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Teacher Strategy in Learning Mathematics in Class B At TK Aisyiyah Bustanul Athfal 06 Medan In Academic Year 2023/2024

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A B S T R A C T

This research aims to find out the math learning strategies of TK Aisyiyah Bustanul Athfal 06 Medan Class B teachers. The results showed that there were many variations of mathematics learning strategies used by teachers in Teratai class, including direct learning strategies, indirect learning strategies, interactive learning strategies, and autonomous learning strategies, but when used in Teratai class teachers were more likely to use indirect learning strategies, while the use of direct learning strategies, interactive learning strategies, and autonomous learning strategies was still not optimal. So in Mawar class, the strategies used by teachers in teaching mathematics are still relatively single, the strategies used include direct learning strategies, indirect learning strategies, and indirect learning strategies. Among these strategies, Mawar class teachers more often use direct learning strategies. Meanwhile, the use of indirect learning strategies and autonomous learning strategies is still less than optimal.

INTRODUCTION

Early childhood education is a form of learning that is based on the direction of development and growth, both gross and fine motor skills, emotional development, cognitive development, and spiritual development of children, that is why early childhood education is the most fundamental thing in every child's life, experience learning and growth and development from an early age will become the basis for the learning and development process. Through the principle of early childhood education, namely, learning while playing, it is hoped that children can develop every potential they have.

In the learning process, various materials are given to young children to prepare them to know the world around them and provide them with various knowledge that can be used in everyday life. One of the learning materials provided is mathematics learning. Mathematics is one of the lessons provided to stimulate children's cognitive development. According to Yus, learning mathematics means doing activities related to numbers and calculations, geometry, measurement (including comparison, sorting, and series), as well as probability and graphs (Suryana, 2018).

Children's mathematical concepts that can be introduced at an early age include matching, sorting, comparing, and ordering. According to (Sumardi, et al. 2017), children should be able to interpret numbers sequentially, starting from number 1 and continuing with numbers 2, 3, 4, 5, 6, 7,…. . . . etc. The sequence of numbers does not change position, each number does not repeat itself, it only appears once. (Syafdaningsih, et al. 2020) believes that children aged 5-6 years should be able to name the number symbols 1-10, count using number symbols, and match numbers with number symbols. Apart from that, mathematical concepts are introduced to children so that they understand the basic knowledge of mathematics learning and are better prepared to receive deeper mathematics learning at the next level of education.

One important component of successful early childhood learning is the learning process, namely through learning strategies provided by the teacher. A learning strategy is a general pattern of planned interaction between students teachers and other learning resources in a learning environment to achieve certain learning goals (Mulyasa 2017). Teachers should be able to develop good strategies so that the material provided by the teacher is easy for children to understand and comprehend. Then according to (Yus and Sari, 2020), learning strategies are reflected in a series of activities through the components of learning methods, learning media, and time used.

Based on the results of the author's previous observations when conducting PLP II in the Teratai class at TK Aisyiyah Bustanul Athfal 06 Medan, in implementing the learning there were several advantages and disadvantages to the mathematics learning strategy. Teachers tended to use direct learning strategies. In this strategy, learning is teacher-centered, where the teacher provides information about new learning topics at the beginning of the lesson, provides examples of learning activities, etc., and then asks students to complete learning tasks on the whiteboard or the screen. . each table. This kind of learning focuses on the teacher but must still ensure student

participation. Even though the methods and media used are conversational methods and visual media, teachers conduct conversations, communicate through discussions, and provide instructions or directions to follow instructions. An example of learning is using student worksheets to carry out counting activities. The teacher gives instructions on how to do the work in front of the class, then the children listen from their respective desks and then carry out the assignment according to the instructions given by the teacher previously. Usually, the activity given is, children count the number of fruits in the book and then write down the numbers according to the number. The author sees several advantages and disadvantages in using this method and media. The author sees that out of 17 children in 1 class, only 4 to 5 can complete the assignment independently from their teacher. Therefore, researchers are interested in conducting research at TK ABA 06 Medan, to find out what strategies are used so that children's achievements are different.

According to research conducted by Lubis (2021), children can begin to understand mathematical concepts by playing while learning. Guiding young children to learn mathematical concepts can include: 1). Developing the concept of numbers in children, 2) Developing patterns and concept relationships, 3) Developing the concept of geometric relationships, 4) Developing the concept of measurement, 5). data concept collection, organization, and presentation. Of course, all this is done in a fun situation with the teacher. In line with the research above, Misrawati and Suryana (2021) concluded that the quality of mathematics teaching materials affects children's mathematical abilities. When seen when asking math questions, children appear to be proactive in answering a series of questions asked by the teacher. Apart from that, it can be seen in class discussions that the children are very enthusiastic about using mathematics teaching materials to learn.

Based on the above, the author is interested in learning more about the strategies and learning processes carried out by teachers, why children in a class have different learning outcomes, what strategies are used, what methods and learning media are used by teachers, that some children succeeded in achieving their learning objectives while several others were not successful, so the author intends to carry out research with the title "Teacher Strategies in Learning Mathematics at TK Aisyiyah Bustanul Athfal 06 Medan in Academic Year 2022/2023".

LITERATURE REVIEW

Early Childhood Mathematics

Sriningsih said that early childhood mathematics is a tool that can be used to encourage children to develop various intellectual potentials and thinking abilities and can be used as a means of developing various positive attitudes and behaviors to lay the foundation for the child's future.

According to Yus (2020), early childhood mathematics has a specific aim, namely training children to be able to think systematically and logically from an early age through observing objects, pictures, and numbers around the child, being able to adapt and socialize in their daily life in people who need the

ability to calculate, have focus and precision and have a high attitude of appreciation, can understand the concepts of space and time and can calculate the sequence of events that occur in the correct order, and can do things spontaneously using their creativity and imagination.

Mathematics Learning Strategies for Children Aged 5-6 Years

Mathematics learning strategies are planning mathematics learning activities where educators and students must use learning methods and media to achieve effective and efficient learning goals (Aulia R, 2018).

To achieve optimal learning goals, teachers strive to provide the right stimulus through various learning strategies. The following are several early childhood mathematics learning strategies used by teachers (Nurhasanah et al. 2019).

1. Direct Learning Strategies

   Direct learning strategies are strategies whose activities focus more on the teacher. These strategies include lecture methods, problem-based teaching, explicit learning, exercises, and demonstrations. Direct learning strategies can be used effectively to disseminate information or improve skills gradually.

2. Indirect Learning Strategies

   Indirect learning indicates a high level of student involvement in the process of observing, investigating, drawing conclusions from data, or forming hypotheses. In indirect learning, the teacher's role changes from lecturer to facilitator, supporter, and resource person. Teachers design learning atmospheres to provide opportunities for students to participate and allow students to provide feedback during inquiry. Indirect learning strategies refer to printed, and non-printed materials and human resources.

3. Interactive Learning Strategy

   This interactive learning strategy refers to a form of discussion and sharing with students which provides opportunities for students to respond to the ideas, experiences, opinions, and knowledge of teachers and groups and try to find alternative thoughts. Interactive learning strategies are developed through a series of grouping and interaction techniques. This includes class discussions, small group discussions, group assignments, and students working in pairs.

4. Experiential Learning Strategies

   Experiential learning strategies take the form of an inductive series, which is student-focused and activity-oriented. The focus of experiential learning strategies is the learning process, not the learning outcomes. Teachers can use this tactic both inside and outside the classroom. For example, the simulation method can be used in the classroom, while the observation method can be used outside the classroom to obtain an overall picture of opinions.

5. Independent Learning Strategy

   Independent learning is a learning strategy created to foster initiative, sensitivity, independence, and self-improvement. The emphasis is on

students to develop learning plans independently with the help of teachers. This independent learning can also be done with friends or in groups.

Mathematics Learning Media for Children Aged 5-6 Years

Learning media is a real form of learning material that teachers can use to distribute their learning material. According to (Syafdaningsih, et al 2022) learning media is divided into 3 which are explained as follows:

1. Visual Media

   This media is media that can convey messages through sight or media that can only be seen. Visual media is very suitable for conveying learning material because of its concrete nature so children will be interested in seeing it. Visual media is divided into two, namely media that can be displayed (projected visual) and media that cannot be displayed (non-projected).

2. Audio Media

   Audio media is media that contains messages in the form of sound (can be heard) which will stimulate attention, feelings, thoughts, and encouragement to learn the content, for example, cassettes and radio. In early childhood mathematics learning, audio media that can be used is playing songs related to children's mathematical concepts, such as the song "One and One, I Love You, Mother", the song "my two eyes" and "my balloon".

3. Audio Visual Media

   Audiovisual media is a combination of audio media and visual media, often also called auditory media, namely media that can be seen and heard simultaneously. The use of audio-visual media to convey learning to young children is very appropriate because it can attract children's interest in learning. Examples of audiovisual media include television/video programs, education/teaching, and sound slide shows. According to Mike. M. Comel from Indiana believes that the use of this media must be adjusted to learning needs. Learning media can be used indoors or outdoors, depending on the purpose of the media itself (Syafdaningsih, et al. 2022).

METHODOLOGY

This research is qualitative research that uses a descriptive approach. This research method is a method based on the post-positivism philosophy, used to examine objects in natural conditions, with the researcher as the key instrument, and the research results are actual data (Sugiyono, 2017). Qualitative research usually uses data collection techniques using interviews, observation, documentation, and combination or triangulation.

This research was carried out at TK Aisyiyah Bustanul Athfal 06 which is located on Jl.Silaturrahim No.36-22, Tegal Sari III, District. Medan Area, Medan City, North Sumatra. The research will be carried out from April to June 2023.

Research subjects are people who will be the source of information and data needed to fulfill the research topic to be conducted. The subjects of this research were two class B teachers at TK Aisyiyah Bustanul Athfal 06 Medan who were directly and actively involved in the process of teaching and learning

activities every day. Meanwhile, the research object is the problem topic to be studied. The object of this research is the teacher's strategy in learning mathematics B TK Aisyiyah Bustanul Athfal 06 Medan.

Research procedures and designs are the stages or processes carried out to achieve research objectives. The following are the research procedures and designs that will be carried out by researchers consisting of the Pre-Field Stage and Field Stage.

Research instruments are tools for collecting data in the field. The researcher is the main instrument in qualitative research, where the researcher will go directly into the field to obtain the required research data. In this type of qualitative descriptive research, researchers will use observation and interview guidelines so that the research carried out is more focused.

RESEARCH RESULTS

The research that has been carried out is related to the topic of teacher strategies in teaching mathematics in class B, TK Aisyiyah Bustanul Athfal 06 Medan, where this research focuses on discussions related to AUD mathematics strategies used by teachers in class B, based on the results of the observation notes obtained. During the research carried out, the following are the results of the research findings which are explained in the form of data descriptions.

Some of the strategies used by respondent A are direct learning strategies, indirect learning, interactive learning strategies, and finally independent learning strategies. However, of the four strategies used by respondent A in the mathematics learning process, the strategy that is used most often is the indirect learning strategy. In contrast to respondent A, respondent B only uses direct learning strategies, indirect learning strategies, and independent learning strategies. Of the three learning strategies used in learning mathematics, respondent B is more likely to use direct learning strategies. For the two respondents studied, the researcher found that the learning carried out by the two respondents was not by the existing RPPH.

DISCUSSION

In this discussion, the research findings obtained through observations and interviews will be explained further by the researcher regarding the teacher's strategy in teaching mathematics in class B of TK Aisyiyah Bustanul Athfal 06 Medan. Data collection in this research was obtained through observation, interviews, and documentation in a clear, objective, and appropriate manner with the facts in the field. This research was carried out from June to August 2023 at TK Aisyiyah Bustanul Athfal 06 Medan, involving two class teachers. The explanation related to the implementation of early childhood mathematics learning at TK Aisyiyah Bustanul Athfal 06 Medan is as follows.

In his research entitled "Arithmetic Skills in Children Aged 5-6 Years" (Sari et al., 2020), stated that the learning strategy used to improve numeracy skills in children aged 5-6 years is to use child-friendly learning methods, Learn The process follows children's learning principles, statistics on learning activities according to the child's age, and the use of interesting learning resources and media. The development of numeracy skills in children aged 5-6 years seems

very active and enthusiastic in answering various questions asked by the teacher. Apart from that, it can be seen in class discussions that the children are very enthusiastic about using mathematics teaching materials to learn.

The use of mathematics strategies in children should be done by implementing each strategy in a balanced manner with one another. The mathematics learning strategies used by teachers at TK ABA 06 Medan are still less varied. Apart from that, the only media used in the Mawar class are pictures and books. Meanwhile, the media used are natural materials (loose parts). Then, the RPPH design is not by the implementation of learning in the classroom. The activity plan prepared with the activities carried out must be in line so that the final results can be achieved optimally. Learning activities in introducing early childhood mathematics must also be varied and can arouse children's enthusiasm for learning.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the results of the research in the previous sub-chapter regarding Teacher Learning Strategies in Class B TK Aisyiyah Bustanul Athfal 06 Medan, the following conclusions can be drawn:

1) There are many variations in the mathematics learning strategies used by teachers in the Teratai class, including direct learning strategies, indirect learning strategies, interactive learning strategies, and independent learning strategies, but when used in the Teratai class, teachers tend to use indirect learning strategies. Meanwhile, the use of direct learning strategies, interactive learning strategies, and autonomous learning strategies is still less than ideal.
2) The strategies used by teachers in the mathematics teaching and learning process in the Marwar class have not yet undergone any changes, the strategies used include direct learning strategies, indirect learning strategies, and indirect learning strategies. Among them, Mawal's class teacher uses more direct learning strategies, while the use of indirect learning strategies and independent learning strategies is still not optimal.

ADVANCED RESEARCH

For advanced research, we hope to be able to see another researcher using a larger sample and population to look at teachers' strategies in teaching mathematics to early childhood in kindergarten.

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