

EFFORTS TO IMPROVE UNDERSTANDING OF THE CONCEPT OF NUMBERS THROUGH THE MEDIA OF LEARNING NUMBERS CARDS IN EARLY CHILDREN IN RA BAETURROHMAH

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Abstract

The background of this research is the learning process of understanding numbers in children, it appears that they do not understand simple concepts in everyday life, especially in the ability to recognize numbers, even though introducing the concept of numbers to children aged 5 years must use the right and appropriate methods and models in the learning process. accompanied by the right media. The purpose of the research is to find out efforts to improve understanding of the concept of numbers through the learning media of number cards in early childhood at RA Baeturrohmah. In this study, the researcher used a descriptive method with a qualitative approach where the sample consisted of one principal of RA Baeturrohmah, one teacher of RA Baeturrohmah, and eight students of RA Baeturrohmah. Data collection techniques are carried out to the respondents through interviews and observations. The result is that students can take part in learning to increase understanding of numbers with number card learning media where the process is carried out with students learning while playing so that students can follow the learning well. This can be seen from the observations of students experiencing an increase in understanding of numbers. So it can be concluded that learning media can help increase students' understanding of learning numbers in particular.

Keywords: Early Childhood, Number Cards, Number Concepts, Learning Media

Abstrak

Latar belakang penelitian ini adalah proses pembelajaran pemahaman bilangan pada anak terlihat bahwa kurang memahami konsep sederhana dalam kehidupan sehari-hari terutama dalam kemampuan mengenal bilangan padahal mengenalkan konsep bilangan pada anak usia 5 tahun harus dengan metode dan juga model yang tepat serta sesuai dimana pada proses pembelajaran diiringi dengan media yang tepat. Tujuan dari penelitian yaitu untuk mengetahui upaya meningkatkan pemahaman konsep bilangan melalui media pembelajaran kartu angka pada anak usia dini di RA Baeturrohmah. Pada penelitian peneliti menggunakan metode deskriptif dengan pendekatan kualitatif dimana sampel berjumlah satu orang kepala sekolah RA Baeturrohmah, satu orang guru RA Baeturrohmah dan delapan orang siswa RA Baeturrohmah. Teknik pengumpulan data yang dilakukan kepada para responden melalui wawancara dan observasi. Hasilnya yaitu siswa dapat mengikuti pembelajaran peningkatan pemahaman bilangan dengan media pembelajaran kartu angka dimana proses dilakukan dengan siswa belajar sambil bermain sehingga siswa dapat mengikuti pembelajaran dengan baik. Hal ini dapat dilihat dari hasil observasi siswa mengalami peningkatan pemahaman dalam bilangan. Sehingga dapat diambil kesimpulan bahwa media pembelajaran dapat membantu peningkatan pemahaman siswa dalam belajar bilangan khususnya.

Kata kunci: Anak Usia Dini, Kartu Angka, Konsep Bilangan, Media Pembelajaran

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INTRODUCTION

Education is an effort to humanize humans through the education process by creating human beings who are knowledgeable and have character. Every human has different standards, good human standards, namely differences between communities, nations, or countries where these differences become the philosophical views of their beliefs (Ariyanti, 2016). Education starts from an early age, based on Law No. 20 of the Year concerning National Education System article 1 paragraph 14 (Indamah & Khotimah, 2018) that Early Childhood Education (PAUD) is early education before entering basic education to be one way to nurture children from birth until the age of six years which is carried out by providing educational stimulation to provide growth and development assistance both physically and spiritually so that a child will have readiness when entering the next level of education. In children aged 5-6 years, achievements in cognitive development include the introduction of numbers 1-10, understanding numbers need to be given as early as possible by using appropriate and appropriate ways. This is following the opinion (2006) that the concept of numbers is an important mathematical concept and must be mastered by all children because mathematical concepts are the basis for mastering subsequent knowledge of mathematics. The hope after understanding the concept of mathematical numbers is that children can understand other mathematics. Although there are obstacles when providing an understanding of mathematical concepts to children aged five years, they will be resolved properly if there is assistance and guidance from parents and teachers. The participation of parents and teachers can help students understand mathematical concepts quickly. Parents and teachers can provide an interesting introduction and incorporate it into the daily activities of students. The introduction of the concept of numbers is adjusted to the stages of child development where early childhood still likes to play, so learning is done using counting games. The counting games that are carried out are expected to be given not only on the cognitive aspects but can provide learning about the mental, social and emotional of children so that they can grow children's intelligence, especially children's mathematical intelligence.

In this case, learning media is needed that can help early childhood in recognizing the concept of numbers. Media (Supriyono, 2018) is one component in a system that has a function as a means of non-verbal communication. Media means absolutely must exist and be used in the learning process. It is said like that because if one of the components is not present, the results will not be optimal. In the process of learning activities that will be carried out to introduce the concept of numbers to children aged 5 years, they must use the right and appropriate methods and models where the learning process is accompanied by the right media. The media used is relevant to the introduction and also the purpose of the concept of number recognition. Number counting operations are directed slowly to children starting from how to adjust number symbols. This process is expected to provide children with a more complete experience and understanding of the concept of number recognition. To make it easier to recognize number symbols, the use of illustrated number cards is one of the media that can be used. Following research conducted by Halimatonsakdiah (Khoirunnisa, Rini, & Sofia, 2018) that children give an increased response when playing using picture number cards, not only that, children's abilities also increase after using picture number cards. So based on the explanation above, shows that picture number cards can be used as a medium for cognitive learning for early childhood in providing material for introducing the concepts of numbers, symbols, and letters. So that children can receive learning mathematics with fun, a teacher should use interesting mathematical concepts and provide a positive view of mathematics that is easy and fun.

Based on the results of field observations in the learning process, it can be seen that children still do not understand simple mathematical concepts following everyday life. Children have

not been able to connect the concept of numbers with number symbols and children have not been able to sort and pair objects with numbers. Therefore, researchers are interested in using number card media as a learning medium in introducing the symbol of saying to children.

THEORETICAL REVIEW

Early childhood education programs

Education starts from an early age, based on Law No. 20 of the Year concerning National Education System article 1 paragraph 14 (Indamah & Khotimah, 2018) that early childhood education is a level of education before basic education which is a coaching effort directed at children from zero to six years. by providing educational stimuli to help the child's growth and development both physically and spiritually so that the child will have a readiness when entering the next level of education. The learning process in early childhood must meet the characteristics of learning for early childhood, as for those characteristics, namely: 1) Learning while playing; 2) Learning by building knowledge; 3) scientific learning; 4) Learning considers aspects of development, is meaningful, interesting and functional. (Khairi, 2018). Furthermore, according to the Ministry of National Education (Hasiana & Wirastania, 2017) the characteristics of early childhood who enjoy learning numbers include: a) Children will directly show interest in learning activities with numbers; b) Can begin to mention the sequence of numbers even though they do not understand; c) Already able to start counting objects that are around; d) Children begin to compare objects around; e) inadvertently the child can add and subtract objects around him.

Number Concept

The concept of numbers according to Sudaryanti (Reswita & Wahyuni, 2018) is a mathematical concept that is the basis and is very important for a child to master other mathematical concepts. Furthermore, numbers (Hasiana & Wirastania, 2017) are one of the mathematical concepts used for enumeration and measurement using symbols in the form of numbers or symbols. Dewi (Rahman, Sumardi, & Fuadatun, 2017) stated that numeracy is a part of mathematics that is needed to develop numeracy skills as one of the readiness to follow basic education and also skills in everyday life. Furthermore, according to Ahmad Susanto (Susanto, 2011) the character of children's understanding of the concept of numbers for ages 5-6 years is that children can: a) count from 1 to 10; b) can mention the sequence of numbers; c) sort numbers 1-10 differently; d) connects number symbols with objects and can: e) create and distinguish two sets of objects with the same number, with unequal numbers or less and more.

Number Card Media

Media (Putri, Wirya, & Ujiti, 2016) is a way to make it easier for students to teach so that they can provide a stimulus to students through media such as picture number cards. Picture number cards are thick paper in the shape of a rectangle or square or box containing a sign or a symbol as a substitute for numbers and pictures. Number cards according to Sudiman, et al (Sanaky, 2011) have a goal that as a tool in the learning process that can: a) help the learning process in the classroom: b) Can help improve learning efficiency: c) Maintain the suitability of the material with learning objectives ; d) Increase children's concentration in the learning process.

METHODS

This study uses a descriptive method with a qualitative approach. According to (Sugiyono, 2014) the research method is based on the philosophy of post-positivism, which is used to observe natural objects, (as opposed to experiments) where researchers are the key instrument because they are more active, starting from research, data collection to making research conclusions at the end of the activity. The data collection technique is done by triangulation or

a combination. Furthermore, in this study using data analysis techniques following the opinion of Miles and Huberman (Sugiyono, 2014), data analysis techniques in qualitative research are data reduction, data presentation, and conclusion drawing or verification which is carried out interactively and continuously until complete so that the data has become saturated.

Sources of data can be done purposively, namely the selection with certain considerations and goals (Sugiyono, 2014). While the sample selection was done randomly because the representative samples selected were competent people and could assist in this research, namely where the principal and teachers are people who have competent abilities in the field of education and are involved in the child's learning process while for students selected because students are involved in the learning process where students are learning citizens who accept every lesson and learning media provided by the teacher in class. For research data, researchers took a sample of one principal RA Baeturrohmah, one teacher RA Baeturrohmah and 8 students RA Baeturrohmah with data collection techniques interviews and observations, researchers took these respondents because they are people who are directly involved in the learning process at school. The place of research is RA Baeturrohmah which is located in Rawa Village, Cingambul District, Majalengka Regency.

RESULTS AND DISCUSSION

Results

Based on the results of research that has been carried out by researchers regarding how to improve understanding of number concepts through number card learning media in early childhood at RA Baeturrohmah are as follows:

The first respondent is the Principal with the initials SA, the researcher asked about the learning process regarding number recognition, the respondent answered "The learning process that we provide to students when introducing numbers or number concepts is using pictorial media so that students can remember numbers quickly". Furthermore, regarding the purpose of using the number card learning media, namely "We have a goal so that students can immediately remember and apply what they have learned, especially the numbers 1-10, and students can learn while playing when using number card media". According to SA respondents in the learning process for understanding numbers using number card media, they said about obstacles, SA said that "We don't have that big of a problem, maybe there are only some students who still don't understand the concept of numbers, but we continue to try so that students can understand the concept of numbers. number". Next regarding the results and benefits of SA respondents said that "The results obtained are that almost 70% of students can understand numbers using number cards learning media, many benefits are obtained when learning using number cards media".

The second respondent is a teacher with the initials MS, according to MS for the learning process in class regarding understanding numbers, namely that "Using number cards media facilitates the learning process of understanding numbers to students so that students can remember and know numbers 1-10." Furthermore, regarding the purpose of using number card media, MS respondents said that "We want to provide a medium in learning that can help students quickly understand what is being taught, especially regarding numbers". As for the constraints, results, and benefits obtained, namely that "In the learning process, not all children can follow the process of understanding numbers well, but I try to understand the condition of the children so that the results obtained from each child are different, it cannot be said to be the same regarding understanding them to numbers. However, we can get many benefits from

using number card media when understanding numbers, one of which is that students can learn while playing so they are not bored and bored".

Furthermore, the researchers made observations to students who became the sample, which amounted to 8 people, with the results of the observations, namely:

Table 1. Student Observation Results Regarding Understanding Number Symbols

No	Name	Counting many objects 1-10			Recognizing Number Symbols			Know the concept of a lot and a little		
		BB	BSH	BSB	BB	BSH	BSB	BB	BSH	BSB
1	Alya		✓			✓			✓	
2	Al Farizi		✓			✓			✓	
3	Bilkis		✓				✓		✓	
4	Zahra			✓			✓		✓	
5	Marwah			✓		✓			✓	
6	Ulum		✓			✓			✓	
7	Fahri	✓				✓			✓	
8	Hafid	✓			✓			✓		

Note:

BB : Undeveloped

BSH : Growing As Expected

BSB : Very Well Developed

Based on the data above, it can be seen that two students are still not developed regarding indicators of counting objects 1-10, four students have developed as expected and two students have developed very well regarding indicators of counting objects 1-10. Furthermore, for the indicator of recognizing the said symbol, it can be seen that one student has not developed, five people are developing according to expectations and two are developing very well. Finally, regarding the indicators of knowing the concept of many and few, it can be seen that one student has not developed but seven students have developed as expected. Based on the data above, it can be concluded that students can participate in learning to increase their understanding of numbers with number cards.

Discussion

From the results of the research, it can be seen that the learning process of number recognition using number cards can make students learn while playing. This is following the characteristics of early childhood learning, namely: 1) Learning while playing; 2) Learning by building knowledge; 3) scientific learning; 4) Learning considers aspects of development, is meaningful, interesting, and functional. (Khairi, 2018). The results of the process that has been given to students regarding understanding number card numbers following the objectives of learning media with number cards according to Sudiman, et al (Sanaky, 2011) have a goal that as one of the tools in the learning process that can: a) help the process classroom learning; b) Can help improve learning efficiency; c) Maintain the suitability of the material with learning objectives: d) Increase children's concentration in the learning process.

Furthermore, regarding the obstacles experienced by teachers when providing learning understanding of numbers, this does not make it a problem because each student has a different understanding. Students must continue to learn to understand numbers, this is following Sudaryanti's opinion (Reswita & Wahyuni, 2018) which states that it is a mathematical concept that is the basis and is very important for a child to master to master other mathematical concepts.

Furthermore, based on observations, it can be seen that not all students have the same ability to recognize numbers, but this is not a problem because each student has different characteristics in understanding numbers. According to Ahmad Susanto (Susanto, 2011) the character of children's understanding of the concept of numbers for ages 5-6 years, namely children can: a) count from 1 to 10: b) can mention the sequence of numbers: c) sort numbers 1-10 differently: d) connects number symbols with objects and can: e) create and distinguish two sets of objects with the same number, with unequal numbers or less and more. The use of learning media can at least help students to keep learning while playing. According to (Putri, Wirya, & Ujiti, 2016) that is a way to make it easier for students in the teaching process so that they can provide a stimulus to students through media such as picture number cards. Picture number cards are thick paper in the shape of a rectangle or square or box containing a sign or a symbol as a substitute for numbers and pictures.

CONCLUSION

Based on the results and discussion above, it can be concluded that students have increased in understanding the basic concepts of numbers using number card learning media, besides that students are also happy with learning because the delivery of material is done interestingly and learn while playing. Through the media of number cards, students are stimulated to be able to understand the basic concepts of numbers as one of the main bases before continuing to learn mathematics in basic education.

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