EDUARTS

Jurnal Pendidikan Seni
https://journal.unnes.ac.id/journals/eduart
E-ISSN: 2721-785X and P-ISSN: 22526625
Volume 15 Issue 2 Year 2026 Page 10-20

DEVELOPING FINGER COLORING MEDIA TO TRAIN THE COLORING SKILLS OF CHILDREN WITH DOWN SYNDROME

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Received: *25 January 2026*
Revised: *13 April 2026*
Accepted: *20 April 2026*
Published: *01 May 2026*

Abstract. The purpose of this research is to improve children's creativity and art skills through the exploration of watercolor painting based on local culture in the Omah Sinau Puntan Community, Ngijo, Semarang. The activity was motivated by the low ability of children to use watercolor as a painting medium and the high dependence on gadgets which reduced creative activities. The method used is a practice-based participatory approach through exploratory training using alternative media such as skewers, salt, candles, soap, tissues, and alcohol. The results showed a significant improvement in the aspects of technical skills, visual expression, and understanding of local cultural values. Children are more daring to experiment with colors, create unique visual effects, and understand the local story philosophy of "Bale Kambang". This program also has positive implications for improving cultural literacy and strengthening children's character through art media.

Keywords: Finger coloring, down syndrome, coloring skills, learning media, media development

1. Introduction

In this era, Down syndrome is no longer unfamiliar to the public. Down syndrome is a disorder that occurs on the twenty-first chromosome (21) and attacks a person's genetics while in the womb. Almost identical physical characteristics are characteristic of this chromosomal disorder, not only that, but also other characteristics such as disorders in fine and gross motor skills, and below average intelligence levels (Irdawati & Muhlisin, 2017). The results of previous research found on Google Scholar state that children with Down syndrome face a number of developmental challenges, including disorders in motor function. Motor skills play a very crucial role in carrying out daily activities. The hope is that children with Down syndrome will be able to carry out daily activities for self-care independently. Children with Down syndrome need to do motor training to support their academic abilities. However, it must be adjusted to the child's abilities. Motor development will be influenced by the nervous and brain capabilities of each individual.

Coloring is a basic activity that is easy, practical, effective, inexpensive, and fun to develop fine motor skills in children with Down syndrome. Coloring is a very enjoyable process for children aged 3 years and above. Choosing the right colors to color a blank drawing area is considered fun. Fine motor skills in children with Down syndrome should be trained as early as possible to minimize obstacles through coloring. This activity can be used as therapy or repeated activities to train fine motor skills in children with Down syndrome. Furthermore, coloring can be used as an activity that can train fine motor skills because children are easily attracted to bright colors. This can be an opportunity to incorporate it into their learning methods. Coloring for children aged 3 years and above also aims to develop patience, skill, and neatness. Children's motor skills develop through consistent and continuous hand practice, so that over time they are able to control and direct movements as desired. The neatness aspect is reflected when children color a predetermined area. Continuous experience makes them

increasingly adept at applying coloring tools because they have been trained (Putri, 2020). Meanwhile, the value of patience is formed through the experience of selecting and determining color compositions that suit their own judgment. As children grow older, they are able to color according to the original color of the object (Putri, 2020). Many dyes can be used in the coloring process, such as crayons, markers, colored pencils, watercolors, and food coloring. The drawing media used for coloring are also diverse, such as paper, Styrofoam, cardboard, and so on. Coloring tools are also very diverse, such as brushes, banana stems, or even children's fingers.

The finger coloring technique was chosen as the primary technique in this study because direct finger coloring is more appealing to children than conventional coloring tools. This activity provides a unique sensory experience as children directly experience the texture of the paint through their fingertips. The primary consideration for developing this research was the motoric limitations of children with Down syndrome in grasping standard coloring tools, such as crayons, colored pencils, and watercolor brushes. The term finger painting comes from English and consists of two words: "finger" meaning finger and "painting" meaning to paint. Conceptually, finger painting is a fine art technique that involves applying paint directly using the fingers or palms of the hands to media such as paper or cardboard (Novitasari & Mursid, 2025). This activity is important because it will provide a unique sensation to the child's fingers, so that the child can control their fingers and form the concept of movement to make letters (Ni'mah & Rachmawati, 2021).

2. Approach Method

The research method used in this study is a research and development design. This study uses the ADDIE model, which stands for Analysis, Design, Development, Implementation, and Evaluation. This is in line with the research being conducted, which will utilize finger coloring media developed from finger painting media. It will undergo trials to measure the effectiveness and feasibility of the developed media. It can be concluded that the ADDIE research model is a traditional development process that is general in nature in teaching and training with an indirect approach, namely the analysis of the relationship of one component with another coordinated through design, development, implementation, and assessment. This development model was chosen because it does not require a long time in the research process, so it does not disrupt teaching and learning activities in schools.

The research and development procedure for finger coloring media to facilitate therapy through the coloring method using the fingers of children with Down syndrome is as per the research and development flow using the ADDIE model. At this stage, a preliminary study was conducted by observing the conditions of teachers, children and learning facilities. This preliminary study was used to obtain aspects of needs analysis, including: (1) analyzing the applicable curriculum for children with Down syndrome in special programs on the aspect of coloring skills, (2) analyzing the material taught in training the coloring skills of children with Down syndrome. It is necessary to identify the right material that is systematically arranged in the finger coloring media, and (3) analyzing the coloring media used with the aim of choosing the type of coloring media that is suitable for use in coloring learning activities.

In addition to analyzing needs, the analysis stage also requires identifying problems. Children with Down syndrome experience difficulties controlling their fine motor skills, and fine motor therapy through coloring activities is rarely practiced. Common methods include coloring with colored pencils, crayons, and liquid paint. Coloring with children's fingers is more enjoyable because they directly touch the paint they will be using. Furthermore, the selection of bright colors increases children's interest and enthusiasm in practicing coloring. The design stage was conducted to develop a framework for developing finger coloring media.

The HVS paper media used in the previous study was developed into an A5-sized coloring book using 125 gsm linen paper with varying levels of image difficulty. Watercolors in the previous study were developed into child-safe paints. The paint is safe because it is easy to remove if it comes into contact with skin or clothing, and uses food coloring so there is no risk of accidental ingestion by children. The bowl container in the previous study was replaced with a special container with a sponge inside to dip children's fingers to stimulate children's fingers. All materials are packaged in one cardboard box to make it easier for educators or companions during coloring activities. The results of the needs analysis were carried out to create a product at the design stage. The results of this design plan were compiled and used as a reference in the development and implementation stages, as follows.

Table 1. Development Research Design

Learning Outcomes (CP)	Learning Objectives (TP)	Learning Objective Achievement Indicator (IKTP)
Art Form Phase A. Students are expected to be able to observe, identify, record, and visually represent information.	Students are able to observe, recognize, and identify the visual elements (lines and shapes) in their surrounding environment.	The students were able to add color to simple image objects.
Art Form Phase B It is expected that students will be able to recognize visual elements and apply basic skills or knowledge of materials, tools, techniques, technologies, and procedures to visually recreate these elements into artistic works.	Students learn to recognize, understand, and use the appropriate tools, materials, and procedures in creating their own works.	The students can create various color combinations and apply them to simple drawing objects.

Source: Raindriati, 2022; Slamet, 2022

The Media Finger Coloring exercise is designed with varying levels of difficulty, ranging from easy to challenging, progressing from simple images to more complex ones. This design aims to enhance the coloring skills of children with Down syndrome.

The development phase represents the initial product of finger coloring media, incorporating both a product framework and validation procedures. The key steps include: (1) Design development and implementation—this stage involves storytelling, design creation, and production of the finger coloring materials. The underlying design concept serves as the foundation for the product; the learning materials are created using CorelDRAW for graphic design and printed on 150-gsm linen paper. The cover features an attractive design with vibrant colors printed on art paper, which boasts a smooth surface and a 250-gram thickness. This 12-page coloring book features: page 1 outlines how to use the materials; page 2 includes the child's name; page 3 contains a circle; page 4 shows a square with curved corners; page 5 features a cloud; page 6 depicts an apple; page 7 shows a banana; page 8 illustrates a flower; page 9 displays a carrot; page 10 portrays a tree; page 11 shows a mushroom; and page 12 features a fish. The pages are colored with six distinct hues—red, green, yellow, blue, brown, and orange. Safe for children's skin, the paints are food-grade pigments that cause no irritation or allergies and fade easily on clothing. The container contains a sponge for applying paint and is placed inside a 30 x 15 cm cardboard box made of thick cardboard. (2) The instructions on page 1 describe the finger coloring activity: "This coloring book uses safe, child-friendly paints to develop coloring skills and enhance fine motor skills through foam inside a dedicated container. The illustrations are simple designs with minimal colors and varying difficulty levels." The media materials used include paint, a specialized container, and a coloring book. The usage steps are as follows: first, open the paint to select the desired color; then gradually pour the paint into the container; next, color the images using your fingers in the order specified on the book pages;

after completing the coloring, wait for the paint to dry before turning to the next page. (3) A key advantage of this product is its convenience for educators, parents, or caregivers in training children with Down syndrome in coloring skills, as all coloring materials are packaged in a single box, making it easy to use and time-efficient. (4) Expert validation: This stage assesses the effectiveness of the developed finger-coloring material and provides recommendations for improving the product before testing it on children. The expert validation involves assessments by art education specialists and instructional media experts. The media competency assessment tool for experts is used to collect data on media competency in coloring. (5) The refinement phase involves improving the product based on recommendations and feedback from media education experts and character education experts obtained through expert validation. (6) The final product is expected to effectively train children with Down syndrome who have difficulties with coloring skills using practical, efficient, and effective media tools. The evaluation phase is conducted through testing.

The research subjects involved in the data collection for this development included the initial needs analysis conducted among teachers at Muhammadiyah Elementary School No.9 in Malang City. The expert evaluation panel consisted of one learning media specialist with at least a Master's degree (S2), one arts education specialist with at least a Master's degree (S2), and the pilot subjects were two children with Down syndrome from grades 1 and 3 at the same school.

This development research data collection employed observation, interviews, documentary studies, questionnaires, and validation forms. The data analysis utilized qualitative descriptive methods to process notes, comments, and suggestions derived from validation forms, teacher response questionnaires, and observation records. Observation was employed to gather the required data; specifically, it involved participating in classroom lessons for one week, using photographs and recordings to document the coloring activities conducted among elementary school students with Down syndrome at SD Muhammadiyah 9 in Malang City, focusing on two-and three-dimensional art creation.

Data collection in research can also be conducted through interviews. Interviews serve as one method for data gathering, involving preliminary studies to identify specific issues and obtain clearer information from respondents (Sugiyono, 2019). The interviews were conducted to collect data from Special Tutor Teachers and students' parents regarding the learning activities involving the creation of two-and three-dimensional artworks led by the tutors, as well as the achievement of indicators related to coloring flat shapes, plants, and animals using fingers. The observation findings and interview results were supported by documentary research.

This development research aims to produce a valid, practical, and effective finger-coloring book product, as outlined in Table 2.

Table 2. Assessment Criteria, Instruments Used, Data Collected, and Respondents

The aspect being evaluated	Instrument	Observed Data	Response
The effectiveness of media-based finger coloring exercises in training coloring skills	Validation Sheet	The suitability of the finger coloring method as a teaching tool	Media Expert Expert in Art Education
The impracticality of using media-based finger coloring methods in training coloring skills	Survey	Teacher's Response	Specialized Mentor
The effectiveness of the "finger coloring" media in training coloring skills	Survey	The success of using finger coloring media	Class Teacher

Source: Sugiyono, 2019

The data from the development research were analyzed using two distinct data analysis techniques. First, qualitative analysis was employed, particularly for data derived from documentation and surveys, to assess needs and characterize student characteristics based on observations. Second, quantitative analysis was conducted.

This development study employed qualitative descriptive analysis to process data comprising notes, comments, or suggestions derived from evaluation results on validation sheets, teacher response questionnaires, and observation sheets. Additionally, quantitative descriptive analysis was utilized to extract scores obtained from these instruments and student learning outcomes. The data were presented as percentages and subsequently categorized. The product validity was calculated using the formula: $\mathrm{V-ah} = \frac{Tse}{Tsh}\ x\ 100\%$(Aryani et al., 2018), where V−ah denotes expert validity, Tce represents the empirical total score of the validator, Tsh indicates the expected maximum score, and 100% is a constant.

Table 3. Product Validity Criteria

Level of Achievement	Validity Level
25,00 – 40,00	Invalid; cannot be used.
41,00 – 55,00	Less valid; cannot be used.
56,00 – 70,00	It's quite valid and can be used after undergoing major revisions.
71,00 – 85,00	Valid; can be used with revisions.
86,00 – 100,00	Very valid; excellent for use.

Source: Aryani et al., 2018

The effectiveness of finger coloring media as a tool for training coloring skills can be measured using the CP, TP, and IKTP indicators. The effectiveness is assessed by classroom teachers based on children's coloring outcomes. The observation data reflect children's coloring proficiency using their fingers, evaluated alongside product usability. The product is deemed effective if 80% of children's coloring results meet the learning objectives, categorized as: (1) underdeveloped, (2) still developing, (3) developing, or (4) developing as expected.

3. Results and Discussion

3.1. Presentation of Trial Data

Based on the data collected from the validation and testing of the finger-coloring media development product for children with Down syndrome, which was designed to enhance coloring skills, the findings include expert validation results and product testing data. The expert validation data was obtained from two specialists: a learning media expert and an arts education expert. The testing data were collected from two classroom teachers. The trials were conducted on two children with Down syndrome. The complete testing data are described as follows.

3.1.1. Expert Validation Data

Evaluation Results and Expert Media Responses

The finger coloring media product designed for children with Down syndrome has been validated by educational media expert Eka Pramono Adi, S.I.P., M.Pd, a lecturer in Educational Technology at Malang State University. The validation was conducted on February 12,2020, and the media experts awarded a 97.50% rating for the product. They concluded that the media is highly effective for developing coloring skills in children with Down syndrome. Additionally, the experts recommended improvements including: (1) Researchers should foster children's enjoyment through both intrinsic and extrinsic motivators to encourage practice; (2) Media effectiveness should be evaluated through practical implementation; (3) The cardboard cover should include labels, a product description, and safety instructions. These recommendations will guide further

enhancements to the product. The improvements were implemented on February 17,2020. The outcomes of these improvements are as follows: (1) Researchers should foster children's enthusiasm through both internal and external factors to encourage their participation in practice, such as through interactive activities like asking them which image to color or which color to choose; (2) Media efficiency was also evaluated based on field implementation, not merely through media usage alone; the research process was conducted in accordance with the allocated time in the learning program design; and (3) Labels were applied to the cardboard boxes.

Evaluation Results and Expert Responses from Art Education Specialists

The finger-coloring media product designed for children with Down syndrome has been validated by an art education expert, Dr. Robby Hidajat, M Sn., a lecturer in Literature at Malang State University. The validation was conducted on February 14,2020. The art education expert's evaluation indicated a 68% approval rate for the product. The expert commented that the media product is highly effective for developing coloring skills in children with Down syndrome. Furthermore, art education experts have recommended improvements to the finger-coloring materials, including: (1) The illustrations should be more comprehensive and tailored to children's technical abilities; (2) The colors used are not sufficiently vibrant to capture children's attention—primarily basic colors would be preferable; (3) For higher-quality materials, detailed explanations should be provided to parents or accompanying learners, emphasizing that this is a workbook designed for use with parental or companion guidance. These recommendations from art education experts serve as the basis for enhancing the product development. The revisions were implemented on February 25,2020. The improvements include: (1) thickening the edge lines in the illustration and adjusting angles deemed too narrow; (2) labeling bottles with printed stickers matching their interior paint colors; (3) providing detailed product descriptions that briefly summarize the medium, its benefits, ingredients, and application steps.

3.1.2 Media Test Results

The trial results were conducted on two children with Down syndrome who were in Grade 1 and Grade 3 at an elementary school.

Class 1 Trial Results

The field trial for first-grade students was conducted from March 5 to 18,2020, at SD Muhammadiyah 9 in Malang City. The research sample was selected systematically, with a focus on children with Down syndrome. The data collection tool used in this trial was a questionnaire. The data gathered through classroom teachers 'questionnaires on March 20,2020, included evaluations, comments, and feedback on the finger coloring book. The teachers' evaluation rate reached 82%, indicating that the finger coloring material met practical criteria and was suitable for use after minor revisions. The teachers 'suggested improvements included: (1) adding usage instructions, (2) reducing the paint's water content to prevent it from being too thin, and (3) using paper of appropriate thickness. Based on these suggestions, the product was revised on March 25,2020. Since the required modifications were not particularly substantial, the improvement process could be completed in a relatively short time. The revised finger coloring materials were then printed and bound at the printing press on the same day.

Class 3 Trial Results

The pilot trial involving third-grade students was conducted from March 5 to 18,2020, at SD Muhammadiyah 9 in Malang City. Sampling was carried out systematically, with the study subjects being children with Down syndrome. Data collection during this phase utilized survey instruments. The survey results obtained from classroom teachers on March 24,2020, included evaluations, comments, and feedback on the finger coloring book. Teachers 'assessments

showed a 90% positive response rate, with no criticisms or improvement suggestions. The positive feedback indicated that the finger coloring material is highly effective in enhancing the coloring skills of children with Down syndrome and supporting learning objectives. The material's effectiveness was demonstrated through students 'work after using the book specifically, by dipping their fingers into the paint to color a key component of the product's practicality testing. The supporting data obtained from the teacher-guided intervention with children indicate that the product meets the criteria for being highly practical and achieves the minimum completion standards, falling into the category of "developing as expected."

3.2 Data Analysis

The product validity analysis was conducted by experts who assessed the validity level of the finger coloring product. The validating experts were media specialists and art education specialists. The product's validity was evaluated based on two criteria: (1) its suitability for the developed finger coloring materials, ease of use, and appropriateness for children with Down syndrome; and (2) its alignment with the specific needs and characteristics of children with Down syndrome. Data from the media and art education trials served as key supporting evidence for determining the product's validity and suitability. The validity assessment results were compiled based on percentages, feedback comments, and improvement suggestions provided regarding the finger coloring product.

3.2.1. Product Practicality Analysis

The practicality analysis of the finger coloring development product was conducted through a classroom teacher evaluation survey. This analysis aimed to assess the product's practicality and suitability for real-world use. The product's practicality was evaluated based on its ease of use from the teachers' perspective, with teacher feedback data serving as a key indicator. The combined evaluation scores from grades 1 and 3 showed an 86% rate, falling within the "very practical" category. These results demonstrate that the finger coloring material is suitable for implementation as a training tool for coloring skills among children with Down syndrome.

3.2.2. Product Effectiveness Analysis

The effectiveness of the finger coloring development product was assessed based on coloring results from trial sessions. This analysis evaluates the product's efficacy in achieving learning objectives through finger coloring activities. The product's effectiveness was measured by classroom teachers 'observations of children's coloring outcomes. Observation data indicate that children's coloring skills through finger coloring activities met the "expected developmental standards." Finger coloring techniques have proven effective as a training method for coloring skills in children with Down syndrome who already possess basic color recognition. Consistent coloring practice also contributes to the development of fine motor skills in these children. The completion rate reached 78.8% in Grade 1 and 81.2% in Grade 3, with an average completion rate of 80% for both groups. It can therefore be concluded that this finger-coloring activity is effective in training the coloring skills of children with Down syndrome, especially those who are already familiar with colors.

3.3 Product Revision

The finger coloring product was revised following validation by media experts and art education specialists, along with field trial implementation. The revisions were based on feedback and suggestions from respondents, with their evaluations and responses serving as the foundation for the product improvements. The development revision process involved three stages: (1) improvements based on media experts 'evaluations and feedback; (2) refinements guided by art education experts' assessments and recommendations; and (3)

adjustments incorporating feedback and responses from classroom teachers during field trials. These steps are detailed in the table below.

Table 4. Expert Media Responses and Recommendations

No	Suggestion	Revision
1	Developers need to foster children's interest through both internal and external stimuli, in order to cultivate their motivation to practice.	Creating a conducive and pleasant atmosphere during the research process by giving children the freedom to choose colors according to their preferences.
2	Media efficiency is assessed based on two aspects: the characteristics of the product itself and its implementation in real-world field conditions..	Apply the media according to the established operational instructions.
3	The lid of the cardboard box should preferably be labeled with a description of the finger coloring book, as well as safety instructions.	Add labels and safety notes

Source: Author, 2025

Table 5. Responses and Recommendations from Art Education Experts

No	Suggestion	Revision
1	The presented visualization appears monotonous and lacks variety; it would be better designed in a more comprehensive manner, taking into account the technical capabilities of the children.	Modifying several images by adjusting the capabilities of children with Down syndrome on a global scale.
2	The intensity of the colors used is not sufficient to attract a child's attention; therefore, it is recommended to use primary colors instead.	Assign color labels to the paint bottles.
3	If higher-quality materials require more detailed explanations for parents or those accompanying their children in learning, a specific note should be included stating that this book serves as a training resource for children and necessitates guidance from parents, dedicated accompanying teachers, or classroom instructors.	Providing an explanation about the finger coloring activity for parents or those accompanying their children in the learning process.

Source: Author, 2025

Table 6. Responses and Suggestions from the Class Teacher

No	Suggestion	Revision
1	It would be better to provide instructions for use	Provide instructions for use and combine them with the coloring book
2	The paint is too watery	Thicken the paint by not mixing it with water
3	The paper used is too thin	Replace the paper with a thicker type

Source: Author, 2025

3.4 Results of the Development of the "Finger Coloring" Media

The final product is an A5-sized finger-coloring book featuring 125 gsm linen paper, complete with a 3 cm diameter circular container containing a sponge to enhance fine motor skills in children, along with six types of child-safe paints. All components are packaged in a 30 x 15 cm cardboard box. The product development follows the ADDIE model, beginning with an analysis of the needs of children with Down syndrome. The findings indicate that coloring activities promoting fine motor development require practical and effective materials to support children, teachers, and parents in teaching coloring skills to these children. The packaging is made from eco-friendly 30 x 15 cm thick cardboard. The packaging's exterior features an informative label containing the cover, a brief description of the finger-coloring

medium, adult supervision warnings, material specifications, and an explanation of the product's purpose for children with Down syndrome aged 5–10 years, helping parents or teachers understand its functions and usage instructions. The paint is made from food-based pigments and comes in a 10 ml drop bottle. These food-based pigments contain harmless ingredients even if accidentally ingested or come into contact with a child's skin. Their properties allow easy removal with soap and water, whether from the skin or clothing, making it convenient for caregivers to supervise finger-coloring activities. A dedicated 3 cm-diameter container is provided for dipping the child's finger into the paint prepared by the caregiver. The interior sponsor of the container is designed to provide fine motor stimulation through children's finger touches. This finger-coloring learning material serves as a training method for children with Down syndrome who already possess color recognition skills.

This approach optimizes the color-coding abilities and fine motor skills of children with Down syndrome. Consequently, the illustrations on the finger coloring materials are specially designed. The coloring book consists of 18 pages: (1) The first page is the cover, featuring an attractive design with vibrant colors printed on 125-gram glossy paper. This type of paper features a smooth surface with a cover thickness of 250 grams. The second page contains the tools, materials, and instructions for using the coloring book. The subsequent pages present 15 simple illustrations of varying difficulty levels: the first is a circle, the second an oval, the third a square with rounded corners, the fourth a cloud, the fifth a star, the sixth a flower, the seventh a carrot, the eighth a tree, the ninth the sun, the tenth a cherry blossom, the eleventh an umbrella, the twelfth a mushroom, the thirteenth a butterfly, the fourteenth a turtle, and the fifteenth a mole. The final page includes the author's profile and motivation. (5) The paper used in this product is white linen paper, A5 size, with a thickness of 125 gsm. (6) The paint comes in six colors: red, green, yellow, blue, brown, and orange. This paint is safe for children's skin as it contains food-grade pigments, causing no itching or allergies and easily fading on clothing. (5) A container with an inner sponge for applying the paint, and (7) a 30×15 cm cardboard box.

4. Conclusion

This study assessed the effectiveness and practicality of a finger coloring activity designed to enhance coloring skills in children with Down syndrome, through field testing and post-training questionnaire evaluations conducted after 10 days of daily 30-minute coloring sessions. The effectiveness and usability of the activity were evaluated by first-grade and third-grade teachers. The questionnaire feedback yielded several recommendations, which were subsequently revised by the researchers. The first recommendation involved providing clear usage instructions alongside the coloring book. The second recommendation was to use paint without water mixing to achieve a thicker texture. The final recommendation from the teachers was to replace plain drawing paper with thicker linen paper to minimize paint bleeding. This finger coloring activity is designed not only to enhance coloring skills but also to improve the fine motor skills of children with Down syndrome. The activity promotes better fine motor development; the selected paper has a textured surface, and the container used for pouring paint is lined with a sponge, allowing children to directly touch the paint and sponge when dipping their fingers. Fine motor skills significantly influence a child's intelligence, social skills, and emotional well-being. Classroom teachers' evaluations confirm that finger coloring materials effectively support coloring practice for children with Down syndrome, making them suitable for use both at home and in school. Post-coloring assessment surveys indicate that children meet the minimum completion criteria.

Conflict of Interest Declaration

The development of a finger coloring media for training coloring skills in children with Down syndrome was conducted independently and objectively, with no personal or professional conflicts of interest that could compromise the study's objectivity. No commercial collaboration agreements were established regarding the research outcomes. This study aims to advance academic knowledge, particularly in special education. The data and information presented herein represent the results of honest, objective, and accountable research.

Funding Information

None.

Acknowledgements

Our sincere gratitude goes to the experts who assisted in validating the research materials for this learning media development project, to the Principal of SD Muhammadiyah 9 Kota Malang for granting permission to conduct the research, and to the teachers of grades 1 and 3 for their invaluable support throughout the research process.

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