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Improving Geometry Skills Through Group B Finger Painting Activities

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Abstract

This Classroom Action Research (PTK) aims to determine the level of achievement in the development of the ability to recognize geometric shapes in children in group B at the Melati Baliara Kindergarten, Bombana Regency. The data collection techniques used are observation, assessment and documentation. Meanwhile, the model chosen for carrying out the action is the Kemis model cycle and Mc Tanggart which has four stages, planning, implamentation, observation and reflection cycles. Data on the development of children's ability to recognize geometric shapes using percentages. The research was carried out in two cycles, each cycle was held three times. The results of the research showed that finger painting activities could improve the ability to recognize geometric shapes children at the Melati Baliara Kindergarten, Bombana Regency. This can be seen from the results of the implementation of the action which shows that the development of the child's ability to recognize geometric shapes has experienced good changes. In the pre-cycle or before the research action was carried out, the child was said to have reached 66.67% completion. In cycle I, children who completed reached 41.68%, and in cycle II, children who completed reached 83.34%. This shows an increase from the initial research to cycle II. The ability to recognize children's geometric shapes has increased and exceeded the researchers' predictions, which initially only completed 75% and was in accordance with the achievement level indicators that had been set.

1. INTRODUCTION

Introducing geometric shapes to young children is the ability to recognize, show, name and collect objects around them based on geometric shapes. Introducing geometric shapes to young children starts from building geometric concepts, namely by identifying the characteristics of geometric shapes. Before identifying geometric shapes, in children's cognitive abilities according to Bloom's theory there are six levels of thinking processes, including knowing, understanding, applying, analyzing, evaluating and creating. So that aspects of children's cognitive development can develop well, one of which is by introducing geometric shapes with objects around them that are easier to know, understand, apply analysis, evaluate and be creative in the form of children's lives.

To improve children's geometric abilities, something is needed that can support increasing children's geometric abilities, namely through activities that can support improving children's geometric abilities. Activities in learning at the kindergarten level are very necessary when teaching, because a child's world is a world of play, therefore learning in kindergarten should be

directed at playing while learning which is packaged in an interesting way. In the process of providing education to young children, an educator is required to be as creative as possible in preparing various learning activities related to the theme, so that children are interested and enjoy learning. One of the learning activities that can be used to develop children's geometric abilities is finger painting. Finger painting is a painting technique that uses fingers as a tool for painting.

One of the objects that researchers saw during initial observations on September 10 2023 was the geometric abilities of group B children at Melati Baliara Kindergarten, Bombana district, that the ability to recognize geometric shapes had not developed optimally compared to other abilities. From the results of the child development report (LPA) shown by the teacher, namely the level of achievement of children's development, where there were 14 children. Of the 9 children who have not yet developed (BB) because the children cannot differentiate and group geometric shapes and 5 children are starting to develop (MB), these children can name, differentiate and group geometric shapes but are still guided by the teacher.

This was confirmed by the results of an interview with one of the class teachers at the kindergarten which was carried out on October 11 2023, that the introduction of geometric shapes through observation and interviews which had not yet reached the assessment standards was developing well in carrying out tasks such as naming geometric shapes in detail. independently and distinguish between squares and rectangles correctly. Apart from that, many students look bored, sleepy, less interested, and some even play by themselves when the teacher explains learning material.

2. METHODS

This research is Classroom Action Research. Classroom action research is a research activity with a classroom context that is carried out to solve learning problems faced by teachers, improve the quality and outcomes of learning and try new things in learning in order to improve the quality and outcomes of learning. The subjects in this research were group B children at Melati Baliara Kindergarten, Bombana Regency, aged 5-6 years, totaling 12 students, 7 boys and 5 girls from Group B at Melati Baliara Kindergarten, Bombana Regency. The object of this research is finger painting learning activities by teachers for students at the Melati Baliara Kindergarten, Bombana Regency.

Research instruments used to collect data in a study. The instrument in this research was intended to determine the level of ability to recognize geometric shapes through finger painting activities in Group B children at Melati Baliara Kindergarten, Bombana Regency.adolescents aged 15-18 years.

3. RESULT AND DISCUSSION

In the results of research from the first cycle of the first meeting, there were still many children who could not recognize geometric shape patterns, children could classify the shape, color and size of geometric shapes, and children could sort objects based on size from smallest to largest or vice versa. Because there are still many children who need help from teachers and the level of ability to imitate the pattern of children in group B is still classified as underdeveloped (BB) for 7 children with a total percentage of 58.34%, children in the category starting to develop (MB) for 2 children with a total percentage 16.66%, for children in the developing according to expectations (BSH) category for 2 children with a total percentage of 16.66%, and children in the very well developing (BSB) category, namely 1 child with a total percentage of 8.34%. To see the results of observations in cycle I first meeting, can be seen in the table below:

Table 1. Results of Cycle I First Meeting Development of Ability to Recognize Geometry with Finger Painting Techniques in Group B of Melati Baliara Kindergarten, Bombana Regency

No	Fine Motor Skill Indicators for Children Aged 5-6 Years	Kriteria Skor			
		BB	MB	BSH	BSB
1	Children can recognize geometric shape patterns	58.34%	16.66%	16.66%	8.34%
2	Children can classify colors and geometric shapes	58.34%	16.66%	16.66%	8.34%
3	Children can sort objects by size from smallest to largest or vice versa.	58.34%	16.66%	16.66%	8.34%

Based on the table above, in terms of conversion, the average score for children's ability to recognize geometry using finger painting activities from the three indicators of children's acquisition in the Not Yet Developed (BB) assessment is 7 children with a percentage of 58.34%, Starting to Develop (MB) 2 people children with a percentage of 16.66%, Developing According to Expectations (BSH), namely 2 children with a percentage of 16.66%, and children in the Developing According to Expectations (BSB) category, namely 1 child with a percentage of 8.34%. This shows that the ability to recognize the geometry of children in class B still requires improvement because there are still many students who are not able to carry out activities to develop the ability to recognize geometric shapes.

Based on the picture above, it states that after the first cycle of the first meeting, the first indicator is that the child can recognize patterns of geometric shapes with the theme of my needs, sub-theme of fruit, the specific theme of watermelon, children who are still in the underdeveloped assessment range (BB) A total of 58, 34% or 7 children, namely Nur, Akbar, Zaidan, Anisa, Alicia, Azril, and Ahmad, whose ability to imitate geometric shape patterns still need help from teachers and still need to be demonstrated because children still have difficulty imitating dotted lines using the finger technique. painting, especially the child named Azril, because the child takes a long time to fill in the pattern because his physical hand is still not as fast as his other friends, so he still really needs help from the teacher.

There were 16.66% of children in the Starting to Develop (MB) assessment or 2 people, namely Sofya and Kinan. Where children can begin to recognize patterns in the theme of my needs, sub-theme of fruit, the specific theme of watermelon, but the process is very slow and is mostly guided by the teacher. like a child named Kinan, when he imitates the pattern, the lines are still out of line and sometimes the child starts working when the teacher just reprimands him and the child seems to have difficulty using his fingers to imitate the pattern because of the texture of the sago and food coloring which when it gets cold will gradually thicken. Therefore, children still need help from teachers and examples from teachers regarding how to use it properly and correctly.

There are 16.66% of children in the Developing According to Expectations (BSH) assessment range or 2 children, namely Azzam and Rahmat, where the children already know the patterns of geomaterial shapes independently without help from the teacher. Like a child named Azzam, where the child is able to answer questions like "does anyone know what this looks like"? Azzam answered "like a triangle shape, teacher" because the child easily understands what the teacher explains, especially how to do the finger painting technique, so the child must be able to imitate the pattern with patience because the same goes for the child named Rahmat, where the child finds it easier to use his index finger to do it. finger painting technique according to the pattern

on the student's worksheet without help and direction from the teacher.

Children who are in the Very Well Developed (BSB) assessment range are 8.34% or 1 child, namely Princess, where the child can recognize geometric shape patterns well and correctly and do it independently without help from the teacher. The daughter is able to help her friends who have not reached the indicators because the child easily understands and understands the steps for carrying out finger painting activities when explained and the daughter is very responsive regarding how to do it with different levels of difficulty so that the child is classified as developing very well (BSB).

The second indicator is that children can classify colors and geometric shapes with the theme my needs, sub-theme fruit, the specific theme of watermelon, children who are still in the underdeveloped assessment range (BB). A total of 58.34% or 7 children, namely Nur, Akbar, Zaidan, Anisa, Alicia, Azril, and Ahmad whose ability to imitate geometric shape patterns still need help from teachers and still need to be demonstrated because children still have difficulty imitating dotted lines using finger painting techniques.

There were 16.66% of children in the Starting to Develop (MB) assessment or 2 people, namely Sofya and Kinan. Where children can begin to recognize patterns in the theme of my needs, sub-theme of fruit, the specific theme of watermelon, but the process is very slow and is mostly guided by the teacher. like a child named Kinan, when he imitates the pattern, the lines are still out of line and sometimes the child starts working only when the teacher reprimands him and the child seems to have difficulty using his fingers to imitate the pattern because of the texture of the sago and food coloring which when it gets cold will gradually thicken because Children still need help from teachers and examples from teachers regarding how to use it properly and correctly.

There are 16.66% of children in the Developing According to Expectations (BSH) assessment range or 2 children, namely Azzam and Rahmat, where the children already know the patterns of geomaterial shapes independently without help from the teacher. Like a child named Azzam, where the child is able to answer questions like "does anyone know what this looks like"? Azzam answered "like a triangle shape, teacher" because the child easily understands what the teacher explains, especially how to do the finger painting technique, so the child must be able to imitate the pattern with patience because the same goes for the child named Rahmat, where the child finds it easier to use his index finger to do it. finger painting technique according to the pattern on the student's worksheet without help and direction from the teacher.

Children who are in the Very Well Developed (BSB) assessment range are 8.34% or 1 child, namely Princess, where the child can recognize geometric shape patterns well and correctly and do it independently without help from the teacher. The daughter is able to help her friends who have not reached the indicators because the child easily understands and understands the steps for carrying out finger painting activities when explained and the daughter is very responsive regarding how to do it with different levels of difficulty so that the child is classified as developing very well (BSB).

The third indicator is that children can recognize patterns of geometric shapes with the theme my needs, sub-theme fruit, the specific theme of watermelon, children who are still in the underdeveloped assessment range (BB). A total of 58.34% or 7 children, namely Nur, Akbar, Zaidan , Anisa, Alicia, Azril, and Ahmad whose ability to imitate geometric shape patterns still need help from teachers and still need to be demonstrated because children still have difficulty imitating dotted lines using finger painting techniques.

There were 16.66% of children in the Starting to Develop (MB) assessment or 2 people, namely Sofya and Kinan. Where children can begin to recognize patterns in the theme of my needs, sub-theme of fruit, the specific theme of watermelon, but the process is very slow and is mostly guided by the teacher. like a child named Kinan, when he imitates the pattern, the lines are still out of line and sometimes the child starts working only when the teacher reprimands him and the child seems to have difficulty using his fingers to imitate the pattern because of the texture of the sago and food coloring which when it gets cold will gradually thicken because Children still need help from teachers and examples from teachers regarding how to use it properly and correctly.

There are 16.66% of children in the Developing According to Expectations (BSH) assessment range or 2 children, namely Azzam and Rahmat, where the children already know the patterns of geomaterial shapes independently without help from the teacher. Like a child named Azzam, where the child is able to answer questions like "does anyone know what this looks like"? Azzam answered "like a triangle shape, teacher" because the child easily understands what the teacher explains, especially how to do the finger painting technique, so the child must be able to imitate the pattern with patience because the same goes for the child named Rahmat, where the child finds it easier to use his index finger to do it. finger painting technique according to the pattern on the student's worksheet without help and direction from the teacher.

Children who are in the Very Well Developed (BSB) assessment range are 8.34% or 1 child, namely Princess, where the child can recognize geometric shape patterns well and correctly and do it independently without help from the teacher. The daughter is able to help her friends who have not reached the indicators because the child easily understands and understands the steps for carrying out finger painting activities when explained and the daughter is very responsive regarding how to do it with different levels of difficulty so that the child is classified as developing very well (BSB)

Based on the results of research from the first cycle of the first meeting, the development of the ability to recognize geometric shapes using finger painting techniques in group B at Melati Baliara Kindergarten, Bombana Regency, the conversion value obtained by each indicator is the same from the number of children who are BB, MB, BSH, and BSB, that is, it can be concluded that the child's first indicator 58.34% were able to recognize patterns of geometric shapes with the Not Yet Developing (BB) assessment category, namely 7 children, 16.66% with the Starting to Develop (MB) category, namely 2 children, 16.66% with the Developing According to Expectations (BSH) category, namely 2 children children and 8.34% with the Very Well Developed (BSB) category, namely 1 child, the acquisition of indicator conversion scores for both children who can classify colors and geometric shapes is 58.34% with the Not Yet Developed (BB) assessment category, namely 7 children, 16.66% with the Starting category Developing (MB), namely 2 children, 16.66% in the Developing According to Expectations (BSH) category, namely 2 children and 8.34% in the Very Well Developing (BSB) category, namely 1 child and in the third indicator children can sort objects based on size from most small to largest or vice versa, namely 58.34% with the Not Yet Developing (BB) assessment category, namely 7 children, 16.66% with the Starting to Develop (MB) category, namely 2 children, 16.66% with the Developing According to Expectations (BSH) category, namely 2 children children and 8.34% in the Very Well Developing (BSB) category, namely 1 child. The conversion value obtained is the same because the number of children who have not yet developed the ability to recognize geometric patterns is 7 children and this also influences the second indicator of the acquisition of children who have not yet developed

the ability to recognize colors and geometric shapes. There are 7 children as well as children who have not yet developed the ability to recognize geometric patterns. can sort objects based on size from smallest to largest or vice versa, there are 7 children. It can be concluded that the first, second and third indicators have a collective relationship. Also looking at the results of children who were MB for the first, second and third indicators, two children each obtained each indicator with the same child, as well as in the BSH assessment, two children obtained BSB, while 1 child obtained BSB for each indicator.

In the results of the first cycle of research at the second meeting, there were still many children who were not able to recognize patterns of geometric shapes, children were not yet able to classify shapes, colors and sizes of geometric shapes, and children were not able to sort objects based on size from smallest to largest or on the contrary. Because there are still many children who need help from teachers and the level of ability to recognize geometric shapes of children in group B is still classified as underdeveloped (BB) for 5 children with a total percentage of 41.67%, children in the category starting to develop (MB) for 3 children with a total percentage of 25%, for children in the category of developing according to expectations (BSH) for 3 children with a total percentage of 25%, and children in the category of very well developing (BSB), namely 1 child with a total percentage of 8.33%. To see the results of observations in the cycle I second meeting, can be seen in the table below:

Table 2. Results of Research Cycle I Second Development Meeting Ability to Recognize Geometric Shapes group B at Melati Baliara Kindergarten, Bombana Regency

No	Fine Motor Skill Indicators for Children Aged 5-6 Years	Kriteria Skor			
		BB	MB	BSH	BSB
1	Children can recognize geometric shape patterns	41.67%	25%	25%	8.33%
2	Children can classify colors and geometric shapes	41.67%	25%	25%	8.33%
3	Children can sort objects by size from smallest to largest or vice versa.	41.67%	25%	25%	8.33%

Based on the table above, in terms of conversion, the average score for the ability to recognize children's geometry using finger painting activities from the three indicators of children's acquisition in the Not Yet Developed (BB) assessment is 5 children with a percentage of 41.67%, Starting to Develop (MB) 3 people children with a percentage of 25%, Developing According to Expectations (BSH), namely 3 children with a percentage of 25%, and children in the Developing According to Expectations (BSB) category, namely 1 child with a percentage of 8.33%. This shows that the ability to recognize the geometry of children in class B still needs improvement because there are still many students who are not able to carry out activities to develop the ability to recognize geometric shapes.

Based on the picture above, it states that after the first cycle of the second meeting, the first indicator is that the child can recognize patterns of geometric shapes with the theme of my needs, sub-theme of fruit, the specific theme of apples, children who are still in the underdeveloped assessment range (BB) as much as 41.67% or 5 children, namely Nur, Zaidan, Anisa, Azril, and Ahmad whose ability to imitate geometric shape patterns still requires help from the teacher and still needs to be demonstrated because the children still have difficulty imitating dotted lines using the finger painting technique.

There are 25% or 3 children in the Starting to Develop (MB) assessment, namely Akbar, Alicia and Sofya. Where children can begin to recognize patterns in the theme of my needs, sub-theme of fruit, specific theme of apples, but the process is very slow and is mostly guided by the teacher. like children named Alicia, Sofya and Akbar, when they imitate the pattern, the lines are still out of line and sometimes the children start working when the teacher just reprimands them and the children seem to have difficulty using their fingers to imitate the pattern because of the texture of the sago and food coloring which when it is cold will be a little different. As it thickens little by little, children still need help from teachers and examples from teachers regarding how to use it properly and correctly.

Children who are in the Developing According to Expectations (BSH) assessment range are 25% or 3 children, namely Kinan, Azzam, and Rahmat, where the children already know the patterns of geomaterial shapes independently without help from the teacher. Like the child named Azzam, where the child is able to answer questions like "does anyone know what this looks like"? Azzam answered "like a triangle shape, teacher" because children easily understand what the teacher explains, especially how to do the finger painting technique, so children must be able to imitate the pattern with patience because the same goes for children named Rahmat and Kinan, where children find it easier to use their index finger. to carry out finger painting techniques according to the pattern on the student's worksheet without help and direction from the teacher.

Children who are in the Very Well Developed (BSB) assessment range are 8.33% or 1 child, namely Princess, where the child can recognize geometric shape patterns well and correctly and do it independently without help from the teacher. The daughter is able to help her friends who have not reached the indicators because the child easily understands and understands the steps for carrying out finger painting activities when explained and the daughter is very responsive regarding how to do it with different levels of difficulty so that the child is classified as developing very well (BSB).

The second indicator is that children can classify colors and geometric shapes with the theme my needs, sub-theme, fruit, specific theme, apple, children who are still in the underdeveloped assessment range (BB). A total of 41.67% or 5 children, namely Nur, Zaidan, Anisa, Azril, and Ahmad, whose ability to imitate geometric shape patterns still needs help from the teacher and still needs to be demonstrated because children still have difficulty imitating dotted lines using the finger painting technique.

There are 25% or 3 children in the Starting to Develop (MB) assessment, namely Akbar, Alicia and Sofya. Where children can begin to recognize patterns in the theme of my needs, sub-theme of fruit, specific theme of apples, but the process is very slow and is mostly guided by the teacher. like the children named Akbar, Alicia, and Sofya, when they imitate the pattern, the lines are still out of line and sometimes the children start working when the teacher just reprimands them and the children seem to have difficulty using their fingers to imitate the pattern because of the texture of the sago and food coloring which when it is cold will be slightly As it thickens little by little, children still need help from teachers and examples from teachers regarding how to use it properly and correctly.

There are 25% of children in the Developing According to Expectations (BSH) assessment range or 3 children, namely Kinan, Azzam and Rahmat, where the children already know the patterns of geomaterial shapes independently without help from the teacher. Like a child named Azzam, where the child is able to answer questions like "does anyone know what this looks like"? Azzam answered "like a triangle shape, teacher" because children easily understand what the

teacher explains, especially how to do the finger painting technique, so children must be able to imitate the pattern with patience because the same goes for children named Rahmat and Kinan, where children find it easier to use their index finger. to carry out finger painting techniques according to the pattern on the student's worksheet without help and direction from the teacher.

Children who are in the Very Well Developed (BSB) assessment range are 8.33% or 1 child, namely Princess, where the child can recognize geometric shape patterns well and correctly and do it independently without help from the teacher. The daughter is able to help her friends who have not reached the indicators because the child easily understands and understands the steps for carrying out finger painting activities when explained and the daughter is very responsive regarding how to do it with different levels of difficulty so that the child is classified as developing very well (BSB).

The third indicator is that children can recognize patterns of geometric shapes with the theme my needs, sub-theme fruit, specific theme apples, children who are still in the underdeveloped assessment range (BB). A total of 41.67% or 5 children, namely Nur, Zaidan, Anisa, Azril , and Ahmad whose ability to imitate geometric shape patterns still needs help from the teacher and still needs to be demonstrated because children still have difficulty imitating dotted lines using the finger painting technique.

There are 25% or 3 children in the Starting to Develop (MB) assessment, namely Sofya, Alicia and Akbar. Where children can begin to recognize patterns in the theme of my needs, sub-theme of fruit, specific theme of apples, but the process is very slow and is mostly guided by the teacher. like a child named Sofya, when she imitates the pattern, the lines are still out of line and sometimes the child starts working when the teacher just reprimands her and the child seems to have difficulty using her fingers to imitate the pattern because of the texture of the sago and food coloring which when it gets cold will gradually thicken. Therefore, children still need help from teachers and examples from teachers regarding how to use it properly and correctly.

Children who are in the Developing According to Expectations (BSH) assessment range are 25% or 3 children, namely Kinan, Azzam, and Rahmat, where the children already know the patterns of geomaterial shapes independently without help from the teacher. Like a child named Azzam, where the child is able to answer questions like "does anyone know what this looks like"? Azzam answered "like a triangle shape, teacher" because children easily understand what the teacher explains, especially how to do the finger painting technique, so children must be able to imitate the pattern with patience because the same goes for children named Rahmat and Kinan, where children find it easier to use their index finger. to carry out finger painting techniques according to the pattern on the student's worksheet without help and direction from the teacher.

Children who are in the Very Well Developed (BSB) assessment range are 8.33% or 1 child, namely Princess, where the child can recognize geometric shape patterns well and correctly and do it independently without help from the teacher. The daughter is able to help her friends who have not reached the indicators because the child easily understands and understands the steps for carrying out finger painting activities when explained and the daughter is very responsive regarding how to do it with different levels of difficulty so that the child is classified as developing very well (BSB).

Based on the results of research from the first cycle of the second meeting, the development of the ability to recognize geometric shapes using finger painting techniques in group B at the Melati Baliara Kindergarten, Bombana Regency, the conversion value obtained by each indicator is the same from the number of children who are BB, MB, BSH, and BSB, that is, it can

be concluded that the first indicator of the child 41.67% were able to recognize patterns of geometric shapes in the Not Yet Developing (BB) assessment category, namely 5 children, 25% in the Starting to Develop (MB) category, namely 3 children, 25% in the Developing According to Expectations (BSH) category, namely 3 children children and 8.33% with the Very Well Developed (BSB) category, namely 1 child, the acquisition of indicator conversion scores for both children who can classify colors and geometric shapes is 41.67% with the Not Yet Developed (BB) assessment category, namely 5 children, 25% with the Starting category Developing (MB), namely 3 children, 25% in the Developing According to Expectations (BSH) category, namely 3 children and 8.33% in the Very Well Developing (BSB) category, namely 1 child and in the third indicator children can sort objects based on size from most small to largest or vice versa, namely 41.67% with the Not Yet Developing (BB) assessment category 5, namely children, 25% with the Starting to Develop (MB) category, namely 3 children, 25% with the Developing According to Expectations (BSH) category, namely 3 people children and 8.33% in the Very Well Developing (BSB) category, namely 1 child. The conversion value obtained is the same because the number of children who have not yet developed the ability to recognize geometric patterns is 5 children and this also influences the second indicator of the acquisition of children who have not yet developed the ability to recognize colors and geometric shapes. There are 5 children as well as children who have not yet developed the ability to recognize geometric patterns. can sort objects based on size from smallest to largest or vice versa, there are 5 children. It can be concluded that the first, second and third indicators have a collective relationship. Also looking at the results of children who were MB for the first, second and third indicators, two children each obtained each indicator with the same child, as well as in the BSH assessment which was obtained by 3 children while BSB was obtained by 1 child in each indicator.

In the results of the first cycle of research at the third meeting, there were still many children who were unable to explore the two materials, color according to the pattern, attach the materials properly and correctly, and imitate the shapes. Because there are still many children who need help from teachers, children in group B are still classified as underdeveloped (BB) for 2 children with a percentage of 16.66%, children in the beginning to develop (MB) category for 5 children with a percentage of 41.67%, for children in the category of developing according to expectations (BSH) for 4 children with a total percentage of 33.33%, and children in the category of developing very well (BSB), namely 1 child with a total percentage of 8.33%. To see the results of observations in the first cycle of the third meeting, you can seen in the table below:

Table 3. Results of Cycle I Third Meeting on Capacity Development Get to know geometric shapes in group B at Melati Baliara Kindergarten, Bombana Regency

No	Fine Motor Skill Indicators for Children Aged 5-6 Years	Kriteria Skor			
		BB	MB	BSH	BSB
1	Children can recognize geometric shape patterns	16.66%	41.67%	33.33%	8.33%
2	Children can classify colors and geometric shapes	16.66%	41.67%	33.33%	8.33%
3	Children can sort objects by size from smallest to largest or vice versa.	16.66%	41.67%	33.33%	8.33%

Based on the table above, in terms of conversion, the average score for children's ability to recognize geometry using finger painting activities from the three indicators of children's acquisition in the Not Yet Developed (BB) assessment is 2 children with a percentage of 16.66%, Starting to Develop (MB) 5 people children with a percentage of 41.67%, Developing According to

Expectations (BSH), namely 4 children with a percentage of 33.33%, and children in the Developing According to Expectations (BSB) category, namely 1 child with a percentage of 8.33%. This shows that the ability to recognize the geometry of children in class B still needs improvement because there are still many students who are not able to carry out activities to develop the ability to recognize geometric shapes.

Based on the picture above, it states that after the first cycle, the first third meeting, the first indicator is that children can recognize patterns of geometric shapes with the theme of my needs, sub-theme of fruit, the specific theme of fruit, Mangosteen, children who are still in the underdeveloped assessment range (BB) as much as 16.66% or 2 children, namely Nur and Zaidan, whose ability to imitate geometric shape patterns still needs help from the teacher and still needs to be demonstrated because the children still have difficulty imitating dotted lines using the finger painting technique.

There were 41.67% or 5 children in the Starting to Develop (MB) assessment, namely Anisa, Azril, Ahmad, Akbar, and Alicia. Where children can begin to recognize patterns in the theme of my needs, sub-theme of fruit, the specific theme of mangosteen fruit, but the process is very slow and is mostly guided by the teacher. such as children named Anisa, Azril, Ahmad, Akbar, and Alicia, when they imitate the pattern, the lines are still out of line and sometimes the children start working when the teacher just reprimands them and the children seem to have difficulty using their fingers to imitate the pattern because of the texture of the sago and food coloring which when they have The cold will gradually thicken, therefore children still need help from the teacher and examples from the teacher regarding how to use it properly and correctly.

There are 33.33% of children in the Developing According to Expectations (BSH) assessment range or 4 children, namely Sofya, Kinan, Azzam, and Rahmat, where the children already know the patterns of geomaterial shapes independently without help from the teacher. Like a child named Kinan, where the child is able to answer questions like "does anyone know what this looks like"? Kinan answered "like a triangle shape, teacher" because children easily understand what the teacher explains, especially how to do the finger painting technique, so children must be able to imitate the pattern with patience because the same goes for children named Rahmat, Azzam and Sofya, where children find it easier to use. his index finger to carry out finger painting techniques according to the pattern on the student's worksheet without help and direction from the teacher.

Children who are in the Very Well Developed (BSB) assessment range are 8.33% or 1 child, namely Princess, where the child can recognize geometric shape patterns well and correctly and do it independently without help from the teacher. The daughter is able to help her friends who have not reached the indicators because the child easily understands and understands the steps for carrying out finger painting activities when explained and the daughter is very responsive regarding how to do it with different levels of difficulty so that the child is classified as developing very well (BSB).

The second indicator is that children can classify colors and geometric shapes with the theme of my needs, sub-theme of fruit, the specific theme of mangosteen, children who are still in the underdeveloped assessment range (BB). As many as 16.66% or 2 children, namely Nur and Zaidan, have the ability to imitate shape patterns. The geometry still requires help from the teacher and still needs to be demonstrated because children still have difficulty imitating dotted lines using the finger painting technique.

There were 41.67% or 5 children in the Starting to Develop (MB) assessment, namely

Anisa, Azril, Ahmad, Akbar, and Alicia. Where children can begin to recognize patterns in the theme of my needs, sub-theme of fruit, the specific theme of watermelon, but the process is very slow and is mostly guided by the teacher. such as children named Anisa, Azril, Ahmad, Akbar, and Alicia, when they imitate the pattern, the lines are still out of line and sometimes the children start working when the teacher just reprimands them and the children seem to have difficulty using their fingers to imitate the pattern because of the texture of the sago and food coloring which when they have The cold will gradually thicken, therefore children still need help from the teacher and examples from the teacher regarding how to use it properly and correctly.

There are 33.33% of children in the Developing According to Expectations (BSH) assessment range or 4 children, namely Kinan, Azzam, Sofya, and Rahmat, where the children already know the patterns of geomaterial shapes independently without help from the teacher. Like a child named Kinan, where the child is able to answer questions like "does anyone know what this looks like"? Kinan answered "like a triangle shape, teacher" because children easily understand what the teacher explains, especially how to do the finger painting technique, so children must be able to imitate the pattern with patience because the same goes for children named Rahmat, Azzam, and Sofya, where children find it easier. using his index finger to carry out finger painting techniques according to the pattern on the student's worksheet without help or direction from the teacher.

Children who are in the Very Well Developed (BSB) assessment range are 8.33% or 1 child, namely Princess, where the child can recognize geometric shape patterns well and correctly and do it independently without help from the teacher. The daughter is able to help her friends who have not reached the indicators because the child easily understands and understands the steps for carrying out finger painting activities when explained and the daughter is very responsive regarding how to do it with different levels of difficulty so that the child is classified as developing very well (BSB).

The third indicator is that children can recognize patterns of geometric shapes with the theme of my needs, sub-theme of fruit, specific theme of mangosteen, children who are still in the underdeveloped assessment range (BB). As many as 16.66% or 2 children, namely Nur and Zaidan, have the ability to imitate patterns. The geometric shapes still require help from the teacher and still need to be demonstrated because children still have difficulty imitating dotted lines using the finger painting technique.

There were 41.67% or 5 children in the Starting to Develop (MB) assessment, namely Anisa, Azril, Ahmad, Akbar, and Alicia. Where children can begin to recognize patterns in the theme of my needs, sub-theme of fruit, the specific theme of mangosteen fruit, but the process is very slow and is mostly guided by the teacher. like a child named Anisa, when she imitates the pattern, the lines are still out of line and sometimes the child starts working only when the teacher reprimands her and the child seems to have difficulty using her fingers to imitate the pattern because of the texture of the sago and food coloring which when it gets cold will gradually thicken because Children still need help from teachers and examples from teachers regarding how to use it properly and correctly.

There are 33.33% of children in the Developing According to Expectations (BSH) assessment range or 4 children, namely Kinan, Azzam, Sofya and Rahmat, where the children already know the patterns of geomaterial shapes independently without help from the teacher. Like a child named Azzam, where the child is able to answer questions like "does anyone know what this looks like"? Azzam answered "like a triangle shape, teacher" because children easily

understand what the teacher explains, especially how to do the finger painting technique, so children must be able to imitate the pattern with patience because the same goes for children named Sofya, Rahmat and Kinan, where children find it easier to use. his index finger to carry out finger painting techniques according to the pattern on the student's worksheet without help and direction from the teacher.

Children who are in the Very Well Developed (BSB) assessment range are 8.33% or 1 child, namely Princess, where the child can recognize geometric shape patterns well and correctly and do it independently without help from the teacher. The daughter is able to help her friends who have not reached the indicators because the child easily understands and understands the steps for carrying out finger painting activities when explained and the daughter is very responsive regarding how to do it with different levels of difficulty so that the child is classified as developing very well (BSB).

Based on the results of research from the first cycle of the third meeting, the development of the ability to recognize geometric shapes using finger painting techniques in group B at Melati Baliara Kindergarten, Bombana Regency, the conversion value obtained for each indicator is the same for the number of children who are BB, MB, BSH, and BSB, that is, it can be concluded that the first indicator of the child 16.66% were able to recognize patterns of geometric shapes with the Not Yet Developing (BB) assessment category, namely 2 children, 41.67% with the Starting to Develop (MB) category, namely 5 children, 33.33% with the Developing According to Expectations (BSH) category, namely 4 children children and 8.33% with the Very Well Developed (BSB) category, namely 1 child, the acquisition of indicator conversion scores for both children who can classify colors and geometric shapes is 16.66% with the Not Yet Developed (BB) assessment category, namely 2 children, 41.67% with the Starting category Developing (MB), namely 5 children, 33.33% in the Developing According to Expectations (BSH) category, namely 4 children and 8.33% in the Very Well Developing (BSB) category, namely 1 child and in the third indicator children can sort objects based on size from most small to largest or vice versa, namely 16.66% with the Not Yet Developing (BB) assessment category, namely 2 children, 41.67% with the Starting to Develop (MB) category, namely 5 children, 33.33% with the Developing According to Expectations (BSH) category, namely 4 people children and 8.33% in the Very Well Developing (BSB) category, namely 1 child. The conversion value obtained is the same because the number of children who have not yet developed the ability to recognize geometric patterns is 2 children and this also influences the second indicator of the acquisition of children who have not yet developed the ability to recognize colors and geometric shapes. There are 2 children as well as children who have not yet developed the ability to recognize geometric patterns. can sort objects based on size from smallest to largest or vice versa, there are 2 children. It can be concluded that the first, second and third indicators have a collective relationship. Also looking at the results of children who were MB on both the first, second and third indicators, two children each obtained each indicator with the same child, as well as in the BSH assessment which was obtained by 4 children while BSB was obtained by 1 child in each indicator.

Based on the data above, improving children's ability to recognize geometric shapes through finger painting activities has not shown good changes, but there has been progress that occurred as a result of the actions in cycle I. However, the percentage has not yet reached the 75% success indicator. Judging from observations on March 18 2024, there are still children who have not yet developed (BB) in several indicators the ability to recognize geometric shapes, this is because children still cannot recognize geometric shapes well, there are still children who cannot

classify shapes, colors , size in geometric shapes, and children have not been able to sort objects based on smallest to largest or vice versa, which reaches a percentage of 33.33%, which is the same as 4 children in the BSH category and one child in the BSB category, namely 8.33%. Therefore, (teachers and collaborators) observe children in the learning process and plan improvements to be made in cycle II so that in cycle II the ability to recognize children's geometric shapes in finger painting activities can develop and reach a success indicator of 75%.

Early childhood is a group of children who are in a unique growth and development process. The learning process in early childhood should be carried out with the aim of providing basic concepts that are meaningful to children through real experiences that enable children to show activity and curiosity optimally. Early childhood is a group of children who are in a unique process of growth and development, in the sense of having growth and development patterns (fine and gross motor coordination), intelligence (thinking power, creativity, emotional intelligence and spiritual intelligence), social emotional (attitude). , behavior and religion), language and communication that are specific to the child's growth and development level. (Hasanah & Fajri 2022)

Fine motor skills are fine coordination of small muscles that play a major role. One of the fine motor skills is writing skills. Writing skills are the skill of making letters, numbers, names, signs of any language with a writing tool on a certain page. The writing ability of students with special needs is still low. An effort to overcome this problem is by using finger painting activities. Finger painting is a technique of painting with your fingers directly without using tools. Finger painting activities can be carried out and make learning active, innovative and creative in inclusion classes. The aim of this research is to find out whether finger painting can influence fine motor development, especially writing skills in students with special needs. (Fadilah & Zuhroh, 2023).

Gross motor development occurs when children begin to have coordination and balance, like adults. The development of gross motor skills is as important as the development of other aspects, so educators must be ready to help develop and train children's motor skills in early childhood education institutions. The importance of gross motor skills is because developing gross motor skills in early childhood can help children's physical growth, improve children's body balance. , trains flexibility, speed and agility, trains eye, hand and foot coordination, and helps develop the ability to jump on one leg (Asmuddin et al., 2022). However, in reality there are still many schools that do not stimulate children's gross motor skills, so that children lack gross motor skills (Utari et al., 2022)

Cognitive ability is the ability where children can think logically which they obtain starting from information and ideas that are reality and involve a person's intelligence in solving a problem. This ability then develops into the ability to think logically. The development of a child's thinking determines whether the child is able to understand his environment logically and realistically. As cognitive abilities develop, children's understanding of objects, people and events in their environment will develop more accurately. Every child has the same pattern of cognitive development, namely through four stages of cognitive development, including (1) sensorimotor stage, age 0-2 years. (2) pre-operational stage, aged 2-7 years, (3) concrete operational stage, 7-11 years and (4) formal operational stage, aged 11-15 years. (Safira & Fidesrinur, 2021).

Cognitive abilities have an important role in children's lives, because good cognitive abilities are a provision for children to be able to solve the problems they face in their lives. Cognitive development is very necessary for the development of cognitive abilities. For example, grouping, recognizing numbers, recognizing geometric shapes, recognizing sizes, recognizing the concept of

space, recognizing the concept of time, recognizing various patterns. Recognizing shapes as one of the materials in developing children's cognitive abilities needs to be introduced. The importance of introducing geometric shapes to children is so that children are able to differentiate between several types of geometric shapes that are encountered in their daily activities, for their ability to arrange geometric shapes, and to be able to differentiate between various types of geometric shapes (Pandu Winata, 2023).

Geometry is a part of mathematics that we often encounter in everyday life. Understanding geometric shapes in early childhood starts from concrete to abstract, from intuitive to analytical, from exploration to mastery over a long period of time and from the simplest to the highest stages. Geometry is basic in mathematics and development. Apart from being able to develop logical thinking skills, geometry is also effective in helping to solve problems in many branches of mathematics. Introduction to geometry to children needs to be given through fun activities, namely playing. Introducing geometry through play will make children relax, not feel burdened and have a positive impact on learning. Not only that, it will also be recorded in children's minds that the introduction of geometry is very fun and not scary. By introducing children to geometry, it is hoped that it can help children to prepare themselves to face changing times in life which continues to develop, through various basic exercises children are expected to in the future will have logical, critical and rational thinking patterns. (Komariyah, 2023)

Introduction to geometry is very important for young children. Walle stated that studying geometry is very important, this is for several reasons, including: geometry is often found in everyday life, through geometry it can remind children in the problem solving process, geometry also has an important role in studying other branches of mathematics, then geometry too can be used in everyday life. Apart from that, according to Clement & Battista & Tan, geometry causes an increase in geometric thinking in learning at the mathematical thinking level). Looking at this, it can be seen that geometry is very important to introduce to young children (Hasanah & Agung, 2020).

The ability to recognize geometric shapes using finger painting techniques in the first cycle of the first meeting of 12 children in group B, the results in all indicators were very well developed (BSB) 1 child with a percentage (8.34%), developed according to expectations (BSH) there were 2 The percentage of children is (16.66%), starting to develop (MB) there are 2 percentages (16.66%), and not yet developing (BB) there are 7 children in percentage (58.34%). The second meeting of the 12 children in group B in all indicators developed very well (BSB) there was 1 child with a percentage (8.33%), developing according to expectations (BSH) there were 3 children with a percentage (25%), starting to develop (MB) 3 children percentage (25%), and not yet developed (BB) there are 5 children percentage (41.67%), the third meeting of 12 children in group B who gave results in all indicators that are very well developed (BSB) there is 1 child percentage (8.35%), developing according to expectations (BSH) there are 4 children with a percentage (33.33%), starting to develop (MB) there are 5 children with a percentage (41.67%), and not yet developing (BB) there are 2 children with a percentage (16.67%).

Based on the explanation above, the results of cycle II in this research improved the ability to recognize geometric shapes through finger painting activities. It was discovered that at the first meeting of the 12 children in group B who gave results in all indicators that were very well developed (BSB), it was known that there was 1 person children with a percentage of (8.34%), developing according to expectations (BSH) it can be seen that there are 5 children with a percentage of (41.66%), and starting to develop (MB) it can be seen that there are 6 children with a percentage of (50%). The second meeting of the 12 children in group B who gave results in all

indicators that were developing very well (BSB), it could be seen that there was 1 child with a percentage of (8.34%), developing according to expectations (BSH). It could be seen that there were 7 children with a percentage of (58.33). %), and starting to develop (MB) it can be seen that there are 4 children with a percentage of (33.33%). The third meeting of the 12 children in group B who gave results in all indicators of very good development (BSB), it can be seen that there is 1 child with a percentage (8.34%), developing according to expectations (BSH). It can be seen that there are 9 children with a percentage (75 %), and starting to develop (MB) it can be seen that there are 2 children with a percentage of (16.66%).

Van Hiele believes that there are five stages in children learning geometry, namely as follows: (a) Introduction Stage. At this stage, children already know geometric shapes such as triangles, cubes, balls, circles, etc., but they do not yet understand their nature, (b) Analysis Stage. At this stage, children can understand the properties of geometric concepts or shapes. For example, children can know and recognize that opposite long sides are the same length, that the two diagonals are the same length and intersect each other at the same length, etc., and (c) Sequencing Stage. At this stage, children can recognize geometric shapes and understand their properties and children can order geometric shapes that are related to each other (Wartini et al., 2022)

Finger painting is a type of image-making activity that is done by scratching color mixture (color porridge) directly with the fingers of the hand freely on the image area, the limits of the fingers here are all the fingers, palm, up to the wrist. Finger painting or finger painting is an interesting and impressive experience for children. Finger painting is a type of image-making activity that is done by scratching color mixture (color porridge) directly with the fingers of the hand freely on the image area, the limits of the fingers here are all the fingers, palm, up to the wrist. Finger painting is an interesting and impressive experience for children. (Sari et al., 2020).

Based on the results of research in the second cycle of the third meeting, the development of the ability to recognize geometric shapes using finger painting techniques in group B at Kindergarten Melati Baliara, Bombana Regency, the conversion value obtained for each indicator was still the same until the research cycle II, third meeting, of the number of children who got the value for each indicator. obtained a conversion value in the assessment of children who have not yet developed (BB), namely 0% or 0 children, starting to develop (MB) 16.66% or 2 children, developing according to expectations (BSH) 75% or 9 children and developing very well (BSB) 8.34% or 1 child. This can be concluded again that among the indicators children can recognize geometric patterns, children can classify geometric patterns and shapes and children can sort objects based on smallest to largest size or vice versa collectively related to each other because the results of obtaining the conversion value are the same as the child's assessment the same thing where the ability to recognize geometric shapes influences each other between indicators one, two and three.

Based on the data above, improving children's ability to recognize geometric shapes through finger painting collage activities has not shown good changes, but there has been progress that occurred as a result of the actions in cycle I. However, the percentage has not yet reached the success indicator of 75%. Judging from observations on March 18 2024, there are still children who have not yet developed (BB) in several indicators the ability to recognize geometric shapes, this is because children still cannot recognize geometric shapes well, there are still children who cannot classify shapes, colors , size of geometric shapes, and children have not been able to sort objects based on size from smallest to largest or vice versa, which reaches a

percentage of 33.33%, which is the same as 4 children in the BSH category and one child in the BSB category, namely 8.33%. Therefore, (teachers and collaborators) observe children in the learning process and plan improvements to be made in cycle II so that in cycle II children's fine motor skills in collage activities from pencil sharpeners and origami paper can develop and reach a success indicator of 75%.

4. CONCLUSION

Based on the results and discussion presented above, it can be concluded that; Introducing geometric shapes using finger painting is done in 2 cycles. The indicators for each cycle are introducing geometric shapes, classifying geometric shapes, shapes, colors, ordering sizes from smallest to largest and vice versa. The ability to recognize children's geometric shapes at Melati Baliara Kindergarten, Bombana Regency after the finger painting activity was implemented showed that in general the condition of children's ability to recognize geometric shapes was in good condition and there was an improvement from the condition before the action was carried out. There was an increase in the ability to recognize geometric shapes, namely in cycle 1 it was 41.68%, and then increased to 83.34% in each indicator of the ability to recognize geometric shapes. This shows that the predicted results of the implementation of the researcher's actions exceeded 75% in cycle II of the third meeting and met all indicators of the ability to recognize geome.

4. REFERENCES

Fadilah, M. N., & Zuhroh, L. (2023). Finger Painting untuk Meningkatkan Perkembangan Motorik Halus (Keterampilan Menulis) di Kelas Inklusi MI Amanah. Psikodinamika: Jurnal Literasi Psikologi, 3(2), 1–15. https://doi.org/10.36636/psikodinamika.v3i2.2792

Hasanah, L., & Agung, S. (2020). Kemampuan Pengenalan Geometri Melalui Kegiatan Bermain Balok Anak Usia 5-6 Tahun. Jurnal Paud Agapedia, 2(2), 115–124. https://doi.org/10.17509/jpa.v2i2.24538

Hasanah, u., & Fajri, N. (2022). Konsep Pendidikan Karakter Anak Usia Dini. EDUKIDS : Jurnal Inovasi Pendidikan Anak Usia Dini, 2(2), 116–126. https://doi.org/10.51878/edukids.v2i2.1775

Komariyah, S. (2023). Upaya Meningkatkan Kemampuan Mengenal Bentuk Geometri Melalui Permainan Lompat Geometri Pada Anak Kelompok B TK Diponegoro 109 Pageraji. AUDIENSI: Jurnal Pendidikan Dan Perkembangan Anak, 1(2), 105–112. https://doi.org/10.24246/audiensi.vol1.no22022pp105-112

Pandu Winata, N. S. (2023). Penerapan Finger Painting Dalam Menstimulasi Imajinasi Dan Kreativitas Anak Usia Dini Dalam Bidang Seni. Jurnal Citra Pendidikan, 3(4), 1243–1252. https://doi.org/10.38048/jcp.v3i4.2220

Safira, S., & Fidesrinur, F. (2021). Peningkatan Kemampuan Mengenal Bentuk Geometri Melalui Maze Geometri Pada Anak Usia 4-5 Tahun. Jurnal Anak Usia Dini Holistik Integratif (AUDHI), 1(1), 1. https://doi.org/10.36722/jaudhi.v1i1.562

Sari, M. M., Sariah, & Heldanita. (2020). Kegiatan Finger Painting dalam Mengembangkan Motorik Halus Anak Usia Dini. KINDERGARTEN: Journal of Islamic Early Childhood Education, 3(2), 136–145. https://doi.org/10.24014/kjiece.v3i2.10983

Utari, E. R. R., Hariyanti, Lutfiah Aini, Wahyuni, & Khadijah. (2022). Meningkatkan Kemampuan Motorik Kasar Anak Usia Dini Melalui Permainan Engklek. CERDAS - Jurnal Pendidikan,

1(2), 52–60. https://doi.org/10.58794/cerdas.v1i2.208

Wartini, U., Aisyah, D. S., & Riana, N. (2022). Peningkatan Kemampuan Mengenal Bentuk Geometri Melalui Permainan Papan Monopoli Pada Anak Usia 5-6 Tahun. Jurnal Ilmiah Wahana Pendidikan, 8(14), 346–354. https://doi.org/10.5281/zenodo.6994918.