

## Problems of Mathematics Learning in Class V Elementary School Students at SDN Karang Anyar II

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### ABSTRACT

*This research departs from the background of the low learning outcomes achieved by fifth grade students at SDN Karang Anyar II Karang Anyar village, Kec. District border. Probolinggo. One of the subjects considered difficult by students is mathematics. So that this lesson is less attractive to students. This problem causes many students to experience difficulties in learning mathematics. From the results of initial observations, it can be seen that the cause of this is because students feel bored, bored with the implementation of learning with a traditional learning approach which in the end makes students look for other activities to relieve their boredom which causes the class atmosphere to be not conducive. This study aims to determine the problems in learning mathematics for students at SDN Karanganyar II on the mathematics learning achievement of fifth grade students at SDN Karang Anyar II, Karang Anyar Village, Bantaran District. To achieve the above objectives, a qualitative approach is used with the type of descriptive analysis approach.*

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## **A. Introduction**

In facing the current developments that are full of challenges, education is a very important aspect because education is expected to be able to form skilled, creative and innovative human resources. To form human resources in accordance with the development of the times, mastery of science and technology is required. Education itself places more emphasis on the learning process which aims to develop all the abilities that exist in humans. Formal education carried out in schools until now remains the main educational institution which is a center for human resource development supported by education in the family and community.

In Indonesia, the world of education is growing rapidly. This is indicated by the increasing number of schools and students in them. However, this increasingly rapid development of education is not supported by the quality of learning outcomes that students receive. Learning is considered as a process and experience and practice. Higgard and Sanjaya (2007: 53) say that learning is a process of change through activities or procedures, both training in the laboratory and in the natural environment. Learning is not just gathering knowledge. Thus causing a change in behavior

Mathematics is a subject that is considered by many students to be a difficult subject. There are still many students who experience difficulties in learning. The low achievement of students' mathematics learning is due to the absence of an emphasis on learning mathematics in a real-life context. According to Marti in Sundayana, 2013 argued that mathematics is considered to have a high level of difficulty, but everyone must learn it because mathematics is a means to solve problems in everyday life. Mathematics subjects need to be given to all students starting from elementary school, because it has the ultimate goal, namely that students are skilled in using various mathematical concepts in everyday life.

Talking about mathematics is not appropriate if separated from the development of science and technology that exist today. This is mainly due to the position of mathematics as a "basic science" which supports the development of science and technology and develops along with it (Hastaruddin, 2008). This was also stated by Soedjadi (2001) who said that mathematics as one of the basic sciences, both its applied aspects and its reasoning aspects, has a very important role in mastering science and technology. Furthermore Marpaung (2001) says that to a certain extent mathematics needs to be mastered by everyone. School

mathematics is part of mathematics that is selected on the basis of the interest in developing students' abilities and personality as well as the development of science and technology, it is necessary to always be in line with the demands of students' interests in facing future life.

This research was prepared with the hope of providing benefits both theoretically and practically. Theoretically, this research is expected to provide a theory regarding global methods to improve student learning in mathematics learning materials. If the research objectives can be achieved, then the results of the research will be useful for the learning process in the future. Practically this research is expected to provide benefits to all parties, including:

1. For Teachers

Teachers can solve student problems in terms of understanding the difficulty of learning mathematics.

2. For Students

Students can gain learning experience regarding initial mathematics learning materials through student textbooks or can also be from learning videos so that students' calculating abilities can increase.

3. For Schools

Provide input for schools in efforts to improve the learning process so that it has an impact on improving school quality. And can be used as reference material for improving teacher teaching through school principal supervision activities.

4. For Researchers

The benefits of this research for researchers are that it can provide experience in managing learning can improve teaching abilities and provide knowledge about how to overcome difficulties experienced by students in the learning process as an effort to increase students' understanding of learning material

## **B. Method**

This research uses a qualitative approach because this research is descriptive in nature. Descriptive intent is to provide a systematic, actual, and accurate description of the facts, characteristics, and relationships between the phenomena studied. According to Suharsimi Arikunto (2009) in Johni (2013: 122), explaining that experts put forward the action research model in outline there are four stages that are commonly passed, namely: planning, implementation, observation/observation and reflection.

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To obtain objective research results, researchers used direct observation techniques. Observation techniques are systematically observing and recording the phenomena investigated. In a broad sense, actual observation is not only limited to observations made either directly or indirectly. According to Sugiono (2018: 229) observation is a data collection technique that has specific characteristics when compared to other techniques. Observation is also not limited to people, but also other natural objects.

The data collection tools used in this study were observation sheets for teacher performance assessment instruments and observation sheets for children's activities. The teacher performance assessment instrument observation sheet is used to capture the teacher's ability to plan and implement learning. While the observation sheet of children's activities is based on the achievement of the specified indicators.

Through measurements guided by the guidelines for evaluating the learning outcomes of Kindergarten students made by the Directorate General of Elementary Secondary Education of National Education in 2010, qualitative data were obtained. Qualitative research data according to Johni (2013: 103) is research data in the form of quality or quality of something, which is the measurement result that will be examined based on its quality or quality. Qualitative data is research data that is manifested in the form of numbers or numbers from the results of a measurement.

Data collection techniques can be done by observation, interviews and documentation. In this study the authors used documentation as a supporting method to complete data that the authors did not obtain through observation and interviews. This research is a qualitative descriptive research, which is the result of observations, interviews and documentation that the author has done. The data analysis method is a method for analyzing data that has been collected from the field. After the data is collected, the next step is to analyze it to produce the correct conclusions and in accordance with the existing problems. To draw conclusions from these data, qualitative descriptive data analysis techniques were used, namely describing the data obtained through research instruments.

### **C. Result and Discussion**

This chapter presents the results of research on "Problematics of Learning Mathematics in Students of SDN Karanganyar II". Research implementation at

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SDN Karanganyar II was carried out on October 6 2022 and then continued on October 7 2022 with a detailed schedule as follows:

1. October 6, 2022 interviews with teachers
2. On October 7, 2022 the review will be held in class

The research data obtained was in the form of observing student activities during learning activities, psychomotor assessments and student formative tests in each cycle. Observation data was taken from two observations, namely data on student activity observations during learning and teacher activities in teaching students in class. Formative test data or daily tests are used to determine the minimum learning completeness, as well as to determine the level of student learning success. As for the stages carried out in knowing the problem in learning mathematics, namely:

1. Interview with Teachers

- a. The teacher has difficulty developing the material in the book because there is too much material to be taught.

Researcher : "Do you experience difficulties in developing material?"

Teacher : "I, as a teacher, also sometimes find it difficult to develop the material to be taught because there are too few resources in the teacher's handbook"

Teachers have difficulty developing the material in the book because the mathematical material in the book is very limited and only cursory, this causes the teacher to be smart in finding additional material to teach concepts to students. The teacher's role must change from a validator (blaming/justifying) to a mentor who values each student's contribution (work and answers) (Nur Atika & Zubaidah Amir MZ, 2016).

- b. Teachers only use conventional learning approaches

Researcher : "What is the learning system used by the teacher?"

Teacher : "When I teach, I only use a lecture and question and answer approach, because if I want to make media it takes quite a long time, whereas I do not only teach mathematics but other subjects as well"

Teachers also sometimes only use approaches and even monotonous strategies because they remember the limited time so that teachers use more conventional learning. Even though one of the roles of mathematics is to improve a person's abilities and intelligence in various aspects of life. If we study

mathematics, we will get used to solving various small to large problems, thinking positively, creatively, critically, logically and systematically (Pasaribu Endi Zunaedy, et al, 2020).

c. Teachers do not use learning media effectively

Researcher : "In your opinion, what is the effective use of learning media?"

Teacher : "The use of media in accordance with the material being taught. There is no effective media, because the media varies and is in accordance with the material taught by the teacher. So the teacher chooses learning media that is appropriate to the subject matter, for example, construction material will be more suitable for construction media, the important thing is not to use only one media and students are taught with concrete or real objects, not abstract"

Learning media can be seen from the results of research that visual media serves to provide context for understanding texts, and can help students who are weak in reading to organize information and be able to recall it. In other words, learning media serves to accommodate students who are weak and slow to accept in understanding the content of lessons that are presented with text or presented verbally.

d. Lack of student learning interest in mathematics

Researcher : "How do you increase students' interest in learning mathematics?"

Teacher : Children are lazy when it comes to math, it's difficult, he said, plus we as teachers can only teach math at a glance, if we're not given motivation while studying, they don't want to pay attention to learning"

One of the factors that causes students to have learning difficulties is a lack of interest in learning mathematics, so that students do not pay attention to the material and ultimately do not understand the concept. In other cases, students memorize formulas or concepts instead of understanding them. As a result, students cannot use the concept in different situations, because basically the higher the student's learning interest, the better the learning outcomes they will get.

e. Inadequate understanding of concepts

Researcher : "How is students' understanding of the concept of learning mathematics?"

Teacher : "Kids are also lazy now when it comes to memorizing formulas, now what are the difficulties when they like searching on the internet that causes them to be lazy to memorize the formulas given in class. I don't know if this is the influence of globalization or what, so every formula I don't want to understand or memorize, so I have to repeat lessons that I don't remember while there is still a lot of material to be taught that I haven't"

f. Facilities and infrastructure are still not complete

Researcher : "What about facilities and infrastructure that support the learning process, especially Mathematics?"

Teacher : "For facilities and infrastructure at SD Karang Anyar II there is a multimedia room, lab. Computers, music room and library. In addition, each class has an LCD. But for class V there is no LCD yet. However, teachers can borrow LCD projectors in the library if needed in learning, but in reality, according to students in class V, teachers rarely use these facilities. This is a problem in the success of learning"

g. Less varied learning methods

Researcher : "Does the math teacher teach in the right/suitable method, so that it makes it easier for students to understand the material?"

Teacher : "Yes, it depends on students understanding. For methods and approaches that are often used when learning mathematics in class, namely assignments, demonstrations, lectures (when explaining material), and discussions (solving solving mathematical problems)"

As a teacher in teaching mathematics, it is necessary to develop learning methods considering the conditions of students with different learning abilities. In teaching mathematics the teacher does not only use lectures, because if the teacher explains mathematics material by talking continuously it is feared that students will feel bored or bored. So that it causes the concentration of students to decrease and the learning process will be disrupted and does not fulfill the successful process of learning mathematics itself

## 2. Tinjauan Dalam Kelas

In student activities when the mathematics learning process includes students coming, sitting, writing material that has been taught by the teacher on the blackboard, listening to the teacher explaining the material and doing assignments. Thus causing, learning mathematics is less complex which can be seen from the learning outcomes of students who are less thorough. This shows that students still tend to be passive in class, even though learning is said to be successful if students are active during the learning process. Learning mathematics in elementary schools (SD) has many problems, both coming from teachers in the field of study, students, and the parents of the students themselves. In the review of the presenters in the class the presenters found several problems, namely:

- a. Students are less interested in learning mathematics and less motivated to learn mathematics, because fifth grade students at SDN Karang Anyar II think that mathematics is a difficult subject, so the motivation to learn mathematics is very lacking. One of the fifth grade students said that mathematics was more difficult than natural sciences.
- b. Some students have difficulty in making meaningful mathematical relationships. As happened in solving the problem of calculations presented in the form of a story. An understanding of stories needs to be translated into meaningful mathematical operations.
- c. Students who experience difficulty in visual perception will usually have difficulty visualizing mathematical concepts. This problem can be identified from the difficulty of visualizing that is experienced by children in determining the length of lines that are displayed parallel in different forms

In addition, during the observation of mathematics learning in class V SDN Karang Anyar II on October 7, during the mathematics lesson it was evident that the students did not respond to receiving explanations from the teacher, and were less enthusiastic from their expressions. Even when given group assignments, not all students were involved in doing the assignment, they also took a long time to complete the questions from the material just presented

## D. Conclusion

Based on the results of the research that was conducted at Karang Anyar II Elementary School, based on the results of the description and analysis of the data

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that the researchers obtained through interviews, observation, questionnaires, and documentation, it was concluded that the problems of learning mathematics at Karang Anyar II Elementary School were as follows; first, from a student's point of view it was found that students still had difficulty in calculating, second, a lack of understanding of the language of mathematics, thirdly, difficulties in visual perception and auditory perception, and fourthly, the interest and motivation of fifth grade students was still lacking in mathematics. Meanwhile, when viewed from the point of view of teachers and school principals, it is found that teachers rarely use learning tools or media, and do not use innovative and varied methods.

The importance of understanding mathematical concepts for elementary school students causes teachers to study harder in order to find solutions to overcome the difficulties encountered, the solutions offered by researchers to teachers are: first, teachers must provide motivation to learn to students; secondly using appropriate learning methods, media and strategies; third, using mixed methods during the learning process, and fourth, participating actively in the teacher working group (KKG) that has been set so that it can support the teacher's ability to teach

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