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THE ROLE OF USE OF AUDIO VISUAL MEDIA ON CALCULATING ABILITY EARLY CHILDHOOD

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Abstract This writing aims to determine the role of the use of audio-visual media on the numeracy skills of young children. It is very important to develop children's numeracy skills because this is the basis for developing children's mathematical skills and readiness for entering the next level of education. This research uses a qualitative approach to describe and explain the role of the use of audio-visual media on the numeracy skills of young children. The data collection technique used in this research is library research, where library research is an activity that collects materials related to research from books, existing journals, as well as conducting observations at Aisyah Bustanul Athfal Kindergarten in Pijorkoling, Southeast Padangsidimpuan. The results of this research are that children use number symbols to count by showing audio-visual media. This shows that using audio-visual media can stimulate the development of children's numeracy skills in line with the stages of mastery of numeracy in mathematics. Children who initially did not want to learn and did not want to respond to the teacher when the teacher asked questions during learning after using audio visuals as an interesting learning media showed that there was an improvement in children's learning. Teachers act as facilitators who design activities that are interesting and relevant to children's development, ensuring that the media used is appropriate to children's abilities and interests.

Keywords: Audio visual media, numeracy skills, early childhood.

INTRODUCTION

Early childhood is a group of children who are in a unique process of growth and development. They have specific growth and development patterns according to their level of growth and development. This period is a golden age, because children

experience very rapid growth and development and are irreplaceable in the future. Cognition is an important aspect in forming a foundation, namely understanding basic concepts such as counting numbers. The ability to count numbers has long-term implications for early childhood academics.(Fitria, 2014)

Therefore, this research aims to determine the role of audio-visual media on the numeracy skills of young children. By utilizing audio-visuals as a learning tool, it is hoped that children can develop a better understanding of the ability to count numbers in an interactive and fun way. Every child has different abilities, it is very important for the child's abilities to be stimulated so that the child's abilities improve well and equip the child for the future (Margaretha, 2022). Ability is the ability that exists within a person which can be produced from genes or innateness and can be done with exercises that can support the person in completing their tasks. In this case, the cognitive development of early childhood is related to the concept of numbers. The importance of developing cognitive abilities in the field of mathematics, one of which is the ability to recognize the symbols for numbers 1-10 in early childhood, this skill is very much needed in everyday life, because this is the basis for the development of mathematical skills in children and their readiness to enter next level of education. So counting is the basic science used to introduce numbers to early childhood.

Several factors influence the causes of children's concentration during the learning process, including the noise in the classroom, the lack of enthusiasm that children have during the learning process, and the child's lack of interest in learning, as well as boredom during the learning process. One solution to improve cognitive abilities to introduce number symbols is done through audio-visual learning media. Media in the learning process is an intermediary or introduction to the source of the message to the recipient of the message, stimulating thoughts, feelings, attention and will so that they are encouraged and involved in learning. Through media, children can actualize themselves and play an active role in every learning activity. The learning process is basically also a communication process, so the media used in learning is called learning media.(Zaini & Dewi, 2017)

METHOD

This type of research is qualitative, namely describing and explaining the role of the use of audio-visual media on the numeracy skills of young children. The data collection technique used in this research is library research, where library research is an activity that collects materials related to research from books, existing journals, as well as conducting observations at Aisyah Bustanul Athfal Kindergarten in Pijorkoling, Southeast Padangsidimpuan.

RESULT AND DISCUSSION

In this study, researchers observed and described the use of audio-visual media on children's numeracy skills by looking at children's learning outcomes in class using observation techniques (Setiawan, 2018). Data collection in this research was carried out by observation carried out at the initial and final stages of the research process, by obtaining initial data including: the condition and abilities of schools, students, teachers in managing and implementing techniques, methods and models of using learning strategies. 2. complete for data collection. 3. Researchers analyzed written RPPH and children's learning outcomes related to the implementation of numeracy learning that had been carried out by previous teachers, and video documentation of audio-visual media learning activities. The research procedure was carried out in three stages, namely the preparation stage, implementation stage and evaluation stage.

From the results of the research and discussion of the first indicator, children use number symbols to count by showing audio-visual media. This shows that using audio-visual media can stimulate the development of children's numeracy skills in line with the stages of numeracy mastery in mathematics, namely: 1) Concept Mastery. At the concept mastery stage, understanding and comprehension of something must use concrete objects and events, for example recognizing colors, shapes, and counting numbers. 2) Transition period. At this stage the thinking process is a transition period from concrete understanding to the introduction of

abstract symbols, where concrete objects are still used and their shapes and symbols are starting to be introduced. 3) Coat of arms. At this stage there are symbols or visualizations of various concepts. Such as the symbol 7 to describe the concept of the number seven, red to describe the concept of color, large to describe the concept of space, and four squares to describe the concept of shape.(Mahyudin, 2020)

During learning, show audio-visual media to children. During observations, children who initially did not want to learn and did not want to respond to the teacher when the teacher asked questions during learning after using audio-visual as an interesting learning medium showed that there was an improvement in children's learning. Some characteristics of cognitive abilities are: 1) Can understand numbers and sizes, 2) Interested in letters and numbers. Some are already able to write or count, 3) Know their field and move according to their field and 6) At the end of 6 years of age children are starting to be able to read, write and count. Children's counting games can be grouped according to the stages of mastery of counting, namely the stage of mastering the concept of numbers and number symbols, the transition period, namely matching numbers with number symbols and showing number symbols and adding number symbols with number concepts. Therefore, in early childhood learning, children learn while playing so they can recognize and discover concepts that they apply in their daily lives.(Sulistyawan & Prasetiyawati Diyah Hariyanti, 2021)

The role of teachers in PAUD institutions in the learning process in the classroom is to play a very active role in helping the process of children's growth and development, both physically, motorically, socially and emotionally. Teachers must always provide stimulation and guidance to develop children's cognitive abilities from an early age so that children are able to produce lots of relevant ideas or answers and have a smooth flow of thought, the ability to adapt, solve the life problems they face so that in the end their bodies become individuals, who, able to help himself. Teachers can prepare activities and create an atmosphere that can stimulate children and help them choose the right activities. The maximum role of educators and working together with parents positively will produce children who are extraordinary in their potential (Firman & Anhusadar, 2022). The realization of

good growth and development of children is due to the role of educators who optimize stimulation in all aspects of development which can bring out children's potential in optimal care.

There are five roles of PAUD education as professional education, namely: PAUD Educators as educators, PAUD Educators as teachers, PAUD Educators as mentors, PAUD Educators as trainers, and PAUD Educators as evaluators. So it can be concluded that the teacher's role in planning learning in stimulating children's cognition, especially numeracy skills in early childhood (PAUD), is the teacher because teachers can plan children's needs for their activities, as well as stimulate children's cognition by planning learning activities carefully using various technology. Understanding audio-visual learning media, namely a medium used in learning activities involving hearing and sight at the same time in one process or activity. Messages and information that can be transmitted through this media can be verbal and nonverbal messages that rely on both sight and hearing. Because it involves elements of hearing and vision, the learning video presentation must be appropriate and relevant to the material and stages of the child's cognitive development (Tuharyanti et al., n.d.). Achieving the objectives of using media depends on the design and strategy carried out. In order to achieve this, it is necessary to pay attention to the principles of using audio-visual based learning media, namely the principles of using learning media will provide direction on how to use audio-visual learning media more effectively and can achieve the desired goals.

Many audio-visual media are designed to be interactive, allowing children to actively participate in the learning process. Audio visual media also helps children understand the concepts of recognizing numbers, addition and subtraction well through pictures, animations and videos. So teachers and audio-visual media are very important and complement each other in improving the numeracy skills of young children. Teachers act as facilitators who design activities that are interesting and relevant to children's development, ensuring that the media used is appropriate to children's abilities and interests.(Pendidikan et al., 2020)

CONCLUSION

Early childhood cognitive development uses numbers to calculate using learning media that is as interesting as possible. Basically, young children understand things through playing, something that interests them and makes them curious. Therefore, teachers are required to be able to develop learning media that are suitable according to the characteristics of children's development and children's learning styles. Teachers must also provide motivation and guidance to children to build their confidence in numeracy skills, and support children to try and learn from mistakes because children learn from the experiences they go through.

The use of audio-visual media in learning can create a fun, effective and meaningful learning atmosphere so that learning objectives can be achieved. With the help of audio visual media teachers can adapt learning materials according to children's needs and abilities.

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