The Influence of the Mathemagics Method Assisted by Ice Cream Math Media on Understanding the Concept of Multiplication in Class 5 SDN Kowel 1 Pamekasan

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Abstract

The background of this research begins with the researcher's observation of the mathematics learning process in class V SDN Kowel 1 Pamekasan, that students have not understood the concept of multiplication because there are still many students who use multiplication boards that they make themselves. The monotonous learning atmosphere also makes students not eager to start learning Mathematics. The pretest results showed that the students' test scores were very low with the percentage of students who scored more than 50 was 32% and from the questionnaire results which showed that students' lack of interest in Mathematics subjects and learning. From the initial data, the researcher designed the Mathemagics method using Ice Cream Math learning media to improve students' understanding of the concept of Mathematics multiplication. Then from the post test results there was an increase in results, namely the percentage of students who scored more than 50 was 96%. So, from the post test results obtained, it is concluded that the use of the Mathemagics method assisted by ice cream math media can improve students' understanding of the concept of multiplication.

Keywords: *Mathemagics, Learning,Matematic* .

INTRODUCTION

Education is one aspect that needs to be improved in efforts to develop and improve human resources. [1]. Education is used as a fundamental pillar in the progress and development of a society. Improving the quality of human resources in terms of education cannot be separated from the education system implemented in that place. Human Resources will be the country's capital to improve the quality of the next generation. Through education, individuals gain the knowledge and skills necessary to succeed in personal and professional life. In Indonesia, education is very important and is the government's top priority. However, until now, education is still a big problem for the country due to the lack of quality human resources. According to Leli Hasanah Lubis et al, 2023

The low quality of the country's human resources is that the education system implemented so far is a traditional education system, where the education system is not in accordance with scientific developments.

In the process of implementing this education there is a learning process. The learning process is a series of learning implementations to achieve educational goals in which there is interaction between teachers and students in which there are knowledge transfer activities. Teachers are people who play an important role in the continuity and success of the learning process in school [2] .

Based on data obtained from observations, interviews, written tests, and questionnaires conducted at SDN Kowel 1, it shows that students' understanding of the concept of multiplication and their interest in mathematics subjects is low. According to the 5th grade mathematics teacher during the interview, he provided learning material using the lecture method only. From the results of the observations, it was also found that the students at SDN Kowel 1 were unable to understand the basic concept of multiplication. When working on math problems, some students use multiplication boards that they made themselves, so that when asked about the basic concept of multiplication, they don't know it yet.

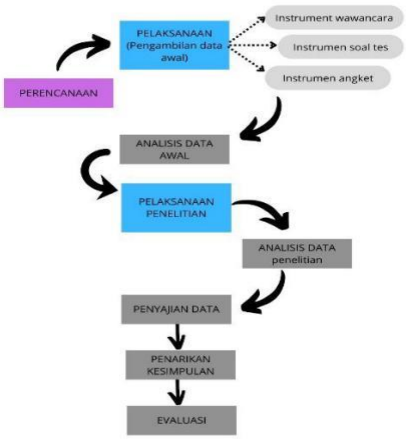
Based on these problems, one way to increase students' understanding of the basic concept of multiplication is by using new methods such as the mathemagics method by creating the multiplication learning media Ice Cream Math. So apart from providing lessons related to the concept of multiplication to grade 5 students, it can also give students an idea that mathematics is not that scary and boring to learn.

According to the Mathemagics method is a series of new ways of looking at mathematics which is categorized as a difficult lesson by most students. In this method, the delivery of material is packaged in fun activities by paying attention to several aspects, namely comfort,

psychology and student learning styles, so this method is good for use in the learning process in mathematics subjects [3] . Mathemagics Method In line with the results of research entitled "The Effect of The Mathemagics Method on Mathematics Learning Outcomes in Multiplication for Deaf Students Elementary Grade 5a In Slb B Karnnamanohara" that the Mathemagics methodThis affects the results of mathematics learning in multiplication materia. In addition, according to the results of research entitled " ***The Effect of Using Learning Media on Mathematics Learning Outcomes***" that the use of learning media in mathematics lessons can improve student learning outcomes. So by combining the Mathemagics learning method with the help of learning media, it is possible to increase fifth grade students' understanding of the basic concepts of multiplication at SDN Kowel 1[4] .

METHOD

The research method used in this research is a quasi-experimental method with a pretest posttest control group design. Quasi-experimental research is a research method that can be used to find out whether there are consequences of actions taken on the subject to be studied by looking for the influence of actions on others under conditions that can be controlled. This research was conducted in April 2024 at SDN Kowel 1. The subjects of this research were grade 5 students at SDN Kowel 1 with a total of 22 students. The instruments used in this research were interview sheets, questionnaire sheets, pretest and posttest question sheets, where each test consisted of 10 descriptive questions. This research was carried out in 2 stages. The first stage of data collection before research and the second stage of data collection after research consists of data collection, analysis and presenting data by categorizing the data that has been obtained. The data obtained from this activity will be presented in a table which is then followed by drawing conclusions and reflection activities. In this research, several instruments were used. Data collection instruments are tools or methods used to collect data from certain sources [5] . The research instruments used when collecting initial data were interview instruments with Mathematics subject teachers, pre-test and post-test sheet instruments and giving questionnaires on interest in learning Mathematics to students. Here's the flow chart this research.



RESULTS AND DISCUSSION

Based on the results of initial research data collection conducted through interviews, pretests and questionnaires, it shows that there are problems faced by teachers and students of class V at SDN Kowel 1. From the results of interviews conducted with subject teachers, the data obtained shows that teachers do not vary their methods. learning in mathematics subjects. The learning method used by mathematics teachers is only the lecture method and giving assignments to students without a variety of other learning methods. In fact, the use of various learning methods can make it easier for teachers in the teaching and learning process and provide new experiences for students when learning in the classroom [6] . The reason teachers do not use a variety of learning methods is because they lack knowledge regarding this matter. Apart from that, from the researcher's observations during the learning process carried out in the mathematics subject of addition of fractions, students still did not understand the concept of multiplication, this was because when the researcher was observing the learning process, students were carrying out assignments given by the teacher, students were using multiplication boards that they printed. individually. After asking the students, most of them did not understand the basic concept of multiplication.

After the interview activity with the subject teacher, the activity continued with giving pretest questions to determine the extent of students' understanding regarding the concept of multiplication. The pretest questions given

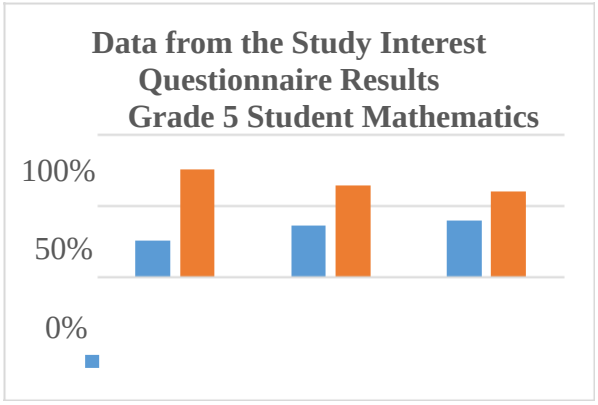
were 10 questions. From the pretest results data for class V students at SDN Kowel 1 shows the following data.

Score Total Percentage Pretest Frequency

10	3	30	14%
30	4	120	18%
40	4	160	18%
50	4	200	18%
60	2	120	9%
70	2	140	9%
80	3	240	14%
Amount	22		100%
Average value		45.9	

Based on the table of pretest results on multiplication concept material for fifth grade students at SDN Kowel 1, it shows that the number of students who got a score greater than or equal to 50 was smaller compared to students who got a score less than 50. The percentage of students who got a score of 50 was 68%, while the percentage of students who have a score of 50 is 32%. This percentage shows that 68% of class V students have not been able to master the basic concepts of multiplication.

Researchers also distributed questionnaires to grade 5 students to find out their interest in mathematics subjects taught by Mathematics subject teachers at SDN Kowel 1. This questionnaire sheet contains 25 questions that describe how enthusiastic the students are towards mathematics lessons in their class with two alternative answer choices (Yes No). The aspects used in the statements in the questionnaire include the affective aspect which includes feelings of joy and interest, the cognitive aspect which includes students' attention during learning, and the connective aspect which includes how students participate during the learning process in the classroom [7] . Based on the results of the questionnaire, the data shows as follows.



Based on the diagram of the results of the questionnaire distributed to grade 5 students above, it shows that of the three aspects assessed, the percentage of students who agree with negative statements regarding mathematics learning is more dominant than students who agree with positive statements. From the diagram, the percentage of students who feel happy and interested in learning mathematics is 25%, while students who are not happy and interested in learning mathematics is 75%. In the cognitive aspect, which includes how students pay attention to learning mathematics, the questionnaire results show that the percentage of students who are enthusiastic about learning mathematics is 36%, while students who are not enthusiastic about learning mathematics is 64%. Then on the aspect of student activity when learning mathematics. The percentage of students who are active during learning is 40%, while the percentage of students who are less active during learning is 60%. Apart from that, from the results of this questionnaire, researchers can find out which lessons carried out by teachers that students find less interesting. Because based on the results of the questionnaire given, 17 of the total 22 students agreed that the learning carried out by the subject teacher was not interesting.

If you look at the data from the two instruments, namely the instrument used to determine students' interest in class 5 students with the results of obtaining pretest scores on students' multiplication concept material, it was found that students who had scores above 70 were indeed students who enjoyed learning mathematics based on the results of questionnaires and teaching methods. subject teacher. Meanwhile, students who get a score below 70 are students who don't like learning mathematics and the way their teacher teaches. This shows that when providing multiplication concept material, teachers are lacking in determining good methods that can facilitate all students with different abilities [8] . Therefore, it is necessary to provide material using creative learning methods that are able to create simple

learning tools that encourage students' understanding. (Rahmatunnisa et al: 2022). Because the pretest and questionnaire sheet show that learning understanding regarding understanding multiplication is not optimal, an appropriate environment must be used to achieve learning objectives and allow students to express them by varying learning methods using appropriate learning media. When using media, you must also have a strategy for selecting the right media for effective learning. [9] Good learning media is media that is able to facilitate all students' characters and can motivate students to learn so that they can improve their understanding of certain material. (Ramadan & Hamid: 2023). Therefore, the researcher designed a new, more interesting method for students in studying the basic concepts of multiplication, namely the Mathemagics method using Ice Cream Math learning media which will be carried out in the second stage of the research, which is expected to be able to increase student learning motivation and be able to facilitate the character of each student. in class V at SDN Kowel 1.

The second stage of the research carried out was applying the Mathemagics method using Ice Cream Math media to grade 5 students. In this implementation the researcher designed a method with a variety of interesting games for students so that students did not feel bored when the multiplication concept material was given. The teacher divides the students into several groups, and each group plays a game using the Ice Cream Math media that was created by the researcher. To make it more interesting, the researchers made the game into a competition to see who could finish it the fastest.

After applying this method, in the second stage of data sampling, the researcher used a test instrument with the same number of questions as before, namely 10 questions. Implementation of the posttest in this second stage produces the following data.

Score Post test	**Frequency**	**Amount**	**Percentage**
50	1	50	4%
60	3	180	14%
70	4	280	18%
80	5	400	23%
90	5	450	23%
100	4	400	18%
Amount	22		100%
Average value		80	

Based on the post test results data, there was an increase in the scores of class 5 students in understanding the concept of multiplication. In the results of this posttest there were no students who had a score of less than 50 and there were more students who got a score of more than 50 than before. Initially 68% of students got a score lower than or equal to 50, now it has decreased to 4% with only 1 student getting a score of 50. There is a change in the range of scores obtained by grade 5 students during the pre-test and post-test. During the pre-test, there were students who got a score of 10, 30, 30, 40. Meanwhile, there were 21 students who got a score above 50 with a percentage of 96% with details, 3 students who got a score of 60 with a percentage of 14%, students with There were 4 people with a score of 70 with a percentage of 18%, 5 students who got a score of 80 and 90 with a percentage of 23% and 4 students who got a score of 100 with a percentage of 18%. From the results of the post test scores of grade 5 students at SDN Kowel 1, it shows that the percentage of students who understand the concept of multiplication is greater after providing a variety of methods using Ice Cream Math media.

CONCLUSION

Based on the results of collecting initial data through interviews and observations, carrying out pretests, and student interest questionnaires, researchers found problems faced by grade 5 students at SDN Kowel 1 in learning mathematics in class. The problem faced by students is the lack of understanding by class V students of the basic concept of multiplication. After implementing the method with the help of Ice Cream Math media, the researcher conducted a posttest to determine the success of the method and media in understanding the concept of multiplication. The results of the posttest carried out showed that there was an increase in the students' scores. Initially, in the pretest score results, the percentage of students who had a score of 50 was 68%, while the percentage of students who had a score of 50 was 32%. After applying the

method with the help of this media, the post test results showed that the percentage of students who got a score equal to 50 was 4%, while students who got a score of more than 50 were 96% with details, students who got a score of 60 were 3 people with a percentage of 14%, students with a score of 70 there were 4 people with a percentage of 18%, there were 5 students who got scores of 80 and 90 with a percentage of 23% and there were 4 students who got a score of 100 with a percentage of 18%. So it can be concluded that the use of the Mathemagics method with the help of Ice Cream Math media is able to provide understanding to fifth grade students at SDN Kowel 1 regarding the basic concepts of multiplication. Apart from providing an understanding of the concept of multiplication, this research can also provide interesting mathematics learning for students.

SUGGESTION

Suggestions describe things that will be done related to further ideas from the research. Obstacles or problems that can influence research results are also presented in this section.

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