



Development of Styrofoam Media as Puzzles to Develop Fine Motoric Children Aged 3-4 at Metro

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Abstract

Fine motor skills are movements that use fine muscles or certain parts of the body, which are influenced by an agreement to learn and practice. This study aims to determine the development of Styrofoam media as a puzzle to develop fine motor skills for children aged 3-4 years at TPA 01 Ma'arif NU Metro Lampung. Types of research and development (research and development). The development procedure according to ADDIE theory which consists of five stages. Development of Styrofoam media as a puzzle to develop fine motor skills at TPA 01 Ma'arif NU Metro Lampung with the following steps: 1) Beginning children pay attention to puzzles that are still neat. 2) Introduce the puzzle pieces. 3) Remove and shuffle the puzzle pieces. 4) Ask the child to rearrange the puzzle pieces into a complete unit. The use of Styrofoam media has a very decent category, this is based on media experts getting a percentage of 100% with the "Very Eligible" category, so it can be used for fine motor development of children aged 3-4 years at TPA 01 Ma'arif NU Metro Lampung.

Keywords: *Styrofoam, Letter Puzzle, Fine Motor.*

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INTRODUCTION

Efforts to develop fine motor skills in early childhood can be done in various ways. These efforts include through development that provides opportunities for children to explore through play so as to open up space for children to be able to develop various motor skills. One of the efforts made is by developing learning media.

Media comes from the Latin word "medium" which means "between", a term that denotes anything that carries information between the source and the recipient

(Pangastuti 2019). Learning media are everything that can be used to distribute learning materials so that they can stimulate the attention, interests, thoughts and feelings of students (students) in learning activities to achieve certain learning goals.

Styrofoam is a plastic material that has special properties with a structure composed of low-density granules, has a light weight, and there is a space between the granules filled with air. Styrofoam material can be used for several media such as coloring media, food chain media, smart ladder media, summation and puzzle media.

Puzzle game is a media game in the form of puzzles or pairs of pieces of shape, which will later be assembled into a unified whole (Hasanuddin 2018). The author chose the puzzle game because this game is very popular, and familiar, especially among children. In general, puzzle games are very interesting games for children, and children are already familiar with this game. Even from 3-4 years old, they are familiar with puzzle games. With a little direction and examples, he can develop cooperative social skills by trying to arrange shapes, colors or logic with his friends.

Fine motor skills are movements that use smooth muscles or certain parts of the body, which are influenced by an agreement to learn and practice (Rudiyanto 2016). Fine motor skills are carried out by certain body parts that do not require great energy but only involve some of the finer parts, namely grasping, inserting objects into holes, imitating paris, drawing, folding, cutting, sticking, weaving and arranging. Fine motor development will train children to be skilled in using their hands and fingers and coordinating their eyes in a balanced way. The following are the Standards for Achievement of Fine Motor Development for Early Childhood Age 3-4 years, such as: Pouring water, sand or seeds into containers (bowls, buckets), Putting small objects into bottles (pieces of sticks, pebbles, seeds). Meronce a fairly large object. Cut the paper following a straight line pattern.

METHODOLOGY

The Styrofoam learning media product that will be developed aims to produce an appropriate educational game tool product for children aged 3-4 years at TPA 01 Ma'arif NU Metro Lampung. The developed media products aim to overcome learning problems that exist at that age. Therefore, the research was conducted using research and development methods or in English called *Research and Development* (R&D), namely research methods used to produce certain products and test the effectiveness of certain products. Sugiyono explained that R&D is research that is used to produce certain products, and test the effectiveness of these products (Sugiyono 2010). Learning products developed can be in the form of modules, multimedia, educational game tools, learning videos, learning audio and others so that they can function in the wider community, especially in the field of education.

RESULTS AND DISCUSSION

The results of this study are not only to develop an existing product, but also to find knowledge or answers to practical problems. The product developed in this

study is styrofoam media as a puzzle to develop fine motor skills for children aged 3-4 years at TPA 01 Ma'arif NU Metro Lampung.

The product that has been developed is then validated by several experts before being tested, validation is carried out by 2 experts, namely one media expert who is an expert in his field.

1. Product Validation

a. Media Expert Assessment Results Media

expert validation in this case is a lecturer at the Ma'arif Islamic Institute (IAIM NU) Metro who has Early Childhood Education qualifications, so that the results of the media that will be developed are in accordance with what researchers expect and can be utilized by early childhood . As for the media expert, namely Mrs. Masrurotul Mahcepat M.Pd.I. The validation results from media experts can be seen that Styrofoam media as a puzzle gets a percentage of 100% with the "Very Eligible" category.

b. The results of the Expert Assessment of Materials

Validation of the material in this case is a lecturer at the Ma'arif Islamic Institute (IAIM NU) Metro who has the qualifications of Early Childhood Education, so that the material on the media that will be developed is in accordance with what researchers expect and has an impact on children's development. Material Expert, namely Mr. Dr. Muhammad Yusuf, M.Pd. The validation results from material experts can be seen from Styrofoam media with the feasibility of getting a percentage of 100% with the "Very Eligible" category.

2. Product Trial

Early childhood is a very decisive period for the development and further growth of children, because it is a sensitive period and a golden period in a child's life. Some aspects of child development that can be developed for an early age include religious moral, social emotional, cognitive, language, physical, motor and artistic aspects. Given the many aspects of development that must be possessed by children, the stimuli and stimuli given must be appropriate. One of them is motor development, namely fine motor skills in children aged 3-4 years.

Fine motor skills are the ability to control movement through coordinated activities of the nerve center, nerves, and muscles such as the movements of the fingers and hands (Ria Susantia, Syafrimen Syafrilb, Rifda El Fiahc 2018). The statement can be concluded that, children's fine motor skills, especially self-help skills that are first carried out, are important because the initial foundation in the function of self-help skills is new to the next stage, such as children becoming members in social groups, in peer play groups and then finally children are ready to enter the world of school so that what they do can be achieved optimally.

The following is the Daily Learning Implementation Plan (RPPH) using styrofoam media as a puzzle, Kec. Purwosari namely:

a. Theme

This research was conducted on Wednesday, December 1, 2021 for children aged 3-4 years at TPA 01 Ma'arif NU Metro Lampung with the theme "Animals / Pets (Elephant)".

- b. Material in Activity
 - 1) Pray before and after study.
 - 2) Identify the parts of an elephant.
 - 3) Introduce the functions of body parts.
 - 4) Sing.
- c. Materials included in habituation
 - 1) Grateful for God's creation.
 - 2) Saying hello is included in the activity soup.
 - 3) Prayer before learning and getting to know the rules in the opening soup.
 - 4) Returning the learning tools included in the soup after carrying out the activity.
- d. Tools and Materials
 - 1) Origami with pictures of shapes for coloring activities.
 - 2) Glue, Styrofoam, cardboard and cater.
 - 3) Cut Styrofoam with animal shapes as well as for pasting activities.
- e. Opening Learning Activities (15 minutes)
 - 1) Sing.
 - 2) Prayer before studying.
 - 3) Make the rules of the game.
 - 4) Discuss body parts, functions and how to properly care for them.
 - 5) The discussion aimed at being grateful to Allah SWT for what has been given to his creatures.
 - 6) Discuss the activities that will be carried out, namely knowing the parts of the body and their functions.
- f. Core (45 minutes)
 - 1) The teacher invites the children to name the parts of the elephant's animal body.
 - 2) The teacher removes the puzzle pieces one by one and the children are asked to answer.
 - 3) The teacher invites the children to ask questions.

Children do activities with the teacher, namely playing elephant picture puzzles:

- 1) The teacher removes the puzzle pieces from their place.
 - 2) The teacher randomizes the puzzle pieces.
 - 3) The teacher asks the children to rearrange the puzzle pieces.
- g. Rest

Wash hands, eat and drink
- h. Closing (15 minutes)

In the closing activity, the things that will be done are as follows:

- 1) Question and answer today's activities.

- 2) Ask how you feel today.
- 3) Sing.
- 4) Informing tomorrow's activities.
- 5) Pray after study.

Based on the Daily Learning Implementation Plan (RPPH) at TPA 01 Ma'arif NU Metro Lampung, Kec. Purwosari, researchers can describe the steps for using Styrofoam media as a puzzle, as follows:

- 1) Show children a styrofoam puzzle picture.

Based on the results of observations on August 1, 2021 at TPA 01 Ma'arif NU Metro Lampung, researchers observed students in order to obtain information about various aspects of development and bring learning according to their needs. based on the following picture:

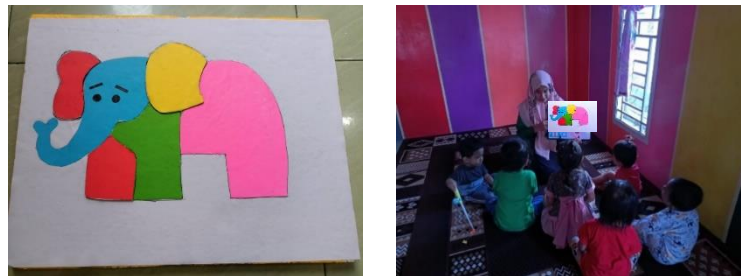


Figure 1 Styrofoam for Puzzle

Based on the picture above, after the researcher introduced the parts of the elephant one by one, the teacher asked the children to answer what the teacher indicated.

- 1) Remove and shuffle puzzle pieces from their place.

Based on observations on August 3, 2021 at TPA 01 Ma'arif NU Metro Lampung, researchers condition the children to classify children based on their parts. based on the following picture:

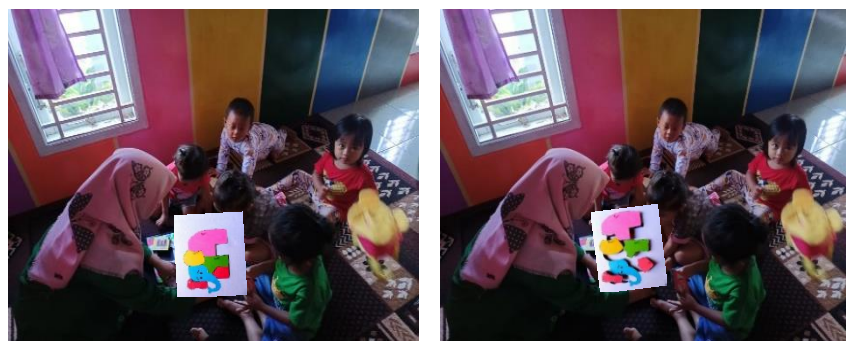


Figure 2 Removing the Puzzle Pieces

Based on the picture above, the children followed the researcher to release and shuffle the puzzle pieces.

1) Ask the children to put the puzzle pieces back together.

Based on observations, on August 5, 2021 at TPA 01 Ma'arif NU Metro Lampung, in this observation the children were not able to arrange/move the puzzle pieces in place.



Figure 3 Putting Puzzles One By One

Based on the picture above, the children rearrange the puzzle pieces through the direction of the researcher. The results of all the observations above (1) From showing pictures of styrofoam puzzles, the children are not yet enthusiastic, because there is no media, so the researcher brought and showed them during the interview and showed the children about the styrofoam puzzle pictures of elephants with different colors, children also enthusiastically curious with great enthusiasm (2) The children help release and shuffle the puzzle pieces and (3) The children help rearrange the puzzle pieces into a whole unit.

CONCLUSION

Based on the trial at RA Ma'arif 1 Metro the effectiveness of Styrofoam media to develop children's fine motor skills is very good. Because puzzle games are educational game tools that can stimulate children's motor skills by disassembling pairs of puzzle pieces based on their partners. Here, the researcher asked several children to try to play puzzles, and the effectiveness of this puzzle game was very visible in playing, the children could take the puzzle out of its place, shuffle, and rearrange the puzzle according to the pieces.

ACKNOWLEDGEMENT

Thank you to all the principals and teachers board of TPA 01 Ma'arif NU Metro Lampung who have supported and allowed to carry out our research. Not to forget also we would like to thank JCD: journal of childhood development for publishing our research in the journal.

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