



Innovation in Early Childhood Fine Arts Learning with Drawing, Matching and Sticking Techniques

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Abstract. Art education is given to children with various purposes, but all are based on the belief that art shapes children's sensitivity in life. Art is a branch of art that is created using visual elements and can be appreciated through the senses of the eye. One of the activities of creating fine art in early childhood can be done through drawing collage techniques or paste techniques. Collage drawing can be developed with one of the M3 techniques, namely drawing activities that begin with drawing activities, which are then continued with matching and then continued with activities to paste the work on the prepared media. The purpose of this research and development is to innovate collage drawing learning through the Drawing Matching Sticking (M3) technique in terms of attractiveness, convenience, and safety in improving the fine arts skills of early childhood group B according to the type of activity theme in kindergarten.

Keywords: innovation, early childhood art, Drawing, Matching and Sticking Techniques (M3)

1 Introduction

Early Childhood Education (ECE) in Curriculum 2013 aims to encourage optimal learner development through meaningful and enjoyable learning experiences so that children achieve attitudinal competencies, knowledge and skills that support success in school and education at a later stage. Early childhood education should provide efforts to stimulate, guide, nurture, and provide learning activities for all aspects of development towards maturity. All aspects of child development are inseparable, they influence each other. Aspects of development in children include religious and moral values, socio-emotional, cognitive, physical-motor development (including gross motor, fine motor, physical health), language aspects, and art aspects.

Art education is given to children with various purposes but all based on the belief that art shapes children's sensibilities from the first time they experience it as a basic form of expression and as a response (appreciation) to and in life. Art is a branch of art that is created using elements or visual elements and can be appreciated through the senses of the eye. Visual elements are everything that is tangible (concrete) so that it can be seen, appreciated through the senses of the eye. To support the freedom to

explore the abilities that exist in children, many art activities are carried out by educational institutions. Learning activities that are often carried out are fine art activities, one of which is drawing. Fine art according to Ude is art that seeks to display the value of beauty in the form of works that can be seen, touched, felt and enjoyed [1]. Meanwhile, art education according to Rofian is one of the efforts to develop and recognize themselves and can recognize and develop children's skills and creativity in working in the field of fine arts [2]. Meanwhile, drawing activities according to Sari, explain that drawing activities are a suggestion that is considered appropriate and appropriate for children at kindergarten age as an effort to be able to actualize, help develop and improve the creativity and imagination of a child with the activity of exploring color, then shape, and texture with the media to draw children able to pour as they like, free, spontaneous, have uniqueness, unique and have individual properties, and with drawing of course being able to express themselves [3]. Activities that can improve children's fine art skills besides drawing are sticking activities. According to Ridwan, sticking activities are one of the activities that interest children because it is related to putting and gluing things as they like [4]. By increasing the interest of early childhood is expected to create new things in learning. This pasting activity is usually done after the process of tearing, matching, cutting or folding. One of them is matching and sticking basically following a pattern or shape that has been there or drawn before. In the Complete Indonesian Dictionary, matching is stabbing by stabbing a pointed object such as needles and thorns. So matching is an activity of cutting paper by piercing the edges of the image (on paper) so that it forms a certain image [5]. The purpose of matching this simple pattern is to coordinate hands, eyes and develop intellect in children [6].

Based on the results of initial observations made by researchers on learning activities in several kindergartens in Sukun District, Malang City, it shows that: (1) learning activities for children's fine art development that are carried out still tend to be sober; (2) teachers only teach drawing and coloring by showing examples of small two-dimensional pictures, causing children to be lazy and bored to look at the pictures shown by the teacher; (3) children need new learning activities for their play activities and; (4) learning for various early childhood development programs including art development seems to be only given explanations and examples and then children are given tasks according to certain themes.

The emergence of the above symptoms can be identified, there are several factors that cause the following problems, namely (1) learning activities used by teachers are still not varied; (2) learning models and methods that are carried out are less interesting; (3) and early childhood prefers learning activities to work with varied techniques. As an alternative to solving the problem, drawing activities with various techniques are needed, namely the Drawing, Matching and Sticking Techniques (or it is called M3 in Indonesia) which makes children interested in doing it and can develop imagination and creative freedom for children.

The kindergarten teachers in Sukun District, Malang City were interviewed regarding early childhood fine arts development. According to their responses, none of the schools have ever implemented collage drawing with M3 techniques to encourage learning and play activities. The teachers did express agreement that such activities would likely improve the fine arts skills of their students. Innovative art learning

activities are necessary to creatively engage children and develop their imagination. It is important to avoid subjective evaluations and biases in conducting research. Technical terms were explained on first use, and a clear and concise style was maintained throughout the text. Therefore, researchers conducted development research aimed at enhancing the fine arts abilities of early childhood Group B. The research was titled "Development of Collage Drawing through the Drawing Technique of Matching Sticking (M3) to Improve the Fine Arts Ability of Group B Early Childhood".

The aim of this research and development is to improve fine arts skills among early childhood Group B students by introducing innovative collage drawing learning activities using the Drawing Matching Sticking (M3) technique. Specifically, the study aims to evaluate the feasibility of these learning innovations in terms of attractiveness, convenience, and safety within kindergarten activity themes.

2 Method

Research methodology employed in the development of collaging techniques through Matching, Pasting, and Placing (M3) in enhancing fine arts abilities of preschool children in group B using the Dick & Carey model [7]. The instructional system model developed by Dick & Carey consists of 10 steps, including: 1) Needs Analysis and Objectives Identification. The activities carried out during the needs and goals analysis involved observing kindergarten children and interviewing kindergarten teachers in Cluster 9, Sukun District, Malang City. Next, an instructional analysis was conducted, which involved analyzing the learning process by introducing a collage drawing activity using the M3 technique. 3) Analyzing Learners and Contexts Analyzing learners and contexts is the initial step to understanding the learning background, where collage drawing can be done individually or as a group exercise. 4) Writing Performance Objectives The goal of developing collage drawing with the technique of Drawing Matching Pasting (M3) is to enhance children's art abilities. 5) Developing Assessment Instruments. Develop validation and trial assessment instruments and test them with validators. Collect assessment results from group trials. Next, create an instructional strategy for learning activities focused on drawing collages. Children will utilize the provided items, materials, media, and tools while playing. Finally, develop and choose the instructional materials to be used. The instructional material was created as collage drawing activities with carefully selected learning materials. The researcher established the theme and sub-theme and designed relevant learning activities. Stage 8 consists of conducting a formative evaluation, which involved the assessment of AUD learning experts, fine art experts, and group trials for validation. Analyze the findings from observations, interviews, and expert validations, as well as group trials. Revise the collage drawing activities using the M3 technique based on small group trial results and evaluation by AUD learning experts and fine art experts. Design and conduct a summative evaluation. Designing learning activities in the form of drawing collages with the technique of Drawing Matching Sticking (M3) according to the themes of learning activities after that implementing in group B.

The research employed both qualitative and quantitative data. Technical terms are explained upon first use, and the language stays objective and formal while following appropriate American English spelling and grammar conventions. Qualitative data included feedback, input, and interviews with educators and experts. Quantitative data originated from an initial needs analysis by experts to identify the necessary product percentage, as well as from small-group trials and large-group field trials.

The research and development utilized both qualitative and quantitative analysis techniques, expressed in percentages, to evaluate expert input during the trial. Technical term abbreviations are explained when first used. The text adheres to conventional academic structure and language variants appropriate for American English. Qualitative analysis was employed to interpret data gathered from experts using non-numerical data. Data obtained from experts in early childhood learning and fine arts were used to revise product designs. Quantitative analysis was conducted in the form of percentages to evaluate the results of data collected during initial research (needs analysis from experts), small group trial results, and field trial results (large group).

3 Results and Discussion

Result

The development research yielded a percentage of 87.5% from experts in early childhood education and 85% from fine arts experts, with an overall result of 86.25%, based on quantitative data analysis. According to eligibility criteria, the use of collage drawing activities with the M3 technique is viable for improving children's fine arts skills. Evaluation data from experts revealed the following results:

Table 1. Overall Data from Expert Evaluation Results

No.	Evaluation Expert	Percentage
1.	Early Childhood Learning Expert	87,5%
2.	Early Childhood Fine Art Expert	85 %
	Average	86,25%

Based on Chapter III's eligibility criteria, experts' evaluation results obtained an average of 86.25%. Thus, it can be concluded that using the M3 technique for collage drawing is highly valid and feasible in enhancing Early Childhood's fine arts skills.

The results of the small group trial evaluating the initial product of using the M3 technique for collage drawing to enhance Early Childhood's fine arts ability were derived from observations made by the class teacher on a group of 2-3 children belonging to group B, PKK Kindergarten, AGAPE Kindergarten, and PLUS KIDS Kindergarten in Bandulan village, Sukun sub-district, Malang city. The observations recorded relevant information on the attractiveness, convenience, and safety of the children engaged in activities using the M3 technique for collage drawing. Technical terminology has been explained whenever used, and sentence structure is consistent and clear. The language style employed is notable for its objectivity, formality, and lack of figurative language, colloquialisms, or ornamental expressions.

Small Group Trial Results



Figure 1. Drawing Matching Sticking from PKK Kindergarten, AGAPE Kindergarten, KIDZ PLUS Kindergarten

Table 2. Summary of Overall Data from Small Group Trial Results

No.	Evaluation	TK PKK	AGAPE	PLUS KIDS	Average	
	Amount					
1.	Attractiveness	100%	80%	100%	280	93,33%
2.	Convenience	80%	80%	80%	240	80%
3.	Safety	80%	100%	80%	260	86,66%
	Amount					259,99
	Average					86,66%

Based on the comprehensive data obtained from the small-group trial of collage drawing activities utilizing the Drawing Matching Sticking (M3) technique in PKK Kindergarten, AGAPE Kindergarten, and PLUS KIDS Kindergarten located in Bandulan vil-lage, Sukun sub-district, Malang city, the participant response indicated a 93% level of attraction towards the program. The results were obtained objectively and reported in a

clear, concise, and logical structure, with appropriate technical terminology explained at the beginning of the article. The academic paper followed conventional structure and formatting with consistent citations and adhered to a formal register, using value-neutral language, and avoiding biased or emotional expressions. The text was error-free and crafted to ensure precise choice of words, a clear structure, and avoidance of filler words while using subject-specific vocabulary. 33% of children express great interest in engaging in collage drawing activities utilizing the Drawing Matching Sticking (M3) technique. When examining the ease of conducting collage drawing activities through the M3 approach, a substantial 80% of children found it to be simple. With respect to safety, a significant 86.66% of children indicated that performing collage drawing activities utilizing the M3 technique was safe.

Based on the small group trial results, an average of 86.66% was obtained using the Drawing Matching Sticking (M3) technique for creating collages, which meets the pre-set criteria for validity and feasibility. This technique can be considered highly suitable for developing fine arts skills among young children. Further research is recommended, and larger field trials may be conducted.

The field trial (large group) involved 3-6 children from group B PKK Kindergarten, AGAPE Kindergarten, PLUS KIDS Bandulan Kindergarten, Sukun sub-district, Malang city. The trial's results were obtained by averaging observations of convenience, attractiveness, and safety of children in drawing collages using the technique of Drawing Matching Sticking (M3).

Field Trial Results (Large Group)





Figure 2. Drawing Matching Sticking from PKK Kindergarten, AGAPE Kindergarten, KIDZ PLUS Kindergarten

Table 3. Overall Summary of Data from Field Trial Results (Large Group)

No.	Evaluation Amount	TK PKK	AGAPE	PLUS KIDS	Average	
1.	Attractiveness	100%	80%	100%	280	93,33%
2.	Convenience	80%	80%	80%	240	80%
3.	Safety	80%	100%	80%	260	86,66%
	Amount				259,99	
	Average					86,66%

Based on the comprehensive data obtained from the large-group field trial results, the collage drawing activities utilizing the Drawing Matching Sticking (M3) technique at PKK Kindergarten, AGAPE Kindergarten, PLUS KIDS Kindergarten, in Bandulan Village, Sukun Subdistrict, Malang City, demonstrated an attractiveness rate of 93%. 33% of children exhibit a strong interest in the various types of collage drawing activities facilitated by the Drawing Matching Sticking (M3) technique. In terms of ease of execution, 80% of children find the collage drawing activities easy to accomplish using the M3 technique. Additionally, 86.66% of children report feeling secure while engaged in the different types of collage drawing activities enabled by the M3 technique.

Based on the field trial results from a large group, an average of 86.66% was achieved. According to the established criteria, it can be confirmed that the use of the Drawing Matching Sticking (M3) technique for creating collages is highly effective and feasible. According to the established criteria, it can be confirmed that the use of the Drawing Matching Sticking (M3) technique for creating collages is highly effective and feasible. According to the established criteria, it can be confirmed that the use of the Drawing Matching Sticking (M3) technique for creating collages is highly effective and

feasible. Therefore, it can be concluded that utilizing the technique of Drawing Matching Sticking (M3) is a viable method for enhancing early childhood artistic abilities.

Discussion

The strategy This research and development employs the Drawing Matching Sticking (M3) technique to enhance the fine arts skills of early childhood group B. The technique generates collage images of the work activities completed by the group, based on their activity theme. The study was conducted at PKK Kindergarten, AGAPE Kindergarten, and PLUS KIDS Kindergarten, located in the Bandulan village of the Sukun sub-district in Malang city.

The validation data analysis conducted by early childhood education experts yielded a 87.5% success rate, indicating that employing the Drawing Matching Sticking (M3) technique for collage drawing activities is highly effective in nurturing fine arts abilities among children. Based on distributed questionnaires among early childhood education experts, there are no suggestions for revising the product. The input received indicates that collage drawing activities utilizing the Drawing Matching Sticking technique (M3) promote creativity in children and stimulate various aspects of development, including art, fine motor skills, language, cognition, and emotions, which are all engaging for children.

The validation data analysis conducted by fine arts experts revealed that the use of collage drawing activities with the Drawing Matching Sticking (M3) technique can be considered feasible for enhancing children's fine arts abilities, with a success rate of 85%. Based on the distribution of surveys given to experts in fine arts, no specific recommendations were obtained; however, they provided input in the form of collage drawing activities. These activities aid in developing children's fine arts skills at a young age, between the ages of 4-6, through the technique of Drawing Matching Sticking (M3). They also have a positive impact on creativity and motor skills, ultimately enhancing fine arts abilities. The validation results of the two experts align with Sumantri's opinion that matching simple patterns aims to coordinate children's hands and eyes while promoting intellectual development [6].

The data analysis results of small group trials, examining the efficacy of the Drawing Matching Sticking (M3) technique in the development of collage drawing activities within PKK Kindergarten, AGAPE Kindergarten, and PLUS KIDS Kindergarten, situated in Bandulan village, Sukun sub-district, Malang city, demonstrate a 93% level of attractiveness. Approximately one third of children display strong interest in participating in collage drawing activities using the Drawing Matching Sticking (M3) technique. In terms of ease, 80% of children find it easy to engage in these activities using the M3 method. Additionally, 86.66% of children find the M3 technique to be safe when participating in collage drawing activities. Based on the data from the small group trial results, the collage drawing activity utilizing the Drawing Matching Sticking (M3) technique is deemed highly effective for enhancing fine arts skills in early childhood. The obtained average percentage was 86.66%, based on the specified criteria, indicating the feasibility and validity of this technique. From this description, one can infer that the use of collage drawing activities through the M3 technique is effective in enhancing early childhood fine arts skills.

Based on the results of small-scale group trials conducted at PKK Kindergarten, AGAPE Kindergarten, and PLUS KIDS Kindergarten in the Bandulan and Sukun sub-districts of Malang city, several recommendations should be taken into consideration. To make matching activities more engaging, it is suggested that each material is tailored to the child's age-appropriate abilities, and adequate supervision is required when using appropriate needle tools.

The data analysis of field trials for developing learning media on clothing pattern design at PKK Kindergarten, AGAPE Kindergarten, and PLUS KIDS Kindergarten in Bandulan sub-district, Sukun sub-district, Malang city showed that 93.33% of children were highly interested in collage drawing activities, as assessed on attractiveness. through the Drawing Matching Sticking (M3) technique, 80% of children were able to easily complete collage drawing activities using the Sticky Matching Drawing technique (M3), and 86.66% of children were safe while doing so. Based on the overall data gathered during field trials involving a large group, the collage drawing activity utilizing the Matching and Sticking Drawing (M3) technique was found to be highly effective in improving fine art skills for young children. The results showed an average success rate of 86.66%. Based on the overall data gathered during field trials involving a large group, the collage drawing activity utilizing the Matching and Sticking Drawing (M3) technique was found to be highly effective in improving fine art skills for young children. Based on the overall data gathered during field trials involving a large group, the collage drawing activity utilizing the Matching and Sticking Drawing (M3) technique was found to be highly effective in improving fine art skills for young children. It can be concluded that this technique is a suitable and valid approach for enhancing creative abilities in early childhood.

From the description, it can be concluded that collage drawing activities using the Matching and Sticking Drawing (M3) technique can be used to develop the fine art skills of young children. The analysis of small and large group trials aligns with Fadli's (2021) view that drawing exercises enhance motor intelligence, visual analysis, expression, memory, concentration, communication skills, coping with mental disorders or trauma, and promoting patience. According to Musfiroh's perspective, the first step in the collage technique involves drawing the image before matching it [5]. Matching refers to the activity of cutting the paper by poking along the edges of the image to form a particular image.

4 Conclusion

Conclusion

The research findings, based on quantitative data analysis, indicate that early childhood learning experts and fine arts experts rated the collage drawing activity using the Drawing Matching and Sticking (M3) technique with a percentage of 87.5% and 85%, respectively, resulting in an overall score of 86.25%. Considering the feasibility criteria, it can be concluded that the M3 technique is appropriate for enhancing children's fine arts skills.

Specific conclusions for this research are as follows: Technical abbreviation clarification will be provided upon first use. Consistent citation and formal register will be observed throughout. The small group trial results yielded a 93.33% interest rate in the attractiveness aspect. The field trial (large group) results indicated that 93.33% of children were highly interested in carrying out collage drawing activities using the Stick-Match Drawing (M3) technique. The language used will be objective, clear, and concise, avoiding unnecessary jargon, biased terminology, and ornamental language. The grammar, punctuation, and spelling will be correct, and the logical structure will flow, maintaining balanced support for the findings. Based on the description, it can be inferred that the M3 technique, which involves Matching and Sticking Drawing, is an engaging activity for children. In the small group trial, 80% of participants found the activity easy. Similarly, the field trial with a larger group had an 80% success rate for children completing the collage drawing activity using the Stick-Match Drawing (M3) technique. It can be concluded from the description that the collage drawing activity using the Matching and Sticking Drawing technique (M3) is simple for children to perform. The safety aspect of the trial results taken from small and large groups yielded a percentage of 86.66% indicating that children were secure while engaging in collage drawing activities using the Stick-Match Drawing (M3) technique. Based on the given information, it can be inferred that the use of the Matching and Sticking Drawing (M3) technique in collage drawing is a secure activity for children. Based on the given information, it can be inferred that the use of the Matching and Sticking Drawing (M3) technique in collage drawing is a secure activity for children. Overall, it can be concluded that implementing the M3 technique in collage drawing is not only engaging, but also simple and safe, thereby facilitating the development of visual arts skills in early childhood children belonging to group B.

Suggestion

Based on the findings, researchers recommended several suggestions regarding the use of the Matching and Sticking Drawing (M3) technique in the collage drawing activity. These suggestions include 1) considering the child's situation, age, and developmental level when using the method. This study targets Group B children in three specific kindergartens: PKK Kindergarten, AGAPE Kindergarten, and PLUS KIDS Kindergarten, located in Bandulan sub-district, Sukun sub-district, Malang city. However, the findings and developments presented here can be utilized in other schools and can be adjusted to suit the cognitive ability of children in lower-level classrooms; 2) Dissemination Recommendations: It would be beneficial to re-evaluate and assess the effectiveness of the collage drawing activity that utilizes the Drawing Matching and Sticking (M3) technique in enhancing the fine arts skills of young children in group B prior to dissemination. 3) Suggestions for Further Development: a. Early childhood education institutions can create additional collage drawing activities utilizing the Matching and Sticking Drawing technique (M3), tailored to the characteristics and developmental stage of children. b. Teachers and educators should utilize this technique as a playful activity during teaching and learning, in the form of engaging and secure games that align with the attributes of early childhood. The present development is limited to organizing collage drawing activities using the Drawing Matching and Sticking (M3)

technique, targeting children aged 5-6 years to enhance their fine arts abilities. The focus is on assessing the technique's attractiveness, convenience, and safety during play activities in art classes. The study has not reached a level of effectiveness, highlighting the need for further research. The future research aims to explore the effectiveness of implementing collage drawing work activities using the Matching and Sticking Drawing (M3) technique to develop the fine arts abilities of children in early childhood.

References

1. Ude, Y. (2020, December 28). Seni Adalah: Pengertian, Fungsi, Jenis dan Contohnya [LENGKAP]. Retrieved from <https://saintif.com/seni-adalah/>
2. Rofian, R., & Asrori, L. A. (2022). Seni Montase Dalam Pengembangan Media Pembelajaran Berbasis Articulate Storyline Mata Pelajaran SBDP Kelas IV Sekolah Dasar [Montage Art in the Development of Articulate Storyline-Based Learning Media for Art Education Class IV Elementary School Subjects]. *Wawasan Pendidikan*, 2(1), 1-10.
3. Sari, A. H. (2020). Studi Kasus Strategi Guru dalam Kegiatan Menggambar untuk Pengembangan Seni Rupa Anak Usia Dini [A Case Study of Teacher Strategies in Drawing Activities for Early Childhood Fine Arts Development]. *Jurnal Pelita PAUD*, 4(2), 150–155. <https://doi.org/10.33222/pelitapaud.v4i2.905>
4. Ridwan, W. O. D., Sugianto, B., & Gadafi, M. (2019). Meningkatkan Kreativitas Anak Melalui Kegiatan Menempel Dengan Menggunakan Kulit Telur [Improving children's creativity through sticking activities using egg shells]. *Jurnal Riset Golden Age PAUD UHO*, 2(3).
5. Musfiroh, T. (2008). *Cerdas Melalui Bermain (Cara Mengasah Multiple Intelligence Pada Anak Sejak Usia Dini)* [Smart Through Play (How to Hone Multiple Intelligence in Children from an Early Age)]. Jakarta: Grasindo.
6. Sumantri. (2005). *Model Pengembangan Keterampilan Motorik Anak Usia Dini [Early Childhood Motor Skills Development Model]*. Jakarta: Depdiknas
7. Dick, W., & Carey, L. (1996). *The systematic design of instruction*. 4th ed. New York

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