

ANALYSIS OF THE CAUSES OF DIFFICULTY LEARNING MATHEMATICS MATERIALS OF COUNT NUMBERS OPERATING IN CLASS IV STUDENTS IN MI MA'ARIF TUNTANG

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Abstract

This study aims to: (1) to find out the causes of the difficulties experienced by students in learning mathematics for the material of calculating numbers in class IV at MI Ma'arif Tuntang Academic Year 2021/2022. (2) to find out the efforts that can be made to overcome students' difficulties in learning mathematics for class IV number calculation operations at MI Ma'arif Tuntang for the 2020/2021 Academic Year. This type of research uses descriptive qualitative research. The data sources used are primary data sources and secondary data sources. The data collection procedures used include observation, interviews, questionnaires, and documentation. The data analysis techniques used are data collection, data reduction, data presentation, and drawing conclusions. Checking the validity of the data by means of extension of observations and triangulation. The results of this study show that (1) the factors that cause difficulties in learning mathematics come from internal and external factors. Internal factors include student attitudes in learning mathematics, student learning motivation which is still quite low, body conditions that are sometimes less than optimal in supporting the learning process, and students' sensing ability is lacking. Meanwhile, external factors include the lack of variety of teaching teachers in the mathematics learning process, the use of learning media that has not been maximized, school facilities and infrastructure that do not yet support mathematics learning, as well as a family environment that is still lacking in providing attention to students. (2) that can be made to overcome difficulties in learning mathematics.

Keywords: Learning Difficulties, Mathematics, Operation Calculat

Introduction

Seeing the importance of mathematics for students, learning difficulties experienced can be detected since students sit in elementary school. There are many factors that influence students' learning difficulties in mathematics, such as lack of interest and motivation in learning mathematics, use of inappropriate learning methods, lack of support from parents and the surrounding environment in learning mathematics for students to understand mathematics.

This statement is supported by research conducted by Mia Muntadiroh Yunita Devi (2019) regarding the analysis of the learning difficulties of grade II students in addition material at MIN 4 Tulungagung which shows that the factors that influence learning difficulties are talents and interests, motivation, and enthusiasm for learning, hyperactivity, and students who do not understand the material. Therefore, these problems must be minimized immediately so that these difficulties do not continue to the next level.

Especially in arithmetic operations (addition, subtraction, multiplication and division) on whole numbers. This material is being taught to fourth grade students of Madrasah Ibtidaiyah. Students must be led to master this material, because this material will support the continuity of further learning. So far, there are still many students who have

difficulty in learning the material for counting operations on whole numbers. Usually students have difficulty when working on story questions because they are not able to understand the meaning of the questions and are confused when determining which arithmetic operations to use. In addition, students often make mistakes when calculating, especially when calculating multiplication and division operations in a long way.

Empirically, in learning mathematics, especially the material for arithmetic operations (addition, subtraction, multiplication and division) of whole numbers, students tend to make mistakes which indicate students still do not understand the basic concepts expected from learning. As stated by (Yeni, 2015) "Learning difficulties can be interpreted as a condition marked by certain obstacles to achieve learning outcomes". The theoretical view above shows learning difficulties as one of the failures in achieving learning objectives that can be caused by internal factors and external factors.

Based on observations at MI Ma'arif Tuntang, most students find it difficult to learn mathematics. Students do not understand when given a math problem and there are only a few students who master the material. If they have difficulty understanding the material explained, most students do not actively ask the teacher and only rely on their friends as a place to ask questions. Difficulties that are often experienced by students are difficulties in calculating multiplication and division, difficulties in practicing the material that has been taught by the teacher, especially on the material for counting operations on whole numbers. This can be seen when learning in class, students have difficulty understanding the material, difficulty in counting, difficulty in analyzing and lack of mathematical literacy skills.

At the time of observing the learning process, the teacher did not use supporting media that could clarify the material and make it easier for students to understand the material presented. Less varied methods and the absence of media also cause children to have difficulty learning mathematics. These difficulties have an impact on mathematics learning outcomes which are still low. The teacher only uses improvised supporting media such as books and LCDs. The application of learning methods is only adapted to the material to be taught and does not combine variations of other learning methods.

Previously, researchers had made brief observations at MI Ma'arif Tuntang, from the results of these observations the researchers found interesting problems to be used as research topics. So that it strengthens researchers to make the location as a research location. MI M'arif Tuntang in 2017 won the Mathematics KSM (madrasah science competition) competition, this also strengthened the researchers' reasons for choosing this location as a research location.

Mathematics learning in schools should be delivered by paying attention to the curriculum and mindset that is in accordance with the level of cognitive development of students to be more effective. The application of methods and the use of learning media should also be adapted to the material to be studied so that students do not experience difficulties in understanding the material that has been explained. Easy, fun and fun learning can also be applied when learning, for example playing games on whole number counting operations by combining the snowball method and group discussion. It aims to make students more interested and active in asking and answering during the learning process.

Based on the description of the problem above, the researcher is interested in knowing the factors that cause difficulties in learning mathematics, especially in grade IV because this level is the beginning of high grade in Madrasah Ibtidaiyah. The information obtained from this study is expected to reduce the difficulty of learning mathematics in grade IV, so that the difficulties experienced by students do not continue to the next level. Therefore, the researcher wants to analyze the problems in learning mathematics at Madrasah Ibtidaiyah through qualitative descriptive research with the title "Analysis of the

Causes of Difficulties in Learning Mathematics in Operational Materials to Count Whole Numbers in Grade IV Students at MI Ma'arif Tuntang for the Academic Year 2021/2022".

Method

This study aims to determine the various mathematical difficulties experienced by students, the causes of difficulties in learning mathematics, and describe the efforts that can be made to overcome difficulties in learning mathematics in grade IV Madrasah Ibtidaiyah. Therefore, this study uses a qualitative descriptive approach.

This study examines and examines students who have difficulty in learning mathematics by collecting complete and accurate information with various data collection procedures in the form of observations, interviews, questionnaires and documentation.

The data analysis technique uses Miles & Huberman, namely data reduction, data presentation, and drawing conclusions. By checking the validity of the data using extended observations and triangulation of sources and triangulation of methods (Choiri, 2019).

Results and Discussion

The results obtained from the entire process of analyzing and testing the validity of the data can be concluded descriptively so that it becomes research that can answer the existing problems as follows:

a. Factors Affecting Counting Ability

1) Difficulty in Understanding Mathematical Concepts

From the results of the research that has been obtained, it is known that some students still have difficulty in mastering the basic concepts of mathematics, including the basic concepts of addition and subtraction, the basic concepts of multiplication and division, especially on whole numbers.

2) Difficulty in Calculation

Students' numeracy difficulties are caused by the lack of mastery of students' numeracy skills, weak student comprehension skills and parental support for the learning process are also factors for students' difficulty in calculating. In addition, students make mistakes when calculating because they are not careful when doing it and cannot understand the meaning of the question.

3) Difficulty in Solving Math Problems

Based on the results of the research, the researchers found the types of learning difficulties experienced by students in mathematics, namely difficulties in understanding story-shaped questions, difficulties in calculating the operation of counting whole numbers, and difficulties in determining steps to solve story-shaped problems.

b. Description of Factors Causing Difficulty in Learning Mathematics

1) Factors Causing Difficulty in Learning Mathematics Internally

a) Attitude in Learning

From the statement of the results of interviews and questionnaires, students do not like mathematics because it is difficult, the suggestions that arise in students can have an impact on the mathematics learning process so that students cannot follow the lesson well.

b) Motivation in Learning

The results showed that students' motivation for learning mathematics was quite low, it could be seen when learning took place that students were cool on their own and preferred to chat or play with friends when participating in learning activities.

c) Body Condition

Based on the analysis of research data, not many students have health problems. However, students' body condition and health still need to be considered, for example, teachers can give directions to students to maintain a healthy body. In addition, parents also play an important role in maintaining the condition of students' bodies, parents can maintain their diet and regulate students' rest hours so that students are always in optimal body condition and can follow math learning well.

d) Sensing Ability

Based on the results of the analysis, it was found that only one student had visual impairment, the student could not see the blackboard clearly. Meanwhile, students sitting at the back stated that they were less clear in listening to the teacher when explaining in front of the class.

2) Factors Causing Difficulty in Learning Mathematics Externally

a) Variations of Teacher Learning Methods

Based on the results of the analysis that has been done, it shows that the teacher has tried to use various methods that are adapted to the material to be delivered, such as giving pre-tests and practicing using the jigsaw method.

b) Less Maximum Use of Learning Media

The results of the analysis show that the use of learning media is one of the important factors as a means to convey material to students to make it easier to understand. However, the obstacles found in the field are the lack of maximum use of learning media because teachers only rely on existing media in schools and the lack of teacher creativity to create learning media.

c) School Facilities and Infrastructure

Facilities and infrastructure in schools are not sufficient to facilitate the learning process of mathematics. Class conditions can be said to be good, the building is a permanent building that is safe to use for learning. Each class has windows and ventilation for the entry and exit of air so that the classroom does not feel stuffy. Another obstacle to facilities and infrastructure in schools is the unequal distribution of textbooks because the available textbooks are only half of the total number of students in grade IV.

d) Lack of Parental Attention

Based on the results of the reduction carried out, it is known that students who are indicated to have difficulty learning mathematics pay less attention to student learning development. Where students are not accompanied by parents when studying at home. The lack of attention from parents is caused because parents are busy working so they are not paying attention to student learning at home.

c. Description of Efforts to Overcome Difficulties in Learning Mathematics

Based on the results of the reduction, it can be seen that the efforts made by the fourth grade teacher of MI Ma'arif Tuntang to overcome students' learning difficulties in mathematics are to provide improvement in grades or remedials to students who have scores below the KKM (Minimum Completeness Criteria) and provide additional guidance to students. who have learning difficulties.

Conclusion

From the results of the data obtained, it can be concluded that there are several factors that cause difficulties in learning mathematics in fourth grade students at MI Ma'arif Tuntang which originate from internal factors and external factors. Internal factors come from the students themselves which include students' attitudes in learning mathematics, students' motivation to learn which is still quite low, body conditions that are sometimes

less than optimal in supporting the learning process, and students' lack of sensory abilities. While external factors originating from outside the students include the lack of variety in teaching teachers in the mathematics learning process, the use of learning media that has not been maximized, school facilities and infrastructure that do not support mathematics learning, and the family environment that is still lacking in paying attention to students.

Efforts can be made to overcome difficulties in learning mathematics based on the difficulties experienced and the factors behind the difficulties in learning mathematics, among others, providing improvement in grades or remedial, providing additional lessons outside school hours, cooperating with parents.

References

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