Finger Painting Learning to Stimulate Motor Development in Early Childhood

Floriana Lali Basa ¹✉, Joko Sutarto², & Deni Setiawan ²

¹Universitas Nusa Cendana, Nusa Tenggara Timur, Indonesia
²Pascasarjana, Universitas Negeri Semarang, Indonesia

Abstract

The process of increasing of motor skills can be done with finger painting activities. The importance of finger painting activities on the development of fine motor and gross motor skills can help improve children's creativity and art. Finger painting in school is drawing activities by using fingertips and colour pulp directly to darwing media. The purpose of the study is to analyze the development of gross motor and fine motor skills in finger painting activities. This research uses qualitative research methods. The approach model used is a case study with 37 childrens of St. Arnoldus Yanssen and Aegela kindergartens the source of research data were, head of kindergarten. Teachers and parents. Data collection techniques are observation, interview, documentation. The criteria used in the research are underdeveloped (UD), beginning to develop (BD), very well developed (VD), and develop as expected (DE) according to Permendikbud about National Standards For Early Childhood Education. Data obtained from kindergarten Arnold Yanssen show that indicators using the right and left hand tendto lead criteria beginning to develop (BD). Data obtained from samples at the Aegela Kindergarten show the highest level of achievement is beginning to develop (BD) in skilled indicators using the right hand and left hand while for the underveloped achievement (UD) the highest in drawing indicators according to his ideas and doing detailed body movements . The results of this study are gross motor development and fine motor development of children in two kindergatens tend to lead to the criteria of beginning to develop for gross motor on the indicator using the right hand and left hand, while fine motor on the indicator self expression through drawing motion. Teachers in kindergarten need to increase knowledge about the development of children's gross motor and fine motor skills, as well as finger painting. It is intended that the teacher can see the full development of the child according to age and then give the children the right stimulus.

✉Correspondence address:
Jalan Kelud Utara III, Petompon, Gajahmungkur
E-mail: florianabasa@gmail.com

Article Info

History Articles
Received: December 2019
Accepted: January 2019
Published: Maret 2020

Keywords:
finger painting, motor development,early childhood education
INTRODUCTION

Early Childhood Education is education that is organized with the aim of facilitating the child's overall growth or emphasizing the development of all aspects of the child's personality. Early childhood education is the provision of efforts to stimulate, guide, nurture and provide learning activities and skills to children, (Suciati, Ketut, & Suarni, 2017). Early childhood education has several aspects of development. One aspect of development, that is not yet as expected, and need to be developed, is gross motor skills. Gross motor development in early childhood is experiencing a rapid period to grow and develop, where there is maturation of the functions of the physical organs. For this reason, it is necessary to provide the right stimulus for the gross motor development (Astria, Suadnyana & Wiyasa, 2015).

Early childhood is commonly recognized as The Golden Age, which is at that period of time, children experience very rapid development. At this time children have enormous potential in the process of development; children can optimize all aspects of their development, such as cognitive, physical, social and moral aspects. As the one of formal education, Early Childhood Education and or kindergarten is expected to be able to help students develop various potential, both psychological and physical abilities, including motor skills.

Physical motor development activities are activities that lead to the development of gross motor and fine motor skills of children. According to Hidayanti (2013), the main elements that play an important role in stimulating children's motor development are teachers and parents. Therefore, the role of educators to develop children's skills especially in motor skills is very important. Educators must also be able to create a pleasant learning atmosphere, understand the psychological condition of children, and create a comfortable learning environment.

The learning process in PAUD is emphasized on the development of thought processes and creative processes that are appropriate to the level of intelligence possessed by children. The quality of a child's development is determined when they are on the age of five.

The process of increasing children's motor skills can be done with finger painting activities. Finger painting at school is meant by the activity of drafting a color mixture using fingers and palms. This activity can also enhance the development of fine motor and social emotional aspects of children and the recognition of the concept of color in children. This is supported by the results of research by Risanti (2013) that there is an increase in the social emotional development of children through concrete media-assisted finger painting activities. Also, Karuniawati's research results (2017) that finger painting influences the ability to recognize color concepts in children. Through finger painting activities, children are able to imitate and respond. So that, in learning activities, children are ready to learn, in which, they have been able to understand instruction or direction being given by their teacher.

Based on the preliminary study that was conducted at Kindergarten St. Arnoldus Yanssen, it was found that, finger painting activities conducted in this kindergarten using body lotion and coloring materials. So far, interview results that obtained from one of the kindergarten teachers teaching in Arnold Yanssen Nangaroro and TK Aegela stated that in finger painting activity, children used body lotion. Children are comfortable using the body lotion because of its soft texture and fragrant aroma. Besides that, it does not leave a color stain on a child's finger because of the oily composition of the body lotion.

Finger painting activities are often used in each theme. Examples of activities that can be done to stimulate the development of gross motor and fine motor skills are free painting, coloring using fingers, handprints, painting shapes and making circles. In preliminary observations, researcher found that, the process of developing gross motor and fine motor skills in finger painting activities at TK Arnoldus Yanssen Nangaroro and TK Aegela have not
been fulfilled to the assessment standard based on indicators development of child in Permendikbud 137 in 2014.

Several studies related to finger painting have been carried out in recent years. Kurnia's research results (2015) showed that the results of early childhood creativity in painting in the group of children who were given finger painting activities were higher than the group of children who were given brush painting activities, and there was a correlation between painting activities and fine motor development on the creativity of young children early in painting. The results of research found by Astria, Sulastri, & Magta (2015) that the application of play methods through finger painting activities can improve the fine motor skills of children. A similar study was found by Kadek, Surya & Ayu (2018) that finger painting affected the fine motor skills of B2 group children at Ganesha Kindergarten. Barnett et al. (2016) identified a correlation between motor development and demographic factors (age, weight, sex, and socioeconomic background).

The difference between this study and other studies is the use of materials in finger painting activities. This study will give benefit as a reference for future researchers regarding the use of materials in finger painting activities to stimulate the development of gross motor and fine motor skills. Based on any descriptions above, it is necessary to conduct research to find out the achievement of gross motor and fine motor development of children aged 5-6 years in finger painting learning activities in terms of the standard of development achievement of children aged 5-6 years old of Arnoldus Yanssen Nangaroro and Kindergarten Aegela by using body material lotion and coloring materials.

METHODS

The research method used was qualitative research with a case study approach, in which the researcher analyzed the achievement of gross motor and fine motor development in children aged 5-6 years in finger painting learning activities in terms of the development achievement standards of children aged 5-6 years old, Arnoldus Yanssen Nangaroro and Kindergarten Aegela by using body lotion and coloring materials.

The research was conducted at St. Arnoldus Yanssen Nangaroro and Aegela Kindergarten, Nangaroro District, Nagekeo Regency, NTT. The subjects of the research were the children of Arnold Yanssen Nangaroro Kindergarten and Aegela Kindergarten class B. Data collection techniques were carried out by means of observation, interviews, documentation. The criteria used in the research are underdeveloped (UD), beginning to develop (BD), very well developed (VWD), develop as expected (DAE), according to Sumina h et al, (2015) to analyze data, the researcher used an interactive model that was adapted from Miles and Huberman's ways namely data collection, data reduction, data presentation, drawing conclusions or verifying data on the achievement of children's gross motor and fine motor development.

RESULTS AND DISCUSSION

The work of finger painting class B children in kindergarten St. Arnoldus Yanssen Nangaroro and Kindergarten Aegela in the form of portfolios. Portfolios produced from children in each kindergarten show significant differences in fine motor development. Fine motor skills of children in kindergarten St. Arnoldus Yanssen Nangaroro is better than a child at the Aegela Kindergarten. The results of the work can be seen in Figure 1.
Figure 1 is the work of St. Arnold Yanssen kindergarten, which is produced by using body lotion and paint, while the Aegela kindergarten children uses starch and paint. The work of St. Arnold Yanssen kindergarten visually looks better because of its smooth texture. It also does not clot when applied, beside that the color contrast is clearer, and the resulting aroma is more fragrant. Furthermore, children looked more comfortable in practicing it. Whereas, the work of portfolios from TK Aegela children looks different because it uses materials from starch where, the texture is soft, but clump when applied, the color contrast is not so bright, and it has no interesting aroma. Also, when children apply on drawing paper, the drying process is long and easy to be damage. Beside that, the working process takes much more time.

Referring to the standard of achieving of child development, Permendikbud No. 137 of 2014, there were 5 indicators of gross motor and fine motor development of children, namely coordinating body movements, skillful using the right and left hands, drawing according to their ideas, imitating shapes, expressing envy through detailed drawing movements, this research was done. The finger painting activities in this study was designed to measure gross motor skills and fine motor skills of children aged 5-6 years. The research findings obtained regarding the development of gross and fine motor skills of children aged 5-6 years in finger painting activities in the two Kindergartens in Nangaroro District. Data presented in this study are the achievements of gross motor and fine motor development in children aged 5-6 years in finger painting activities.

Finger painting is the first way to paint by hand as a means of painting on smooth surface thick paper with the use of original colors such as red, yellow, blue, white, and black to provide learning and exploration experiences for children (Nugroho 2012: 5). Finger painting can help children in the process of learning color recognition. This is supported by the research of Wigati, (2013) about the influence of the art of finger painting on color knowledge that shows that, there are differences between children who are given finger painting training and children who are not given training in gaining knowledge about colors. Finger painting training children is better or higher than children who are not given training in knowing about colors.

The paper used by children from both kindergartens is HVS paper, which is the paper that has a smooth surface. The basic colors used in finger painting activities are yellow, red and green. The colors are clearly seen when children use to paint as shown in Figure 1.

Data obtained from TK Arnoldus Yanssen shows that children who are included in the ‘starting to develop in skilled indicators using the
right and left hand’ criteria are still less, or not developing yet (UD) on the indicators of imitating shapes as in Tabel 1.

Tabel 1. Development Achievements

<table>
<thead>
<tr>
<th>Assessment code</th>
<th>Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>UD (Underdeveloped)</td>
<td>When children do activities, they still have to get guidance and / or be exemplified by the teacher.</td>
</tr>
<tr>
<td>BD (Beginning to Develop)</td>
<td>If the child does an activity, the teacher must still be reminded of the way to do the activity.</td>
</tr>
<tr>
<td>VWD (Very Well Developed)</td>
<td>When a child does an activity, it has been raised intact, the child's independence, and is consistent without having to be reminded by the teacher again.</td>
</tr>
<tr>
<td>DAE (Developing as Expected)</td>
<td>When a child does an activity, it has been raised in a whole, independent, and consistent manner and can remind his friend.</td>
</tr>
</tbody>
</table>

Figure 2 shows the comparison of each indicator. Indicator 1. Conduct coordinated body movements (Gross Motor) 2. Skillful using the right and left hand (Gross Motor) 3. Drawing according to his ideas (Fine Motor) 4. Imitate the shape (fine motor) 5. Self expression through drawing motion. (Fine Motor). Indicators of coordinated body movements (UD) 1 people, (BD) 7 people; (VD) 5 people; and (DE) 3 people. In accordance with the results of observations and interviews that conducted by researcher on children and class teachers, in this indicator, children who do finger painting activities are still smeared, so they need the help of teachers in order to direct the child's hands and fingers when doing these activities.

Figure 2 Graph of the achievement of St. Arnold Yanssen Nangaroro Kindergarten UD: Underdeveloped, BD: Beginning to Develop, VWD: Very Well Developed, DAE: Developing as Expected.
Data obtained from samples at the Aegela Kindergarten show that the highest level of achievement is Beginning to Develop (BD) in skilled using the right hand and left hand indicators, while for the Undeveloped Achievement (UD) the highest is in drawing according to his ideas and doing detailed body movements indicators. This happens because learning in the Aegela Kindergarten uses a classical learning model where the teacher provides activities to children, not through groups. That is also because of the lack of facilities at the Aegela Kindergarten. Many chairs and study tables for children are still lacking. In the Regulation of the Minister of Education and Culture of the Republic of Indonesia No 146 (2014: 17) the characteristics of children aged 5-6 years are children able to perform various coordinated movements in a controlled, balanced and agile manner, children are able to carry out activities that can help children make eye movements, hands, feet, head coordinated using the right and left hand in various activities. The comparison of the level of achievement of children's development in class B Aegela Kindergarten can be seen through Figure 3.

![Graph of the achievement of the development of Aegela kindergarten UD: Underdeveloped, BD: Beginning to Develop, VWD: Very Well Developed, DAE: Developing as Expected](image-url)

**Figure 3** Graph of the achievement of the development of Aegela kindergarten UD: Underdeveloped, BD: Beginning to Develop, VWD: Very Well Developed, DAE: Developing as Expected.
Most of the gross motor development of children requires stimulus, encouragement and the opportunity to move almost all their parts of body, that in this case, it is indicated in child's ability in carrying out activities that use motor skills according to their ages. This statement is supported by the Sujiono (2010: 13) who argues that gross motor movements are abilities that require coordination of most parts of a child's body. Therefore, it usually requires energy because it is done by larger muscles.

The highest level of achievement obtained by children in St. Arnoldus Yanssen Nangaroro class B are Beginning to Develop (BD), except in the Mimic form indicator. In mimic form indicators, children with the same number are in Growth Achievement according to Expectations (GAE) and Very Good Development (VD). This happens because the method used by the class B teacher is the demonstration method, where before the main activity, the teacher demonstrates and the children pay attention to the teacher. This finding supports previous theory that says demonstration method is very good for early childhood children, because the demonstration method is an effective method in conducting learning activities in kindergarten. Furthermore, Purnamasari et al. (2014) stated that, there is an increase in fine motor development in children using the method demonstration.

The development of children in St. Arnoldus Yanssen and Aegela have different levels of gross motor development and fine motor. St. Arnoldus Yanssen Kindergarten is more focused on the criteria of Beginning to Develop (BD) because children seem to be able to do according to the teacher's assessment indicators, while achieving gross motor and fine motor development in children in Aegela Kindergarten is in Beginning to Develop (BD), even though there are some children who have not achieve these criterias. The development of gross motor and fine motor can be increased through the provision of stimuli, other than through finger painting can be combined with traditional collage activities or games. This finding supports Hasanah research (2016) that traditional games can provide benefits for children, especially in the development of gross motor skills and Sari's research (2012) that collage games can improve fine motor development.

Figure 3 Graph of the achievement of the development of Aegela kindergarten UD: Underdeveloped, BD: Beginning to Develop, VWD: Very Well Developed, DAE: Developing as Expected
CONCLUSION

In this research, the achievement of gross motor and soft motor of 5-6 ages children in finger painting activity can be seen from the development of achievement standard of 5-6 age children in St. Arnoldus Yanssen Nangaroro dan Aegela kindergarten. In St. Arnoldus Yanssen Nangaroro, most of the achievement of development is in BD criteria. It is portrayed in children activity, in which, they can do things based on teacher’s instruction or direction which is based on assessment indicators. So, referring to the research result, the teachers of kindergarten need to increase their knowledge, especially about children’s gross and soft motor development by using many interesting activities, for example finger painting activity.

ACKNOWLEDGMENTS

The author would like to thank the mentor, head of two kindergartens and teachers of two kindergartens, Arnoldus Yanssen Nangaroro and Aegela Nangaroro, Nagekeo district, NTT.

REFERENCES


