

The Improvement of Fine Motor Skills Through Sewing Several Types of Clothing Patterns in Group A Children at Kindergarten Plus Wahidiyah Sukun Malang

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ABSTRACT

This research is a class action research, aims to determine the application and improvement of fine motor skills through sewing activities. The scope of this research is fine motor children aged 4-5 years, patterns in sewing are limited to the types of clothing patterns made from duplex paper, the indicators used in this study are eye and hand coordination for complex movements and also controlling hand movements using smooth muscles. Analysis of the data used is quantitative and qualitative. The research was conducted in 3 stages: pre-action, cycle I, and cycle II. The results of mastery learning in pre-action is 17.6%. Researchers prepare a lesson plans, assessments, and make media. Observations were made during sewing activities. After the activity, a reflection is carried out. The results of mastery learning in the first cycle of the first meeting were 23.5%. The second meeting is 70.5%. Cycle II of the first meeting was 82.3%. The second meeting was 88.2%. The results of the second cycle of the second meeting had exceeded the specified criteria $\geq 85\%$. Based on these data sewing activities of the types of clothing patterns can improve fine motor children in group A kindergarten Plus Wahidiyah Sukun.

Keywords: *Fine Motor, Sewing in Early Childhood, Types of Clothing Patterns*

1. INTRODUCTION

Child development is very important, especially in early childhood. There are 6 aspects of early childhood development, namely: religious and moral values, physical motor, cognitive, social-emotional, language, and art. According to (Mulyasa, 2014) early childhood or the so-called preschool period has a sensitive period. This period is the most appropriate period to lay the foundation or foundation for developing 6 aspects of child development and all the potential that the child has. Therefore, it is very important to develop 6 aspects of development in children because children aged 0-8 years are the golden age or more commonly known as the golden age.

Among these six aspects, one of them is physical motor development. Motor physical development is divided into two, namely gross motoric and fine motoric. According to (Yamin & Sanan, 2010) a child's gross motor skills will develop according to the child's age so that adults do not need to force children's motor growth,

such as a 6-month-old child cannot sit alone so that the child does not need to be forced to sit on a chair. Also, according to Yamin & Sanan, several activities can be done to improve children's gross motor skills, namely: looking for traces, walk up and downstairs, play tunnels, and others. Meanwhile, according to Yamin & Sanan, fine motor skills are the ability to develop the motion of the fingers, especially the index and thumb. For example, holding, grasping, tearing, and cutting.

Based on the results of observations and interviews with the Kindergarten A class teacher on November 25, 2019, at kindergarten Plus Wahidiyah Sukun, Malang city, it was obtained that, group A's children totaled 17 children, consisting of 7 girls and 10 boys. Activities that are often carried out at Wahidiyah Kindergarten Plus in developing fine motor skills are pasting activities, finger painting, and stamping activities. Sewing activities have been carried out once in group A, The results obtained in the sewing activity were 17 children in group A, about 70% or 12 children who are less in fine motor development, while 20% or 3 children can participate in

sewing activities even though they are still having trouble, and the remaining 10% or 2 children can sew according to the teacher's directions or instructions.

Based on the results of observations and interviews above, the fine motoric development of group A children at kindergarten Plus Wahidiyah Sukun has not developed properly. Especially the fine motor characteristics aged 4-5 years number 3 and 6 in Permendikbud No. 137 of 2014 that is: 1. Coordinating the eyes and hands to perform complex movements; 2. Controlling hand movements that use smooth muscles. The results of these observations, the researchers suspect how many factors cause the problem, including the following: 1). Teachers still lack innovation in designing activities that improve fine motor skills; 2). Children rarely sew so the results are not satisfactory; 3). Group A children are early ages where all child development is not optimal so that the right stimuli are needed to improve all development in children. Based on these factors, the researcher provides several alternative solutions to the problem, including 1). Implement new activities or innovate existing activities to improve children's fine motor skills; 2). Implement sewing activities more often than ever before. Based on the results of interviews with group A teachers at kindergarten Plus Wahidiyah, sewing activities have been implemented once and the results of sewing activities are not satisfactory. After that, there has been no follow up for sewing activities.

The action hypothesis in this study, If the sewing activity of various types of clothing patterns is carried out in the learning in group A kindergarten Plus Wahidiyah Sukun Malang, the physical development of fine motor skills in children can increase.

2. METHOD

This research is a type of classroom action research, using Kemmis and Mc Taggart's model, which is often known as the spiral model. According to (Akbar, 2009) classroom action research is a controlled investigative process in finding a problem in the learning process in the classroom and also how to deal with the problem. Classroom action research is carried out on a cycle, to solve these problems and improve the learning process in the classroom. This research has three stages, namely: pre-action, cycle I, and cycles II, each cycle consisting of 1). planning; 2). action; 3). observing; 4). reflecting. In this study, there were two meetings each cycle, namely the first meeting and the second meeting.

Implementation in this study using a collaborative model CAR, where the researcher collaborated with a collaborator, namely the teacher of group A kindergarten Plus Wahidiyah Sukun Malang city. Researchers act as activity planners, collect data, analyze, and report research results. The class teacher is in charge of

implementing the activity, being a discussion partner during reflection activities.

This research was conducted at kindergarten Plus Wahidiyah Jl. Colonel Sugiono Gg 06, No 75, Rt 05, Rw 06, Gadang Village, Sukun District, Malang City. The group to be studied was group A with 17 children consisting of 7 girls and 10 boys. Held in the second semester of the 2019/2020 Academic Year.

Data collection techniques in this study are observation, interview, and documentation. Observations are used to collect data about children's fine motor skills in sewing activities. Fine motor skills of children can be observed when the child is doing sewing activities, namely: the child inserts the rope into the hole according to the groove that has been exemplified, the child finishes the stitches to the end, the child joins the two ends of the rope by strapping it in the form of a ribbon, children color the stitches of the shirt pattern using colored markers. Interviews are used by researchers to obtain information about problems and the causes of these problems in the process of learning activities in class, as well as children's learning in class. Interviews were conducted with teachers. The documentation referred to in this research is photo documentation that is used to collect data about various events before and during the learning process.

The data collection instruments are 1). The observation sheet is used to assess the child's fine motor skills through sewing different types of clothing patterns, In this instrument, the aspects assessed are: the child inserts the rope into the hole according to the groove that has been exemplified, the child finishes the stitches to the end, the child joins the two ends of the rope by strapping it in the form of a ribbon, children decorate the stitches of the shirt pattern using colored pencils, markers or crayons. 2). Interview guidelines are used to find out problems, impressions, and suggestions when learning sewing activities. Interviews were conducted by researchers with group A teachers. 3). The documentation instrument is used to document RPPH and the activities carried out during the learning process when the child is doing sewing activities.

The data analysis used in this research is qualitative data analysis, where researchers use descriptive data from observations, interviews, and documentation. Quantitative data analysis is used to see the achievement of classical child development. The student success criterion was 65%, while the classical learning achievement criteria were $\geq 85\%$.

3. RESULTS

3.1. Pre-action

This research was conducted in 3 stages, namely: pre-action, cycle I, and cycle II. The pre-action research was conducted on February 18, 2020. The subjects to be

researched were group A aged 4-5 years at kindergarten Plus Wahidiyah Sukun Malang City. In this study, researchers acted as activity designers and observers while the class teachers were the implementers of the activities. In the pre-action research, there are 2 indicators used in sewing activities, namely: completeness of the stitch results and coloring the stitch results without going out of line. The following results from sewing activities will be presented in table 1.

Table 1. Results of Pre-Action Sewing Activities

The total number of children	BB	MB	BSH	BSB	Average	Classical learning complete-ness
17	9	5	3	0	49.2	17.6%

The results of sewing activities in the pre-action were three children who developed according to expectations (BSH). Five children who started developing (MB) and then nine children had not developed (BB). The learning completeness result obtained is 17.6%. Fine motor development of children is still lacking in sewing activities. Because completeness of classical learning is said to be successful if it reaches $\geq 85\%$. The results of the data above show that the fine motor skills of group A children in sewing activities are still low, so it needs to be stimulated until the fine motoric development of the children develops as expected.

3.2. Cycle I

The implementation and observation stages are carried out simultaneously, In this study, the class teacher as the implementer, the researcher as the observer and assisted by colleagues in carrying out documentation activities. The first cycle of the first meeting was held on February 25, 2020. While the first cycle of the second meeting was held on February 27, 2020. Before taking the first cycle of action, the first step is to prepare a lesson plan for the first cycle of the first meeting with the helicopter sub-theme and the rocket sub-theme in the second cycle I second meeting.

The second step is to prepare the media that will be used in sewing activities such as ribbon straps, cardboard patterns with pictures of helicopters and rockets, color markers, and so on. The third step is to develop an assessment instrument. 4 assessment indicators will be used in sewing activities, namely: completeness of the results of the stitches, the suitability of the stitch grooves, stringing in the form of ribbons, and coloring the pictures on the shirt pattern without going out of line. The results of the research in the first cycle of the first meeting which was held on February 25, 2020, there were 5 undeveloped children (BB), 8 children were in the criteria of starting to develop (MB) and 4 children had developed according to expectations (BSH). Children are said to be complete if they get a score of ≥ 65 , the score lies in the BSH and BSB criteria.



Figure 1 Children's activities when sewing different types of clothing patterns in cycle I

Table 2. Results of Cycle I Sewing Activities

Research Cycle I	first meeting	second meeting
Total Number of Children	17	17
BB	5	0
MB	8	5
BSH	4	4
BSB	0	8
Classical Completeness of Learning	23.5%	70.5%

The results of the children who completed in the first cycle of the first meeting were 4 children. Classical mastery of learning at the first meeting resulted in 23.5%. These results do not meet the predetermined classical mastery criteria, namely $\geq 85\%$. Among the 17 children in group A, there were still 13 children who had not yet completed it, so the researchers continued the research at the second meeting.

The results of the first cycle of the second meeting were 8 children who were in very well-developed criteria (BSB), 4 children were on the criteria for developing according to expectations (BSH) and 5 children were on the criteria for starting to develop (MB). Classical mastery of learning in the first cycle of the second meeting was 70.5%. These results have increased rapidly due to improvements in the media used during sewing activities, although the results obtained have increased rapidly these results have not met the predetermined criteria, namely $\geq 85\%$, so the researchers continued to cycle II.

Cycle I activities are completed, then reflection activities are carried out. Reflection is very necessary in learning activities. With reflection, it is hoped that it can reduce mistakes made in previous lessons to get good results in subsequent lessons. There are several drawbacks of sewing the clothes pattern in cycle I, including 1) The long ribbon and rope ends are easy to unravel when used for sewing, 2) the teacher is too short

in explaining sewing activities to children so that many children still do not understand. Improvements to these problems have been carried out such as renewing the ends of the tape which are easily biodegradable to burn the ends of the tape, At the second meeting, the researchers also received suggestions to put tape on the test ribbon so that the ribbon becomes tapered and easier to use. The second problem should be that the teacher explains the sewing activity of half of the dress pattern so that the children understand better and get a longer opportunity to pay attention to the teacher when explaining the sewing activity. Researchers and teachers work together to fix these problems and apply them to the next cycle, to get the expected results.

3.3. Cycle II

Implementation of cycle II at the first meeting was held on March 2, 2020, while the second meeting was held on March 5, 2020. The researcher is assisted by the teacher in carrying out sewing activities, while the researcher is an observer and is assisted by colleagues in taking documentation. Before carrying out the research cycle II. The first step is to prepare lesson plan cycle I at the first meeting with the theme of the universe, sub-themes of water, and in the second cycle the second meeting with the sub-themes of sand. The second step is to prepare the media that will be used in cycle II, the media has been updated according to the reflection from cycle I. The third step to develop an assessment instrument. 4 assessment indicators will be used in sewing activities, namely: completeness of the results of the stitches, the suitability of the stitch grooves, stringing in the form of ribbons, and coloring the pictures on the shirt pattern without going out of line.

The results of sewing activities in the second cycle of the first meeting were 3 children who got the criteria for starting to develop (MB), 2 children who got the criteria for developing according to expectations (BSH), and 12 children who got the criteria for developing very well (BSB). The results of classical learning completeness at the first meeting were 8.23%. These results did not meet the predetermined criteria, namely $\geq 85\%$, so the researcher decided to continue the second cycle research at the second meeting. The results of the second meeting of the second cycle, 2 children got the criteria for starting to develop (MB), 2 children got the criteria for developing according to expectations (BSH) and 13 children got the criteria for developing very well (BSB). The total number of children who completed in the second cycle of the second meeting was 15 children and 2 children who had not. The results of classical learning completeness in cycle II, namely 88.2%, have exceeded the predetermined criteria, namely $\geq 85\%$.



Figure 2 Children's activities when sewing different types of clothing patterns in cycle II

Table 3. Results of Cycle II Sewing Activities

Research Cycle I	first meeting	second meeting
Total Number of Children	17	17
BB	0	0
MB	3	2
BSH	2	2
BSB	12	13
Classical Completeness of Learning	82.3%	88.2%

The second cycle of the second meeting was completed on March 5, 2020. After carrying out cycle II, the next activity was the reflection. In reflection activities, there are several findings from sewing activities to improve fine motor skills including 1) sewing activities of various types of clothing patterns to improve fine motor skills in cycle II are carried out well, 2) the fine motor skills of group A children were increasing through sewing activities of different types of clothing patterns, 3) there are two children who have not met the predetermined criteria because the child is too hasty in doing it so that the results obtained do not reach the specified criteria, 4) the results of classical learning completeness in the second cycle of the second meeting, namely 88.2%, 5) researchers do not need to continue further research because the results obtained have met the predetermined criteria.

4. DISCUSSION

Sewing activities for the types of clothing patterns begin with compiling a daily learning implementation plan (lesson plan) by following per under existing themes in school and compiling assessment instruments. Then make the media that will be used for sewing, namely the dress pattern from cardboard paper at the top of the shirt pattern, given a theme image on that day like a helicopter, the image will be used for coloring by children.

Next, prepare the string and color markers that will be used to sew and color the image. The steps for sewing the types of clothing patterns are by following per under the steps described by (Irma, 2012) namely the child takes a pattern of clothes that has a hole then the child inserts the rope in the first hole and pulls the rope then inserts the second hole and so on until it's finished, After finishing, the rest of the rope is connected and strung into a ribbon shape. After finishing the string, the children color the pictures on the shirt pattern using color markers.

Early childhood is in the process of growth, so it is very important to stimulate all aspects of development, especially physical and motor skills. One way to stimulate motor skills in kindergarten is by sewing. Sewing activities can improve fine motor skills as expressed by (Hutauruk, 2008) sewing activities are one of the activities often applied by teachers in kindergarten to improve fine motor skills in children.

The pressure point of motor learning according to Davc in (Decaprio, 2013) there are 5, namely: imitation, manipulation, thoroughness, articulation, experience. This pressure point is very important to be applied to motor learning. In sewing activities, 4 indicators are assessed, namely the completeness of the results of the stitches, the suitability of the grooves, stringing in the form of ribbons, and coloring the image without leaving the line.

One of the pressure points of motor learning is imitation. In sewing activities, children imitate how to sew properly and correctly according to the groove that is exemplified, if the child can follow the path that has been exemplified, the motor activity is successful. In the pre-action research and the first cycle of the first meeting, there were still many children whose stitches were not by following per under the teacher's example. In the first cycle of the second meeting, the children started to understand, as many as 11 children were able to sew according to the grooves and 6 children were still at the starting stage (MB) and not yet developed (BB). Meanwhile, in the second cycle, the children were already at the stage of developing as expected (BSH) and developing very well (BSB).

The achievement of fine motoric development of children aged 4-5 years according to Permendikbud No. 137 of 2014 concerning national standards for early childhood education, one of which is coordinating the eyes and hands to perform complex movements, sewing activities are one of the activities that require coordination between eyes and hands, in line with the opinion (Sukmawati, 2018) who say that sewing is an activity that requires patience, meticulousness in using sewing tools such as thread needles and other sewing tools. Sewing activities such as inserting a rope into a hole and also stringing it in the form of a ribbon, this activity requires eye and hand coordination and also accuracy in inserting the rope into the hole.

The results of classical learning completeness in pre-action research were 17.6%. These results indicate that the fine motor skills of children in sewing activities are still not developed so that further stimulus is needed to improve the fine motor skills of group A children at kindergarten Plus Wahidiyah. Researchers carried out sewing activities in the first cycle of the first meeting on February 25, 2020, and got 23.5% results, these results were still far from expected.

So, the researchers continued at the second meeting which was held on February 25, the results of the learning completeness obtained were 70.5% of these results. increased rapidly from the first cycle I meeting. One of the factors for improving children's fine motor skills was due to the improvement of the media used at the second meeting and the children had also begun to understand proper and correct sewing activities.

The results in the first cycle of the second meeting did indeed increase, but these results did not meet the specified criteria so that the researcher would continue further research in cycle II. Classical learning completeness in the second cycle of the first meeting got 82.3% results, these results also did not meet the criteria set by the researcher, namely $\geq 85\%$ so that the researchers continued at the second meeting. At the second meeting, the result was 88.2%.

The results in the second cycle of the second meeting have exceeded the specified criteria, namely $\geq 85\%$ so that sewing activities of types of clothing patterns can be said to be successful, by following per under the Department of Education and Culture in 1994 in (Daryanto, 2011) which states that the class is declared complete learning if 85% of the children have reached a value of ≥ 65 . The results of the second cycle of the second meeting had obtained the expected results and had reached the specified criteria, namely $\geq 85\%$, so the researcher did not need to do further research.

The benefit of sewing activities in early childhood is that it can stimulate several aspects of development in children such as social and emotional aspects. During sewing activities, the children learn to be patient in inserting the rope into the holes which require precision when carrying out these activities, as said by (Sukmawati, 2018) that sewing is an activity that requires patience, accuracy, and tenacity in using sewing tools such as needles, threads, and other tools. In addition to stimulating the socio-emotional aspects. Sewing activities can also improve fine motor skills in children, such as the results obtained in the sewing activities of types of clothing patterns in kindergarten Plus Wahidiyah which always increase at every meeting from pre-action research to cycle II. This is in line with the opinion (Hutauruk, 2008) Sewing activities are activities that are often carried out by teachers in kindergarten to improve children's fine motor skills.

5. CONCLUSION

The sewing activity for the types of clothing patterns in group A children at kindergarten Plus Wahidiyah Sukun, Malang City went well. The results of sewing activities for the types of clothing patterns at each meeting are always increasing, from pre-action research to cycle II. Classical achievement in the pre-action class yields 17.6%. The results of the pre-action research showed that the fine motoric development of children in sewing activities was still undeveloped, so further stimulus was needed.

The researcher took the first cycle of action at the first meeting, the classical learning completeness results obtained were 23.5%, while at the second meeting the results were 70.5%, These results greatly increased from the first meeting, although the increase in these results did not meet the predetermined criteria so that the researchers continued the research to cycle II. In the second cycle, the first meeting got 82.3% results, these results also did not meet the specified criteria, namely $\geq 85\%$, so the researchers continued at the second meeting and got 88.2% results. These results have exceeded the specified criteria so that researchers do not need to do further research.

The suggestion in this research is that the teacher is expected to be able to implement the sewing activity of types of clothing patterns when the theme of my needs is the sub-theme of clothing to stimulate the child's fine motor skills, besides that, sewing activities can also stimulate other aspects of development. For further researchers, this research can be used as a reference for conducting similar research. Further researchers can also examine the improvement of aspects of development in children other than fine motor skills through sewing various types of clothing patterns.

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