



Efforts to Improve the Ability to Recognize Numbers 1-10 by Using Associative Media in Children in Kindergarten

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Receive: 11/08/2024

Accepted: 10/09/2024

Published: 01/10/2024

Abstract

This study aims to improve the ability to recognize numbers 1-10 by using associative image media in TK Satu Atap Empat Lawang. Number recognition skills include calling numbers, matching numbers with associative images, and writing numbers. The purpose of this study is to describe the planning, implementation, and evaluation of learning in an effort to improve the ability to recognize numbers 1-10 using associative image media in TK Satu Atap Empat Lawang. The approach used in this study is qualitative, and the type of research is descriptive qualitative. Data collection techniques include interviews, observation, and documentation. Data analysis uses data condensation, data presentation, and conclusions. The validity of the data in this study used source triangulation and triangulation techniques.

Keywords: Ability to recognize numbers 1-10, associative image media

Introduction

Early Childhood Education (PAUD) is a coaching effort aimed at children from birth to the age of six years, which is carried out through the provision of educational stimuli to help children's physical and spiritual growth and development to readiness to enter further education [1]–[3]. One aspect developed from an early age is cognitive ability [4]. The level of mental development achievement includes understanding numbers, numbers, and letters; general knowledge and science; and the concepts of shape, color, size, and pattern [5], [6]. Permendiknas No. 58 of 2009 states that for group B children aged 5-6 years and participating in kindergarten activities, the standard for the level of achievement The

development of the scope of cognitive development regarding the concept of numbers and numbers is the ability to say names and numbers 1-10.

Vygotsky asserts that young children are still incapable of abstract thinking. For the child, object and meaning become one [7]. In order for children to understand something, concrete objects are still needed [8], [9]. Teaching children to count starts with objects in their immediate environment. For example, children count how many pencils they carry. The ability to recognize numbers is one type of memorization [10]. According to Vienna Sanjaya, memorizing information can be facilitated by using the "memo technique" or "donkey bridge" [11]. Ahmadi said that

one approach to achieving this is to use the mechanism of association. To get around this, the researchers examined the use of associative image media, which are thought to help children maintain the shape of actual objects and facilitate memorization by applying an association approach.

In number identification exercises, associative images are images whose shape resembles a certain number, such as pencil or marker drawings resembling the number 1, duck or goose drawings resembling the number 2, and images of birds in flight resembling the number 3. On November 12, 2023, the author observed 12 children of group B. When the children were asked to write and name the numbers 1 through 10, the author observed what happened. Only five children could say the numbers 1 to 10 at the time, and only five children could write the numbers 1 to 10 on paper, but the numbers were inaccurate. Researchers were not using any instruments at the time; He just made an observation.

Corrective action is needed in light of this reality to increase children's recognition of numbers 1 to 10. Assessment of the learning approaches that have been used to address this problem is crucial, especially with regard to improving the recognition of numbers 1 to 10. Innovations in related actions must be carried out.

The formulation of the problem in this study is: How are efforts to improve the ability to recognize numbers 1-10 in children in kindergarten? The purpose of this study was to find out how efforts to improve the ability to recognize numbers 1-10 in children in kindergarten. One effective way to enhance the ability to identify numbers is to use associative image media [12]. Associative media are media that use techniques of mnemonic or visual reminders.

Here are the steps to implement associative image media in improving

children's number recognition skills [13], [14]:

1. Association of Pictures with Numbers: Make connections between numbers and pictures that are easy for children to remember. For example, you can associate the number 1 with a picture of one apple, the number 2 with two dolls, the number 3 with three cats, and so on. Make sure the images are interesting and easy for children to remember.
2. Number Card with Picture: Create a number card accompanied by an associative picture. For example, on the number 1 card, put the image of one apple. On the number 2 card, place the picture of two dolls, and so on. Invite the child to look at the cards and identify the numbers and pictures on them.
3. Picture Guessing Game: Make a game where the child has to guess the pictures that relate to certain numbers. For example, you could show a picture of an apple and ask your child to name the corresponding number. This helps the child associate pictures with numbers directly.
4. Numbered Storybook: Create a storybook that contains short stories containing numbers accompanied by associative pictures. Such stories can help children relate numbers to a broader context and strengthen their understanding.
5. Interactive Digital Media: Take advantage of digital media, such as learning apps or educational websites, that present associative images to help children recognize numbers. Many apps or websites offer interactive games supported by interesting images.
6. Consistent Exercise: Provide consistent, repetitive practice using associative images to help your child remember numbers better. The more often they are exposed to image-number association,

the faster they will master the ability to recognize numbers.

Using associative image media can help children strengthen the relationship between numbers and images in their memory, thereby improving their ability to recognize numbers effectively and funnily. Interesting visual associations can make it easier for children to remember and understand the concept of numbers, making the learning process more interactive and interesting. This approach not only improves children's cognitive abilities in recognizing numbers but also makes the learning process a fun and meaningful experience for them.

Method

This type of research is descriptive analysis because this study provides an overview of efforts to improve the ability to recognize numbers 1-10 in children in kindergarten. Descriptive research is directed to give symptoms, facts, or events systematically and accurately. The type of research used is qualitative research with a descriptive approach, which is research that aims to describe, describe, describe, or explain the state of the object under study as it is in accordance with actual conditions and situations. This study seeks to tell the reality of the object under study well, clearly, intact, and real [15].

The population and sample in this study are teachers in One Roof Kindergarten in Karang Tanding Village, Lintang Kanan District, Empat Lawang Regency, South Sumatra. This study used data collection techniques in the form of observation, interviews, and documentation. The data analysis used is a concept provided by Miles & Huberman. That is, this data analysis aims to describe the research subject based on data from variables obtained from the subject group studied. Descriptive analysis is carried out

by giving predicates to the variables examined in accordance with actual conditions.

By using associative image media, you can help children strengthen the connection between numbers and images in their memory, thereby improving their ability to recognize numbers effectively and playfully. Interesting visual associations make it easier for children to remember and understand the concept of numbers, making the learning process more interactive and interesting. This approach not only improves children's cognitive abilities in recognizing numbers but also makes the learning process a fun and meaningful experience for them.

Results and Discussion

Know the Concept of Numbers and Number Symbols

Teachers take the following actions in an effort to improve number recognition: counting, labeling, and creating sequences of numbers 1–10:

1. Task: Create and count numbers 1 through 10.
2. Approach: Monitoring and assignment.
3. Resources and Equipment: Count trees and number cards.

To count and create numbers 1 through 10, use the following steps:

1. The instructor discusses an exercise that includes counting and pronouncing numbers 1 through 10. The teacher begins by introducing the symbols of numbers 1 through 10 using associative drawing media.
2. Children are invited to see and remember images associated with each number, for example, a picture of one apple for the number 1, two dolls for the number 2, and so on.
3. After the children recognize the number symbols, the teacher teaches the sequence of numbers 1 to 10.

4. The teacher assigns the task to the children to create a sequence of numbers 1-10 using number cards.
5. Children are invited to count trees or other objects available around them and match them with the corresponding numbers.
6. Teachers monitor and assign consistently to ensure children understand and can remember sequences of numbers well.

Through these steps, it is hoped that children can get to know the concept of numbers and number symbols effectively and can make the sequence of numbers 1-10 easier and more fun.

Actions to Multiply Many Objects 1 to 10

1. Task: Practice number concepts.
2. Approach: Illustration, precision, and allocation
3. Resources and Equipment: Rubber bands and number cards

The steps of task execution are:

1. The instructor displays props in the form of rubber bands and number cards: The teacher prepares props in the form of rubber bands and number cards from 1 to 10.
2. The instructor guides the class through a number concept game: The teacher explains a game in which each number card will be paired with the corresponding number of rubber bands.
3. Card number 1 is placed next to one rubber band, card number 2 is next to two rubber bands, and so on, until card number 10 is placed next to ten rubber bands.
4. Students are tasked with counting the number of rubber bands corresponding to the number after the teacher shows the desired number. The teacher shows a number card, for example, the card number 3.
5. Students then count and take three rubber bands to pair with the numbered 3 cards.

6. This process is repeated until all number cards and rubber bands are correctly paired.

Through these steps, it is hoped that children can better number many objects from 1 to 10, as well as connect number symbols with the number of objects effectively and funnily.

Knowing the Concepts of Many and Few

1. Task: Introduce the concept of development by distinguishing and creating two sets of objects that are equal in number, not the same, more, and less.
2. Approach: Illustration and interactive discussion
3. Resources and Equipment: Various small objects such as buttons, beads, or small toys

The steps of task execution are:

1. The instructor introduces the concepts of many and few by using various objects: The teacher prepares several sets of objects, such as buttons or beads, with varying quantities.
2. The instructor guides students through a comparing activity: The teacher asks the children to make two sets of objects with the same amount and then with different amounts.
3. The teacher showed two sets of objects, one with more and one with less, and asked the children to identify them.
4. Students practice comparing the number of objects: The teacher gives two sets of objects to the children and asks them to determine which set has more or fewer objects.
5. Children were invited to explain their observations, for example, "This set has more buttons than any other set."

The teacher's efforts are consistent with theoretical expressions. Tadkirotun asserts that a number is an object made up of numbers, and a number is a sign. For example, the number 1 and the number 10 can be expressed as two numbers (double

digits) to represent the number 10. In everyday life, numbers are often encountered. On the contrary, Andri Saleh argues that numbers are just human concepts and reasoning when calculating the number of an object. For example, there are two after another, three after two, four after three, and so on. Based on this point of view, it can be concluded that the numbers 1 to 10 represent the magnitude of mathematical units or the magnitude and dimensions of an object.

Through these steps, it is hoped that children can get to know the concepts of many and little better and be able to distinguish and create a collection of objects of the same number, not the same, more, and less effectively.

Conclusion

The use of associative image media can improve the ability to recognize numbers 1-10 in group B of One-Stop Kindergarten. This is in accordance with the results of research and conversations that have taken place, which show that learning is effective in fostering the growth of number recognition skills in early childhood.

Appropriate techniques, such as associative media, can be used to develop number recognition successfully in early childhood. Appropriate and developmentally appropriate stimuli can be provided through demonstration techniques, where teachers play a role in encouraging number development. For example, teachers can assign children tasks to create and count numbers 1 through 10 using resources and tools such as counting trees and number cards. Playing with number ideas can also be a rewarding activity. Methods used include assigning tasks, observing, and demonstrating.

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