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DIAGNOSTICS OF STUDENTS' LEARNING DIFFICULTIES IN MATHEMATICS SUBJECTS AT STATE 61 PRIMARY SCHOOL BANDA ACEH

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Abstract

Diagnostics of learning difficulties is one way that can be used to study and understand the problems experienced by students in teaching and learning activities. This research aims to determine students' learning difficulties, especially in mathematics subjects and the factors that cause them. This research is included in the descriptive research type using a quantitative approach. The population of this study were students at SDN 61 Banda Aceh consisting of 164 people. Meanwhile, the research sample was 18 class IV students. The data collection technique used was DCM (Problem Checklist) and analyzed using descriptive percentage techniques. The results of the research show that every student has obstacles and problems that can be identified as difficulties learning mathematics at school, both in terms of (1) Internal factors caused by; 45% Study Habits, 97% Interest, 80% Motivation and (2) External factors which include; 46% school environment and 25% family environment.

Keywords: *Diagnostics, Learning Difficulties, Learning*

A. Introduction

The world of education interprets the diagnosis of learning difficulties as a series of efforts made to understand and determine the type and nature of learning difficulties. Apart from that, diagnostics also

examines the factors that cause learning difficulties and identifies and overcomes them, both from a curative and preventive perspective based on data and information obtained in the field (Zamrodah, 2016).

Therefore, all activities carried out by teachers to detect learning difficulties are called diagnostic activities. This diagnostic is considered important to carry out because; (1) Every student needs to take advantage of opportunities and services to develop optimally; (2) There are differences in intelligence, potential, interests, talents and circumstances of each student; (3) The education system in schools needs to create opportunities for students to develop according to their abilities; and (4) To overcome the problems faced by students. In this case, teachers need to deepen relationships with students by increasing knowledge, being open, and developing skills in identifying students' learning difficulties (Atieka, 2017).

At school it is not uncommon to find students who are very active, diligent in taking notes, diligent in doing homework, often ask questions, and so on. However, on the other hand, there are also students who are very passive, do not do their homework, play truant, are silent when the teacher asks questions and the like. This indicates that there are students who experience poor behavior patterns and can be identified as obstacles or learning difficulties experienced by students (Irham, 2014).

In connection with this problem,Amerudin (2013)explains that students' learning difficulties are caused by internal factors which include habits, interests and learning motivation. Meanwhile, in terms of external factors, it is influenced by family and school environmental conditions that are less conducive.

Furthermore, the results of research conducted byDhian K (2016)Conclusions can be drawn, namely; (1) The level of learning

difficulties in grade 5 students at Sosrowijayan State Elementary School, Yogyakarta is in the medium category; (2) Mathematics is a difficult subject to learn, 3) The causes of learning difficulties include internal factors such as study habits, learning motivation, attitudes towards learning, interest in learning and talents. Meanwhile, external factors include the school, family and community environment; 4) Students' learning difficulties are temporary, not long term.

The research above is also in accordance with the results of the study conducted by (Fajria et al., 2023)namely Mathematics is a "Very Difficult" subject for students. This is a question mark in itself, so it is interesting to carry out follow-up and in-depth studies regarding the obstacles and problems experienced by students in studying mathematics at school.

Therefore, diagnostics of learning difficulties need to be carried out as early as possible, even when the child enters elementary school level in order to prevent problems in teaching and learning activities, especially in mathematics subjects..Diagnostics of learning difficulties can be done by collecting and analyzing and interpreting data obtained from academic achievement, learning outcomes such as grades obtained by students in exams.

B. Method

This research is included in the type of descriptive research with the aim of examining and reviewing information regarding the status of an existing symptom, namely the conditions or circumstances as they are and was carried out without the intention of presenting conclusions that apply to the general public/generalizations. In other words, this type of research only describes "what is" about a variable, symptom, event or

situation that is taking place at the research location. (Hikmawati, 2020). Furthermore, this research also uses a quantitative approach, namely data obtained in the field will be presented systematically or in the form of numbers or percentages (Priadana & Sunarsi, 2020). In this research, data collection was carried out through a Problem Checklist (DCM) and was filled in by students who experienced obstacles and problems in learning Mathematics. Next, the data obtained will be processed and analyzed using descriptive percentage techniques.

C. Finding and Discussion

In table. I can see the research results obtained by filling in the DCM by 18 students. The implementation will be on Friday, December 8 2023 in class IV at SD Negeri 61 Banda Aceh.

Table 1. Problems experienced by students in mathematics subjects

PROBLEMS	STUDENTS VOTE	PERCENTAGE (P = F/N x 100%)
Study Habits in Class		
1. I was sleepy in class	3 Students	16 %
2. I lack concentration/focus when studying mathematics	11 Students	61 %
3. I often cheat when I practice math problems	16 Students	88 %
4. I often copy friends' homework	5 Students	27 %
5. I rarely pay attention to math teachers	17 Students	94 %
6. I just daydreamed while the teacher explained	7 Students	38 %
Average	9.8	54 %
Interest		
7. I don't like mathematics lessons	18 Students	100%
8. I don't like studying mathematics	18 Students	100%

9.	I often feel lazy studying mathematics	17 Students	94 %
10.	Mathematics lessons are boring	18 Students	100%
11.	I feel bored studying mathematics	18 Students	100%
12.	For me, mathematics is not an interesting subject	16 Students	88 %
	Average	17.5	97 %
Motivation			
13.	I am not enthusiastic about studying mathematics	15 Students	83 %
14.	I give up easily when doing math assignments that tend to be complicated	16 Students	88 %
15.	I have a low passion for studying mathematics	14 Students	77 %
16.	I am less active in asking questions during mathematics lessons	12 Students	66 %
17.	I don't have high curiosity, especially when studying mathematics	10 Students	55 %
18.	I was indifferent to paying attention to the mathematics teacher's explanation	9 Students	50 %
	Average	12.6	70 %
School environment			
19.	The mathematics teacher's explanation was difficult to understand	14 Students	77 %
20.	I didn't get enough attention from the math teacher	7 Students	38 %
21.	The atmosphere when studying mathematics is less fun	17 Students	94 %
22.	My friends often bully me in class	2 Students	11 %
23.	The classroom is not comfortable for studying	1 Student	50 %
24.	I don't have any friends who can teach me mathematics	9 Students	50 %
	Average	8.3	46 %

Family environment		
25. I don't get enough family attention, especially for studying	4 Students	22 %
26. At home, no one could teach me to study mathematics	2 Students	11 %
27. At home, no one can help me with my math homework	2 Students	11 %
28. My father is rarely at home	14 Students	77 %
29. My mother is rarely at home	3 Students	16 %
30. I don't like studying mathematics with my family/relatives	3 Students	16 %
Average	4.6	25%

Based on the research results presented in Table I, it is known that every student experiences obstacles or problems both in terms of internal and external factors.

a. Internal factors

Students' learning difficulties in mathematics cannot be separated from "study habits" where every student has a bad attitude when learning mathematics, starting from often being sleepy, lacking concentration, often cheating or copying friends' homework, rarely paying attention to the teacher and even just daydreaming during learning activities. teaching takes place. The results of the DCM analysis regarding problems with student study habits show an average percentage of 54%. This means that 9 out of 18 students experienced problems in this area.

Furthermore, students' interest in learning is also part of the factors that cause students to experience difficulties learning mathematics. This is known from the results of the DCM analysis which shows that 97% of students have low interest in learning, such as not enjoying studying mathematics, often feeling lazy, bored and thinking that mathematics is not an interesting subject and is boring.

Apart from that, it is also known that 70% of students have low learning motivation. In other words, 12 out of 18 students have low enthusiasm/passion for learning, give up easily when working on relatively complicated mathematics assignments, are less active and are indifferent to paying attention to the explanations of mathematics teachers at school.

b. External Factors

Based on the results of the DCM analysis, it is known that 45% of students have difficulty learning mathematics due to school environmental factors such as classrooms that are less comfortable for studying, an unpleasant learning atmosphere, often being disturbed by classmates, and students having difficulty understanding the mathematics teacher's explanations.

Meanwhile, the family environment is also a factor causing difficulties in learning mathematics. This can be seen from the results of the DCM analysis which reached 25%, meaning that a small number of students felt they did not get enough attention from their families for studying, at home there was no one who could teach or help with assignments or homework and they did not like studying mathematics with their family or siblings.

Students who have difficulty learning mathematics should be given guidance and assistance by teachers at school to prevent long-term problems. What is explained above can be said that diagnosing learning difficulties is an activity that requires careful planning, requires time, energy and also money. Therefore, diagnosing students' learning difficulties should be part of the work program of educational institutions. If this can be implemented well, the learning difficulties of students at

school can be prevented and overcome and learning goals can be achieved.

D. Conclusion

Based on the research results that have been described, it can be concluded that every student has obstacles and problems that can be identified as difficulties learning mathematics at school, both in terms of:

1. Internal factors caused by; 45% Study Habits, 97% Interest, 80% Motivation
2. External factors include; 46% school environment and 25% family environment

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