

Pedagogical Approaches to Enhancing Fine Motor Skills in Early Childhood through Play-Based Activities

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ABSTRACT

Early childhood is a critical period of rapid physical and mental development, often referred to as the "golden age" due to the significant potential for growth and learning. During this stage, it is essential to stimulate children's abilities through intentional and developmentally appropriate pedagogical practices. Fine motor development, which involves the coordination of small muscles and hand-eye coordination, plays a vital role in children's overall growth and readiness for further learning. This literature-based study explores pedagogical approaches aimed at enhancing fine motor skills in early childhood through play-based activities such as coloring, collage-making, and stringing beads. Coloring encourages children to express themselves creatively while improving their grip and precision. Collage-making fosters hand coordination and sensory exploration by assembling various materials into visual compositions. Stringing beads enhances concentration, sequencing, and finger dexterity. These activities demonstrate how play, when guided by pedagogical principles, can effectively support fine motor skill development in early learners.

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1. INTRODUCTION

Early childhood is an individual who is undergoing a very rapid process of growth and development, both physically and mentally. At this time it is very important to develop and stimulate potential in children, therefore early childhood is called the *golden age* where children have the potential to learn many things. Montessori in Hainstock (1999:12) states that in the range of birth to 6 years old, children experience *the golden years* which are childhood in which children begin to be sensitive/sensitive to receive various stimuli.

So in that golden age, children will become sensitive or sensitive to stimuli, whether it is in the form of touch and so on. At this time, children will easily receive stimuli from the surrounding environment, especially if children are good imitators of what they see.

Law Number 20 of 2003 concerning the National Education System Article 1 point 14 states that PAUD is a coaching effort aimed at children from birth to the age of 6 years which is carried out through educational stimulation to help physical and spiritual growth and development so that children have learning readiness to enter further education. This law mandates that education must be prepared in a planned and holistic manner as the basis for children to enter further education.

As for Sumantri's (2005) opinion, it is stated that motor development is a change in movement produced by children that connects behavior and children's movement ability. The same concept is explained by Hurlock (1978:150), that motor development is the development of physical movements through physical activities through the activities of the nerve centers, nerves and muscles that are coordinated. So motor development is a coordinated activity between the nervous system, muscles, brain and spinal cord. Motor development is a process that is in line with gradual and continuous aging, where individual movements increase from a simple, unorganized, and unskilled state to a complex and well-organized mastery of motor skills.

The problem that is often encountered today is the lack or still weak of children's fine motor in moving fingers, moving hands and also not being able to coordinate their eyes when doing an activity. Children are still lacking in doing activities related to fine motor skills such as collage, coloring and cutting. There are many other factors that cause a lack of fine motor in children. One of the reasons is the lack of creativity of teachers in the process of delivering material, the lack of attractiveness of the methods used when carrying out activities, and the materials used are not creative.

According to the explanation above, fine motor skills can be improved through several activities such as coloring activities, collage, and meronce. With some of these activities, it is hoped that it can improve fine motor skills in children.

2. METHOD

The type of research that the researcher uses in this study is a literature study. The literature study method is a series of activities related to the method of collecting library data, reading and recording, and managing research materials (Zed, 2008:3).

Literature study is also called literature study which means a series of activities related to the method of collecting library data, reading and recording and processing research materials. Literature studies are conducted by researchers before the researcher goes directly to the field to find sources for research, but it is done after the researcher finds a topic about the research that he wants to develop.

The data collection in this study came from journals, scientific articles, and other reading materials related to fine motor skills in children through collage, coloring, and scissors activities. After the researcher read and understood about several journals in the aspect of child development, the researcher was interested in activities that were able to improve fine motor skills in children.

The data analysis technique carried out is an analysis method to obtain correct inferences. In the analysis, selection, comparison, merger, and selection will be carried out so that relevant ones are found (Sabarguna, 2005).

3. RESULTS AND DISCUSSION

Regarding Early Childhood Education which is enshrined in Law Number 20 of 2003 concerning the National Education System Article 1 paragraph 14 emphasizes that early childhood education is a coaching effort where it is necessary to carry out coaching that is shown to children born up to the age of 6 years which is carried out through the provision of educational stimuli to help physical and spiritual growth and development so that children have readiness to continue further education.

The goal of early childhood education is to achieve maturity in all aspects of development, both aspects of religious and moral values, physical motor (gross motor and fine motor), cognitive, language, social-emotional, and Pancasila values. To realize these goals, appropriate stimulation is needed in developing the abilities of all aspects of child development. Therefore, from an early age a child is important to be guided, educated, and trained so that all aspects of child development can develop according to their age, especially in the aspect of motor development.

Syamsu Yusuf LN said that development can be explained as a gradual and continuous change of the organism from birth to death. The definition of this development is the systematic, gradual, and continuous change experienced by individuals or organisms towards the level of maturity, both physical and psychological. Physical development in children is not always the same, there are children who develop quickly and there are also children who experience delays.

One of the aspects that is needed in children's lives is the aspect of motor development. There are 2 types of motor development aspects in children, namely gross motor and fine motor. According to (Decapario, 2017, p. 14) gross motor development is the development of children in moving using large muscles or all limbs which is influenced by the maturity of the child itself. Gross motor requires more energy, for example running, jumping, walking, and kicking. Stating that gross motor development is the development of children in moving using large muscles or entire limbs that are influenced by the child's own maturity, for example running, jumping, walking, and kicking.

According to (Decapario, 2017, p. 14) fine motor development is the development of children in moving using a small part of the body's muscles. This movement does not require effort, but there is coordination between the eyes and hands. Fine motor development is the result of children's learning exercises by paying attention to the maturity of the function of the child's own motor organs. For example, folding, shearing, squeezing, and meronce. Stating that the development of fine motor skills, i.e. the development of children in motion using small body muscles that are more coordinated between the eyes and hands, e.g. folding, cutting, pressing and cutting.

There are several activities that can improve fine motor skills in children, namely:

3.1 Coloring Activities

Coloring is an activity that is popular with early childhood with coloring activities can be a medium for children's expression by choosing colors that suit their desires which may be different from the choices of other friends, (Jumrah 2019). Stating that coloring is an activity that early childhood likes, coloring can be a means of expression for children by choosing colors according to their desires, which may be different from the choices of other friends.

In coloring activities, each child has different abilities in terms of coloring, there are children who can color with different color combinations, and some who color one object with only one color. Coloring in children aims to train skills, neatness, and patience.

The age factors that affect coloring activities in children according to their age stages, namely:

1. Age 3 years

At the age of 3 years the child can only move his hands to draw small lines, because at the age of 3 years the child can only hold crayons and there must still be parents.

2. Age 4 years

At the age of 4, the child can already hold a pencil with his finger, then the child can move his hand to form a long line and has followed the curve of the line in the picture and the child. Here children can also choose their favorite colors to use as colors for drawing.

3. Age 5 years

At the age of 5 years the child can already paint colors and is able to choose several colors, usually this 5-year-old child tends to already have a favorite color and will be mixed with other colors so that at the end of coloring there will be more than one color chosen.

Age 6

At the age of 6, children already know more about color choices and can already draw the given pictures, at this age it can be seen that children can already draw or paint, because 6-year-old children already have new ideas.

There are several techniques or ways to teach children to color pictures, including:

1. The first step is to first introduce primary colors such as blue, red, and yellow.
2. Invite children to color simple pictures such as triangles, squares, and rectangles, while introducing children to shapes.
3. The next stage is that children are invited to color animals or plants that they like, so that children are invited to color.
4. If the child is satisfied with the coloring activity, follow the rules and color the picture well so as not to deviate from the line, make children understand that if the coloring is damaged, it will reduce the beauty.
5. Invite children to mix colors, experiment with children so that children feel happy when they find new colors by mixing these colors. This can encourage children to continue coloring. For example, mixing all colors results in black.
6. Don't force the child to continue doing the activity, if you are bored with the activity, let the child do other activities first, after the child feels happy again, then invite them to color again.

3.2. Collage activities

Collage is the art of pasting images or patterns using various materials, such as paper and fabric, glued to the background. Meanwhile, according to Nicholson, a collage is an image made from pieces of paper or other attached materials. Based on the above opinion, it can be concluded that collage is the process of combining several pieces of material in the form of paper or other materials that stick to the surface of the paper to form an image. According to Sumanto (Effi Kumala sari, 2018) collage in English "*Collage*" comes from the word "*Coller*" which means glue. Meanwhile, in terms of collage, it is an application creation made by combining painting techniques by attaching certain materials.

According to Ramdhania, the benefits of collage activities in addition to making children happy, collage also has other benefits including:

1. Fine motor training

Playing collage trains the skills of the fingers, the child so that when writing the child's fingers are flexible.

2. Boosting creativity

Playing collages trains children to be creative in choosing materials, arranging colors, contours and combining them according to taste, so as to produce beautiful results.

3. Practice concentration

Playing collages is exciting for children, so that children will focus when completing tasks. And over time the child will get used to concentrating.

4. Getting to know the colors

Playing collage combines various colors, so that children will get used to combining colors that match according to their desires.

5. Getting to know the types and properties of shapes

Each material has a different roughness and smoothness. By using. By using various materials, children will know a lot and can shape them.

6. Practice perseverance

Completing a collage work takes enough time, it can't be rushed. So children can practice perseverance to produce beautiful works and be trained to be patient.

7. Train confidence

When the work is finished, of course the child will feel proud. Creativity is increasingly honed so that confidence increases. There is no fear or shame.

The various types of materials or media used as materials in making collages in kindergarten are certainly different from materials in general, but the principles used are the same. The difference is that the raw materials used for Collage learning in kindergarten/PAUD will be simpler and less dangerous for children. In general, the types of collage raw materials can be grouped into:

1. Natural Materials

Natural materials are materials that are sourced from nature, such as leaves, dried flowers, shells, rocks, grains, and others.

2. Processed Ingredients

Processed materials are materials that are processed from existing materials, such as: paper, plastic

3. Used Materials

Used materials are leftover materials that are no longer used but can still be reused and are found in the surrounding environment, such as used magazines, used newspapers, candy wrappers, bottle caps, cans, cardboard and so on.

3.3. Meronce Activities

According to (Hajar, et al in Rosidah 2018) meronce is a technique to make wearable/decorative objects from beads, grains or other materials that can be perforated with a skewer so that it can be used. Meronce activities are one of the materials that can be given to early childhood. Stating that meronce is a technique of making items that can be used from beads, grains or other materials that are perforated and then inserted using a rope or skewer. Meronce activities are one of the materials that can be given to early childhood.

Meronce activity is one of the learning media in the form of making ornamental objects or wearables which is carried out by arranging parts of material that are perforated or deliberately perforated using the help of thread, rope and the like. Meronce can also use used goods in the surrounding environment. Meronce is arranging objects or stringing objects together using a string. The shape that children adopt is also different so that it can train children to distinguish shapes and colors.

Distinguishing shapes and colors is the first step for children to observe, learn and group what they see. Characters or characteristics that are easily recognizable by children,

so that they can stimulate children to explain what they see around them and can see the world around them that is full of diversity.

According to Rilia (2012), meronce activities have several stages in their application, namely:

1. Meronce based on color. This stage is the lowest stage in meronce activities. The child inserts the thread into the hole based on the same color, for example the color blue.
2. Meronce based on shape, this is one of the steps forward, namely that children can recognize shapes. There are various shapes in meronce, for example round or cube shapes.
3. Based on color and shape, children begin to be able to combine which ones have the same shape and the same color. Children develop their creativity with shapes and colors that children like.
4. Meronce based on color, shape and size. A stage that is quite difficult for children because it begins to combine three components at once.

The benefits of meronce are fun activities for children. In addition, the benefits of meronce are one of the fine motor development activities, the activity of knitting by making strands of perforated materials that are held together with rope or thread. The benefits of meronce for children are:

1. Practice concentration
2. Stimulate children's creativity
3. Practice eye coordination
4. Train the child's fingers
5. Getting to know the concept of color

The learning provided by the teacher is in the form of activities through meronce media that can hone children to classify shapes with meronce media in the form of geometric shape beads, at first the child does not know the shape of the meronce he is playing, but during the process of the child inserting the meronce shaped like a circle, box, the teacher also explains the shapes when the child inserts the meronce with a thread or rope whose ends have been knotted so that they can hold the meronce so that it does not fall. So that children can understand and carry out these activities by grouping their colors, shapes and sizes.

4. CONCLUSION

Motor development is an ability that involves small muscles as well as eye and hand coordination. The activities that can improve fine motor skills in early childhood are Coloring activities are activities that are popular with early childhood with coloring activities can be a medium of children's expression by choosing colors that suit their desires which may be different from the choices of other friends.

Collage activities are both playful and artistic activities that can develop children's potential, which requires the help of parents/teachers in the process of applying this collage activity to children, so that it can trigger children's creativity while developing children's psychology positively. The materials that are often used in collage art are very varied such as paper, fabric, metal, wood, dried plants, grains, or other materials that suit the needs of the maker. Meronce activity is one of the learning media in the form of making ornamental objects or wearables which is carried out by arranging parts of material that are perforated or deliberately perforated using the help of thread, rope and the like. Meronce can also use used goods in the surrounding environment.

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