

INTRODUCTION'S STRATEGY FOR NUMBER 1-10 ON THE CHILDREN 4-5 YEARS OLD DURING THE PANDEMIC COVID-19

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Abstract: This study aims to describe the introduction of the 1-10 number symbol strategy in children aged 4-5 years during the Covid-19 pandemic. The method used in this research is qualitative descriptive research. Data collection techniques used were interviews and documentation. The results showed that the strategy of introducing the 1-10 number symbol in children aged 1-5 years that was applied in IT Fathiyah PAUD was to carry out mathematical activities at home. Mathematical activities at home that are carried out include math activities on the home page, math activities in the living room, math activities in the kitchen, and math activities in the bedroom. Mathematical activities at home have proven to be effective in introducing the 1-10 number symbol in children aged 4-5 years at PAUD IT Fathiyah. The obstacles encountered in this study are the difficulty of communication made with parents of students using social media and the inhibition of the implementation of learning at home because there are parents who also carry out work from home.

Keywords: symbol of numbers, children 4-5 years old, COVID-19

INTRODUCTION

On March 11, 2020, the World Health Organization (WHO) declared Covid-19 a pandemic. SARS-CoV-2 causes Covid-19. The Covid-19 pandemic or coronavirus occurred at the end of December 2019, a mysterious outbreak of pneumonia characterized by fever, dry cough, flu, and fatigue occurred first in Wuhan China which then spread to other countries including Indonesia (Wu et al, 2020). Covid-19 pandemic, which attacks Indonesia, has an impact on various sectors, ranging from health, economy, to education. The Government of Indonesia issued a policy contained in the Regulation of the Minister of Health of the Republic of Indonesia Number 9 of 2020 concerning Large-Scale Social Limitation Guidelines (PSBB) to prevent transmission from Covid-19. The government provides restrictions on diversity activities, schools, workplaces, public places or facilities, social and cultural activities, modes of transportation, and other activities related to defense and security aspects with several requirements that must be met.

In the real of education, the form of implementing PSBB is through a policy for all educational institutions from early childhood education (PAUD) to universities to learn from home, according to Circular Letter No. 4 of 2020 concerning the implementation of Education policy in the middle of the pandemic. The implementation of government policies related to learning from home provides new challenges for all educational institutions. The process of implementing learning

that is usually carried out in schools with face-to-face learning activities directly between educators and students now must be done face-to-face through the distance learning system. Early childhood learning activities in early childhood institutions that were previously carried out with active involvement of teachers and students through play activities while learning because of the existence of Covid-19, but now all these activities are home. Stimulation of aspects of early childhood development is done at each student's home.

Teachers have the challenge of being able to stimulate developmental aspects to students during the Covid-19 pandemic with the help of parents. Teachers are required to provide effective and efficient learning in stimulating early childhood development with fun activities such as play. Montalalu revealed that learning through play can get the fulfillment of curiosity in children, and children get a lot of practice in observing themselves, comparing, so that children can find ways to solve or solve problems faced (Montolalu et al., 2012). Play facilitates learning relevant processes such as rehearsing, practicing, repeating, imitating, exploring, discovering, revising, extending, combining, transforming, testing (Hughes, 1991; Ozdoğan, E, 2011). Play to learn becomes a legitimate approach in early childhood, valuing the direct contribution of well-designed learning activities based on play and games to the development of different sides of personality (Ciolan, 2013).

Through play activities, children master bodily functions well, coordinate between the eyes and hand movements, coordinate between eyes and movements, train children's muscles, make decisions and gain new skills or abilities (Papalia & Feldman, 2015). Based on some of the opinions above, play activities are an essential and integral part of the process of early childhood learning. So that teachers can prepare a variety of play activities that are fun for children so that children can gain knowledge through the exploration they do when playing. With this Covid-19 pandemic, the teacher has different duties and responsibilities from the previous normal conditions. With the implementation of the CBDR, and learning from home, the role of teachers is replaced by parents. The application of learning for young children is carried out by the teacher, the PAUD teacher, as the activity planner, and learning outcome assessor. While for the implementation of learning played or done by parents in each student's home and still use the principle of playing while learning (Hewi & Asnawati, 2020). The play activities carried out at home for early childhood are carried out by utilizing objects around the child as a means of playing.

Cognitive development is one aspect of development that must be stimulated in early childhood, one of which is in recognizing the 1-10 symbol in children aged 4-5 years. The ability to recognize numbers 1-10 in early childhood is needed in everyday life. These abilities are part of the early mathematical abilities of children and can help children in readiness to enter the next level of education. Early mathematics skills strongly predict later mathematics skills (Blevins-Knabe & Austin, 2016).

The introduction of number symbols in children aged 4-5 years, children not only recognize the symbol numbers but also begin to understand that numbers or symbol numbers represent a number. The ability to identify the number symbols in children aged 4-5 years is more focused on indicators (1) children can mention the sequence of numbers 1-10, (2) children can designate symbols 1-10, and (3) children can say many objects 1- 10 and (4) children can connect 1-10 numbers with objects. The number is a fundamental way of describing the world. To communicate about numbers, people need representations; something physical, spoken, or written (National Research Council, 2001). In introducing the 1-10 symbol numbers in children aged 4-5 years, we need a strategy designed by the teacher and then applied by parents to help children understand the concept of the number symbol. The strategy used must be adjusted to the current conditions during the Covid-19 pandemic. One suitable strategy is to play math at home. Activities to play mathematics at home can be done in the living room, dining room, bedroom, kitchen, and even the bathroom (Kemdikbud, 2020).

METHOD

The method of this research used a qualitative descriptive study. The method of this research aims to gain new knowledge and illustration related to the introduction of 1-10 symbol symbols during the Covid-19 pandemic through mathematical activities at home. Furthermore, the research findings are described in the appropriate and systematic language according to the facts found in the field during the research.

This research was carried out in PAUD IT Fathiyah, which addressed at Jl. D. I Panjaitan, Lorong Sikam, Kelurahan 16 Ulu, Seberang Ulu II District, Palembang City. This research was carried out during the Covid-19 pandemic and the implementation of the student learning policy from home, namely from April to June 2020. For research subjects, children aged 4-5 PAUD IT Fathiyah, amounting to 7 children.

The technique for collecting the data used interviews and documentation. Data collection techniques were taken into consideration of adjusting government policies that were applied during the COVID pandemic 19. Interview and documentation activities were carried out through social media assistance, namely the WhatsApp group. From the collected data, data analysis is then performed with the following steps, data reduction, data presentation, and conclusion drawing. The following are the stages of research conducted by researchers.

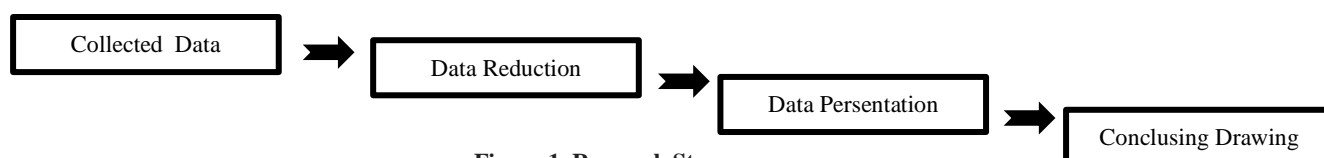


Figure 1. Research Stages

RESULTS AND DISCUSSION

The learning system carried out at PAUD IT Fathiyah also changed following the policy with the issuance of a home study policy by the Minister of Education and Culture. Learning that initially takes place at school must be carried out at home with the help of the students' parents.

From the results of interviews conducted by teachers and principals at PAUD IT Fathiyah, the learning activities carried out began with the provision of learning designs at the beginning of each week. The teacher sends a lesson plan through the WhatsApp group, and then the teacher explains how to do the assignment. Although learning activities that are delivered to parents are for one week, but communication between the teacher and parents can be done every day. Implementation of learning at home is documented by parents, which are then sent to the teacher for further analysis and assessment by the teacher. Besides, teachers are also scheduled to carry out home visit activities. Home visit activities are held every two weeks.

The design of learning created by the teacher during the Covid-19 pandemic was made simple, in contrast to the design of learning for normal situations when learning is carried out in PAUD institutions. The theme used was adjusted to those around the child. One of the themes used at PAUD IT Fathiyah is playing at home. The theme chosen was aligned with the principles of theme selection in PAUD, including closeness, simplicity, attractiveness, carrying capacity, and inspiration (Mustofa et al., 2018). The same was stated by Kostelnik, et al., in developing a theme, teachers select topics they believe to be relevant and of interest to children, then build an array of lessons around that central idea (Kostelnik et al., 1991).

The learning carried out is also adjusted to the concept of early childhood learning through play activities. Play activities carried out at home also by using tools and materials tailored to the available at each student's home. One of the activities carried out is the activity in developing aspects of children's cognitive development in the introduction of number symbols. The introduction of the 1-10 number symbol in early childhood is adjusted to the scope of cognitive mining at the symbolic thinking stage guided by the Ministry of Education and Culture 137 of 2014 on National Standards for Early Childhood Education.

In the activity of introducing the 1-10 number symbol to children in PAUD IT Fathiyah, with indicators: children can mention the sequence 1-10 numbers, (2) children can designate 1-10 symbol numbers, (3) children can say many objects 1- 10 and (4) children can connect 1-10 numbers with objects. The activity of introducing the 1-10 number symbol was designed by the teacher with mathematical activities at home and carried out and documented by parents at home. Mathematical activities carried out include playing mathematics on the home page, playing mathematics in the living room, playing mathematics in the kitchen, and playing mathematics in the bedroom.

In math activities on the page, parents provide tools and materials: objects on the home page, symbols 1-10 written on paper. Implementation of activities: parents are asked to invite children to

play in their home pages. Children are asked to observe objects in the home page, and children are asked to count objects in the home page, such as counting plants or the number of rocks. Children are asked to mention the number of plants/rocks. Parents provide a paper with the symbol number 1-10. The child is asked to show symbol numbers on paper that correspond to the number of plants/rocks that have been counted before.

Activities of playing mathematics in the living room, using tools and materials in the living room, such as tables and chairs, paper, and stationery. Implementation of its activities: children are asked to count the number of tables and chairs in the living room. The child is then asked to mention the number of tables and chairs. In the next activity, the parents ask the children to draw a table and chairs then write down the number of tables and chairs next to the picture.

Activities to play mathematics in the kitchen is done by using tableware such as spoons, plates, and cups. Besides, parents also use herbs such as onions or nuts. In carrying out their activities, parents separate the amount of cutlery/spices from 1-10, then the child is asked to mention the number of such spices/spices. Furthermore, parents guide children to form symbols with numbers

Activities to play mathematics in the bedroom, carried out using objects in the bedroom. The activity is carried out by stating the number of pillows, bolsters, or dolls in the bedroom. Next, the parent asks the child to arrange a pillow to form a tower from a pillow and doll, and then the child is asked to state the number of pillows and dolls used to build the tower. The child is asked to designate a symbol that corresponds to the number of pillows and dolls used to make the tower. Other activities that can be done in the bedroom include grouping clothes and pants, and children are asked to separate their dresses and pants. Then the child is asked to mention the number of clothes and pants that have been separated. The child is asked to show the number of symbols provided by parents using paper with an amount that matches the shirt and pants.

From the results of the analysis of the documentation of mathematical activities carried out above, the teacher can see the cognitive development of children in the aspect of recognizing the symbol numbers 1-10, from seven children for the ability to mention the sequence of the symbol numbers 1-10, has been achieved by all children with very well developed categories. From the results of the analysis on the second indicator, children can designate 1-10 symbols, out of seven children, five of them have reached a very well developed category. In contrast, two children have reached the development category as expected. And in the third indicator, children can say many things 1-10, six of the seven children have reached the category of developing very well and one child with a category growing according to expectations. In the fourth indicator, children can connect the numbers 1-10 with objects. For the outstanding developing category, it has been achieved by five out of seven children, one child in the developing category according to expectations and one child in the starting development category. Home math activities designed by PAUD IT Fathiyah

teachers can help children to recognize 1-10 symbols with the help of parents. Introducing numbers in early childhood should be with play activities/play games because with play activities, children feel happy, comfortable, and the child will learn about the life, train courage to foster a sense of confidence (Komariah, 2013). The introduction of number symbols in children can predict their mathematical achievements (Chu et al., 2015). In line with the results of research conducted by Martin et al. (2014), the introduction of numbers and numeracy skills needs to be well developed to obtain success in mathematics.

Play math activities provide various benefits for children. As revealed by Holton et al. (2001), during mathematical play, children use their current knowledge, and mathematical play develops links between the current schemata while the play is occurring. Mathematical play reinforces the current knowledge, and it assists future problem solving / mathematical activities. During the mathematical play activities, children come across different types of daily problems, and they construct several solution ways for them spontaneously. Therefore mathematical plays support the logical thinking and create powerful learning environments (Holton et al., 2001).

Constraints encountered in conducting this research, namely communication with students' parents through social media. Some parents who do not understand the design of the implementation of learning provided by teachers through social media, causing misunderstandings in the implementation of learning. Besides, the factor of parents who also carry out work from home, so that the implementation of learning in children is hampered. The above conditions are handled by the teacher with home visit activities, which are conducted every two weeks. With this home visit activity, teachers can communicate directly with parents regarding the implementation of learning that should be done. And provide repetition to some children who have difficulty during the implementation of learning at home.

CONCLUSION

Playing mathematics at home is a strategy of PAUD IT Fathiyah's teacher in introducing the symbol of numbers. The teacher designs math activities that are then carried out and documented by parents. From the documentation sent by parents, the teacher analyzes and evaluates children's cognitive development, including aspects of the introduction of sayings 1-10. From the results of research conducted, mathematical activities have proven effective in introducing the symbol 1-10 in children aged 4-5 years at PAUD IT Fathiyah. The teacher with home visit activities overcame the obstacles encountered in conducting this research.

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