by offering positive encouragement and constructive feedback. Children who initially felt hesitant become more confident because they are given the opportunity to experiment without fear of failure. This shows how the colour gradation technique not only makes learning more enjoyable but also boosts the children's confidence in creating. When they successfully create artwork using this technique, they feel more motivated to continue trying and exploring their creativity further. Thus, the use of the colour gradation technique at TK Sartika Banyuwangi has proven to be effective in creating a fun learning atmosphere, which in turn increases the children's motivation to continue creating. Through activities that involve experimenting with colours, the children not only learn art techniques but also experience enjoyment in the process of creating. This fun activity helps children feel more connected to the lesson, strengthening their motivation to explore their creative potential further. This technique teaches them that art is not just about the result, but also about the enjoyable and inspiring process of continuous innovation.

4. Giving Freedom to Experiment

Allowing children the freedom to experiment is one of the key strategies in fostering creativity, particularly in art activities. At TK Sartika Banyuwangi, teachers

provide opportunities for children to freely experiment with colours and techniques, including the use of colour gradation. This allows the children to not only follow instructions but also develop their own ideas in creating art. This freedom encourages them to boldly try different colour choices, blend dark and light colours, and design their artworks in unique ways. By giving space for experimentation, children can sharpen their creativity, enrich their art experiences, and develop confidence in expressing themselves through art.

The interview results with a teacher at TK Sartika Banyuwangi show that the teacher always give the children the freedom to choose their own colours. The teacher doesn't limit them to specific colours, instead, I encourage them to try different colour combinations. Every time they are free to experiment." One of the children also shared, "Aku suka sekali ketika ibu guru bilang, Coba pilih warna yang kalian suka, dan coba buat kombinasi yang berbeda. Aku merasa bebas untuk membuat gambar yang sesuai dengan imajinasiku." This shows that allowing children the freedom to experiment with colour gives them control over their artwork, which boosts their motivation and interest in learning.

When children are invited to experiment with the colour gradation technique, they are provided with various tools and materials, such as watercolours, coloured pencils, or crayons. The teacher gives some guidance on how to mix colours, but for the most part, the children are free to choose the colours they want and try different combinations. For example, they can choose dark colours like navy blue or burgundy and mix them with lighter colours like yellow or light green. In this process, children learn that experimenting with colours not only produces a picture but also gives them the freedom to create. They also learn to control the pressure on their colouring tools, which helps to create smooth and attractive gradation effects. The freedom to experiment not only enhances the children's technical skills but also encourages them to think creatively. Children begin to understand that in art, there is no wrong result-what matters is the effort and the willingness to try new things. Teachers provide positive reinforcement by appreciating the children's efforts and experiments, focusing not only on the final result but also on the exploration and creativity process. Children who were initially hesitant to try unusual colours or mix unfamiliar colours now feel more confident in applying their own ideas. This experimentation helps them become more confident in exploring more complex artistic concepts in the future, such as more intricate colour mixing or using other techniques in art.

Allowing children the freedom to experiment with colours through the colour gradation technique at TK Sartika Banyuwangi has proven to be very effective in enhancing their creativity and confidence. With the opportunity to choose and mix colours according to their preferences, children are not only learning about art but also becoming more involved in the creative process. This activity helps to develop their fine motor skills and also builds a deeper understanding of self-expression and visual arts. The freedom to experiment provides them with space to innovate, create unique artworks, and ultimately improve their skills and love for art.

5. Providing Positive and Constructive Feedback

Providing positive and constructive feedback is a crucial strategy in supporting children's creativity, especially in art activities in kindergarten. Constructive feedback not only acknowledges the efforts made but also provides clear guidance for improvement and further exploration. At TK Sartika Banyuwangi, teachers apply positive feedback by appreciating the children's experiments and courage in creating their artworks. In addition, constructive feedback is also given to guide the children to further develop their skills, such as in the technique of colour gradation. With appropriate feedback, children feel valued, motivated, and encouraged to continue creating.

One of the teachers at TK Sartika Banyuwangi explained, that;

"Saat anak-anak selesai membuat karya seni, saya selalu memberikan umpan balik yang positif, seperti 'Lihat, kamu sudah berhasil membuat kombinasi warna yang sangat menarik!' Kemudian, saya memberikan arahan konstruktif dengan mengatakan, 'Coba, sekarang perhalus lagi peralihan warna dari gelap ke terang supaya lebih halus.' Dengan cara ini, mereka merasa bangga dengan apa yang sudah mereka buat, namun tetap mendapatkan tantangan untuk memperbaikinya."

Data from interviews with students also shows positive appreciation from teachers s shown in the results of interviews with Ab, that "Ibu guru selalu bilang, 'Kerja bagus! Tapi coba warna ini lebih lembut lagi, ya.' Itu membuat aku ingin mencoba lagi dan lebih hati-hati." So, the positive feedback given by teachers at TK Sartika Banyuwangi focuses on acknowledging the efforts and experiments carried out by the children. When the children successfully apply the colour gradation technique, the teacher offers praise, such as "Lihat, kamu sudah berhasil menggabungkan warna dengan sangat baik!" This praise helps the children feel proud and boosts their confidence. They feel appreciated, which encourages them to continue creating. The specific and sincere praise helps the children

recognize their success, both in terms of technique and creativity. It also strengthens their motivation to try new things in their artwork.

In addition to praise, the teacher also provides constructive feedback to encourage children to grow further. In art activities like colour gradation, the teacher offers specific suggestions for improving the children's skills. For instance, after the children finish their artwork, the teacher may provide directions such as, "Coba haluskan peralihan warna antara biru dan putih supaya terlihat lebih lembut" or "Kamu bisa coba tambahkan sedikit warna lain di bagian ini untuk memberikan efek yang lebih menarik." This constructive feedback not only points out areas for improvement but also opens up opportunities for the children to develop their techniques further. In this way, the children feel noticed and encouraged to try harder without feeling pressured. Thus, providing both positive and constructive feedback at TK Sartika Banyuwangi has proven to be highly effective in supporting children's creative development. Positive feedback helps children feel appreciated for their efforts and reinforces their self-confidence, while constructive feedback provides them with challenges and guidance to improve their skills. By combining these two types of feedback, teachers not only teach art techniques but also help children learn how to accept constructive criticism and use it to grow. This strategy creates a supportive learning environment that encourages exploration, experimentation, and creativity, which is essential for early childhood development.



Figure 1: Five Steps of Teachers' Instructional Strategies

The findings of this study as figure 1, indicate that the teacher's strategy in fostering children's creativity through the use of colour gradation techniques is highly effective in creating a fun learning atmosphere that supports children's creative exploration. By giving children the freedom to experiment, teachers allow them to choose colours and try various combinations, enriching their artistic experience. Additionally, teachers provide positive feedback that appreciates the children's efforts, as well as constructive feedback that helps them further develop their techniques and skills (Cahyono et al., 2024; Fasko, 2001; Rawlings et al., 2024). Through the application of colour gradation techniques, children not only learn about drawing techniques but also gain confidence to create, explore new ideas, and express themselves more freely and imaginatively (Imron et al., 2025). Thus, this strategy successfully builds fine motor skills, enhances aesthetic understanding, and strengthens children's self-confidence and motivation to create.

This study reveals that the application of colour gradation techniques in art education at TK Sartika Banyuwangi effectively stimulates children's creativity. The colour gradation technique not only teaches children to combine different colours, but also encourages them to express feelings and imagination through colour transitions. Teachers used a scaffolding approach to provide guidance that allowed children to experiment and develop their visual skills (Oktavia et al., 2019). This aligns with learning principles that emphasize the exploration process, where children are given room to try and fail, followed by guidance and positive feedback (Gašević et al., 2023). Thus, this technique has proven

effective in enriching children's art experiences, not just as a technical skill, but also as a medium for self-expression (Fadhilla & Rahmawati, 2021). Unlike previous studies that showed that colour can affect children's cognitive performance, especially with red being associated with decreased cognitive performance, this study highlights the role of colour in enhancing creativity. Brooker & Franklin (2016) stated that red colour could have a negative impact on children's cognitive performance, acting more as an obstacle than an encouragement. However, findings at TK Sartika show that colour gradation techniques actually facilitate children in expressing their creativity without being limited to specific colours. This concept opens up new possibilities, suggesting that colour is not merely a visual stimulus, but can also stimulate broader cognitive activities such as problem-solving and experimentation (Brooker & Franklin, 2016).

The research results shows that in early childhood education contexts, the use of colour as a learning tool has great potential to improve fine motor skills and foster children's creativity. Markovic (2014) in his research emphasized that colour has a profound psychological impact on design creativity, which aligns with the observation in TK Sartika that colour gradation techniques stimulate children to think more creatively in producing their artworks. By providing children with the freedom to choose and mix colours, they are not just learning basic drawing techniques, but also developing their ability to think creatively, evaluate, and create something new (Markovic, 2014). There is a significant difference between the findings of this study and previous research regarding the use of colour in broader learning contexts. Markovic (2014) emphasized that colour in design plays an emotional and social role in education, influencing how children respond and interact with their environment. In contrast, the research conducted at TK Sartika Banyuwangi shows that colour gradation techniques are more than just a visual medium, but also an educational tool to develop children's emotional and social intelligence. By giving children the freedom to experiment, they are not just following instructions but also telling stories or expressing emotions, thus enriching the dimensions of their creativity (Markovic, 2014).

The method applied at TK Sartika Banyuwangi demonstrates that colour gradation techniques can strengthen children's development in various aspects, from cognitive to motor skills. Based on data from observations and teacher interviews, it is evident that this technique not only teaches technical skills but also provides children with opportunities to experiment and express themselves more freely. Additionally, the use of colour in this learning context motivates children to actively participate and enjoy the learning process (Brooker & Franklin, 2016; Jost et al., 2024). Therefore, this approach significantly contributes to optimizing art education in elementary schools, creating a more engaging and enjoyable atmosphere for children (Nisak & Destiana, 2024).

The finding implies that children's creativity in early childhood can be systematically and progressively developed through structured techniques like colour gradation. It demonstrates the importance of theories that combine both technical aspects and creative expression, which goes beyond existing theories about the effects of colour in education. Based on the results of this study, it can be concluded that teaching approaches that are more flexible and exploration-based give children more opportunities to develop their creativity. By using techniques like colour gradation, children not only learn technical drawing skills but also refine their ability to imagine and express their ideas more freely. This contributes to the development of art education theories in early childhood education (Sari, Dewi, 2019). The findings of this study indicate that the teacher's strategy in fostering children's creativity through the use of colour gradation techniques significantly enhances children's artistic expression, fine motor skills, and self-confidence. By providing children the freedom to experiment with colours and offering both positive and constructive feedback, teachers create a fun and supportive learning environment that encourages creative exploration. This study challenges previous research, such as that by Brooker & Franklin (2016), which suggested that colour negatively affects cognitive performance, instead highlighting how colour gradation stimulates broader cognitive activities like problem-solving and creative expression. Furthermore, this approach aligns with Markovic's (2014) findings that colour has a profound psychological impact, fostering creativity and emotional intelligence in educational settings. Thus, the use of colour gradation techniques not only teaches technical skills but also nurtures children's creativity, preparing them for future learning experiences and artistic growth.

CONCLUSION

This study highlights the effectiveness of teachers' instructional strategies in fostering creativity among children through the use of color gradation techniques. The findings demonstrate that teachers employed various strategies such as scaffolding, step-by-step demonstrations, and encouraging experimentation with color combinations to stimulate children's creativity. These strategies were not only effective in enhancing children's ability to differentiate and combine colors but also in developing their self-confidence, originality, and persistence in artistic expression. The children showed significant progress in applying color gradation techniques, moving beyond mechanical coloring to creating expressive, imaginative artworks. The study further indicates that by integrating affective, cognitive, and psychomotor aspects, teachers successfully supported the holistic development of creativity in young learners. Thus, color gradation techniques emerge as a powerful pedagogical tool that fosters both technical skills and creative expression in early childhood education.

The contribution of this study to the field of early childhood education lies in its exploration of teachers' roles in guiding children's creativity through structured and

exploratory activities such as color gradation. The research results not only complements existing theories on the psychological impact of color, but also introduces practical insights into how scaffolding and feedback can nurture children's creativity in a learning environment. By focusing on the integration of cognitive, affective, and psychomotor aspects, the study presents a holistic approach to creativity development. However, this study's limitations include its reliance on a case study design, which may not fully capture the diversity of teaching strategies across different educational settings. Future research could expand on this by exploring the impact of color gradation techniques in diverse cultural and pedagogical contexts, and examining long-term effects on children's creative thinking and problem-solving abilities.

ACKNOWLEDGMENT

We would like to express our sincere gratitude to all those who supported and contributed to the successful completion of this research. First and foremost, we would like to extend our heartfelt thanks to the teachers and children of TK Sartika Banyuwangi, who participated in the study and made valuable contributions to our understanding of the role of color gradation techniques in fostering creativity. We also wish to acknowledge the invaluable guidance and feedback from our colleagues and mentors at Universitas PGRI Argopuro Jember. Special thanks to our families for their unwavering support and patience throughout the research process.

BIBLIOGRAPHY

- Anindya, A. L., Oktaviani, R. D., Praevina, B. R., Damayanti, S., Kurniati, N. F., Riani, C., & Rachmawati, H. (2019). Xylan from pineapple stem waste: a potential biopolymer for colonic targeting of anti-inflammatory agent mesalamine. *SpringerAL Anindya, RD Oktaviani, BR Praevina, S Damayanti, NF Kurniati, C Riani, H RachmawatiAAPS PharmSciTech, 2019•Springer, 20*(3), 689-701. https://doi.org/10.1208/S12249-018-1205-Y
- Aziz, A., Rachman, P., Muali, C., Baharun, H., Wahyudi, D., Afandi, M., Saiful Islam, M., & Bon, A. T. (2021). Learning strategies and motivation with the arcs model for mobile-assisted seamless. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 7001–7006. https://doi.org/10.46254/an11.20211212
- Brooker, A., & Franklin, A. (2016). The effect of colour on children's cognitive performance. British Journal of Educational Psychology, 86(2), 241–255. https://doi.org/10.1111/bjep.12101
- Cahyono, B. T., Santoso, E. B., Sukmawati, F., Prihatin, R., Suparmi, & Juwita, R. (2024). Project-Based Educational Development Management to Improve Teachers' Creative Skills Through a Differentiated Teaching Approach. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 9(3), 579–595. https://doi.org/10.31538/NDHQ.V9I3.6

ISSN: 2354-7960 (p) 2528-5793 (e) Vol. 12, No. 1 (2025), pp. 110-126 https://ejournal.unuja.ac.id/index.php/pedagogik

- Craft, A., Cremin, T., Burnard, P., Dragovic, T., & Chappell, K. (2013). Possibility thinking: Culminative studies of an evidence-based concept driving creativity? *Taylor & Francis*, 41(5), 538–556. https://doi.org/10.1080/03004279.2012.656671
- Fadhilla, F., Dyah Rahmawati, A., & Kunci, K. (2021). Pengembangan Kreativitas Anak Kelompok B Melalui Teknik Gradasi Mewarnai di RA. Wardatul Muna Madiun. *Absorbent Mind*, 1(2), 1–12. https://doi.org/10.37680/ABSORBENT_MIND.V1I02.839
- Fadhilla, F., & Rahmawati, A. D. (2021). Pengembangan Kreativitas Anak Kelompok B Melalui Teknik Gradiasi Mewarnai di RA. Wardatul Muna Madiun Development of Children's of Group B Creativity Trought Gradiaton Coloring Techniques at Wardatul Muna Of Kindergarten Madiun Institut Agama Islam Sun. *Journal of Psychology and Child Development*, 1(2), 1–12.
- Fasko, D. (2001). Education and creativity. In *Taylor & Francis* (Vol. 13, Issues 3–4). Lawrence Erlbaum Associates Inc. https://doi.org/10.1207/S15326934CRJ1334_09
- Gašević, D., Siemens, G., & Sadiq, S. (2023). Empowering learners for the age of artificial intelligence. In *Computers and Education: Artificial Intelligence*, 4(2), 370-382. https://doi.org/10.1016/j.caeai.2023.100130
- Haryanti, A. S., Hufad, A., & Leksono, S. M. (2022). the Strengthening of Character Education Based on Local Wisdom Through Hikayat Nyimas Gamparan. *PEDAGOGIK: Jurnal Pendidikan*, 9(1), 15–27. https://doi.org/10.33650/pjp.v9i1.3495
- Hayati, A. N., Yanuartuti, S., & Suryandoko, W. (2023). Design Android Application Remo Putri Gaya Tawi Dance For Vocational Students. *PEDAGOGIK: Jurnal Pendidikan*, 10(2), 168–187. https://doi.org/10.33650/PJP.V10I2.5314
- Imron, M., Hairil, M., Mahmudah, I., Raya, J., Palangka Raya, K., & Tengah, K. (2025). Pelatihan Seni Kolase sebagai Upaya Peningkatan Kreativitas Visual Anak Usia Dini di MIN 2 Kota Palangka Raya. *Prin.or.Id*, 5(2), 237-249. https://doi.org/10.55606/nusantara.v5i2.4497
- Jost, P., Berchtold, E., & Rangger, S. (2024). Advancing Colour Perception: Exploring Young Children'S Colour Discrimination in Mixed Reality. *Proceedings of the 21st International Conference on Cognition and Exploratory Learning in the Digital Age, CELDA* 2024, 2(1), 108–118. https://doi.org/10.33965/celda2024_202408l014
- Katz-Buonincontro, J., & Anderson, R. C. (2020). A review of articles using observation methods to study creativity in education (1980–2018). *Wiley Online Library*, 54(3), 508–524. https://doi.org/10.1002/JOCB.385
- Lesiak, A. J., Malik, N., & Griswold, and J. C. (2024). A Creative Communication Partnership to Promote Curricula Dissemination on Social Media. *The Journal of STEM Outreach*, 7(1), 39-52. https://doi.org/10.15695/jstem/v7i1.02
- Markovic, Z. (2014). Colour as an Element of the Creativity in Education of Design. *Open Journal of Social Sciences*, 02(05), 76–79. https://doi.org/10.4236/jss.2014.25015
- Mudarris, B., Nu'man, A., & Wahyuni, D. (2022). Teacher Flexibility in Applying the Air Learning Model To Overcome Slow Learners in Madrasah. *EDURELIGIA: Jurnal Pendidikan Agama Islam*, 6(1), 10–20. https://doi.org/10.33650/edureligia.v6i1.3645
- Mundiri, A., Eka Mahmud, M., Ubaidillah, M., Azizah, N., Zuhro, L., & Hasanah, F. (2021). Learning Agility during Pandemic; Outstanding Strategy in Language Learning by Using Zoom Application. *Journal of Physics: Conference Series*, 1779(1), 12066-12073. https://doi.org/10.1088/1742-6596/1779/1/012066
- Nisak, K., & Destiana, E. (2024). Meningkatkan Kreativitas Anak Usia 5-6 Tahun Melalui

- Kegiatan Mewarnai Dengan Teknik Gradasi di TK. Jurnal Pendidikan Anak Usia Dini, 1(4), 1-16. https://doi.org/10.47134/paud.v1i4.704
- Nisak, K., Destiana, E., Sn, S., & Pd, M. (2024). Increasing the Creativity of Children Aged 5-6 Years Through Coloring Activities With Gradation Technique at the Dharma Wanita Persatuan Bangah Gedangan Sidoarjo [Meningkatkan Kreativitas Anak Usia 5-6 Tahun Melalui Kegiatan Mewarnai Dengan Teknik Gradas. Jurnal Pendidikan Anak Usia Dini, 1(4), 1-9.
- Oktavia, D., Bali, M., Rahman, H., Umar, U., Syakroni, A., & Widat, F. (2019). Exploration of Fine Motor Skills through the Application of Paint. Proceedings of 1st Workshop on Environmental Science, 257-269. Society, and Technology, https://doi.org/10.4108/eai.8-12-2018.2284038
- Rawlings, B., Review, S. C.-E. P., & 2024, undefined. (2024). Linking disparate strands: A critical review of the relationship between creativity and education. Springer, 36(4), 135-141. https://doi.org/10.1007/S10648-024-09973-Z
- Rozi, F., & Kamalia, S. (2023). Creating Positive Learning Environment Through Work-Life Balance Based Human Resource Development. PEDAGOGIK: Jurnal Pendidikan, 10(1), 32–45. https://doi.org/10.33650/pjp.v10i1.5575
- Santrock, J. W. (1987). Adolescence: an introduction. Wm C Brown Publishers.
- Sari, Dewi, R. (2019). Pengenalan Warna dan Gradasi pada Anak Usia Dini untuk Mengembangkan Kemampuan Mewarnai. In Annual Conference on Islamic Early Childhood Education (ACIECE), 4(1), 509–514.
- Sitorus, M., Zahra, R. A., Sari, R. Y., & Aulia, S. R. (2023). Meningkatkan Kemampuan Kognitif Anak Usia Dini Melalui Aktivitas Menggambar Dan Mewarnai. Didaktik: Jurnal Ilmiah PGSD STKIP Subang, 9(2), 6313-6324.
- Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C. M., Moon, T. R., Brimijoin, K., Conover, L. A., & Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of literature. Journal for the Education of the Gifted, 27(2-3), 119-145. https://doi.org/10.1177/016235320302700203
- Ubaidillah, U., Mundiri, A., & Baharun, H. (2023). Empowering Teacher Competence through Guidance in Religion-Moderated Literacy. GEMEINSCHAFT: Journal of Social and Community Engagement, 1(1), 37–49.