The influence of classroom management on ability mathematics literacy of class vii students

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Article Info	ABSTRACT
	The research was conducted with the aim of finding out the effect of classroom management on students' literacy skills. Classroom management is carried out to achieve effective learning goals so that it can improve students' abilities in learning mathematics. This research is quantitative research, the population is class VII students of SMP Negeri 2 Rantau Selatan. and took a sample of 30 students, the data collection technique used a questionnaire technique, using a data analysis technique, namely linear regression analysis. From the results obtained in the classroom learning model, it is very important for teachers to strive to create good and enjoyable teaching and learning conditions. In this study, classroom management was quite good, but students' mathematical literacy skills were still lacking due to difficulties in solving mathematical problems. So it can be said that classroom management can influence the mathematical literacy skills of students at SMP Negeri 2 Rantau Selatan.

INTRODUCTION

Education is a human effort to become a better person. In order to provide good education, the role and duties of teachers in carrying out learning in the classroom are very important. Learning is an important activity that everyone must do optimally to master or obtain something. So, education is the learning that students receive in the classroom. Education is very important for every human being, in accordance with Article 31 of the 1945 Constitution which states that every citizen has the right to receive a decent education. Education is a conscious effort to create a learning atmosphere and learning process that aims to enable students to actively develop (Afsari et al., 2023).

Education is a major investment as well as a central issue for every nation, especially for an active developing nation develop their country as is the case in Indonesia. Development only can be done by humans who are prepared for this through education. The quality of education depends a lot on the quality of teachers guiding the learning process (Khoiriyah, 2018).

In relation to this, educational activities are a the process of changing human attitudes from a particular condition to a condition other. In other words, through education changes will appear deeply the process of changing the human mind, from not understanding to understanding, from not understanding knowing becomes knowing. In the Dictionary of Education book it is mentioned that education is: 1) the process in which a person develops abilities, attitudes and other forms of behavior in the society where he is life; 2) a social process in which people are exposed to environmental influences selected and controlled (especially those coming from school), so that they acquire or experience the development of social skills and abilities optimal individual (Husnul & Retnawati, 2020)

One lesson that contributes to achieving learning objectives, namely enabling students to think logically, analytically, systematically, creatively and critically, is mathematics. In the learning process in the classroom, it is very important for teachers to strive to create good and enjoyable teaching and learning conditions. Therefore, a teacher must have the ability to create good teaching and learning conditions for optimal levels of effectiveness in learning activities. A teacher is required to have knowledge and skills that enable him to effectively create a conducive learning environment structure, design learning procedures, develop good relationships with students and increase attention to the academic activities he manages. Therefore, to give students the ability to understand lessons, this can

be done by carrying out mathematical literacy, to make it easier to understand and solve problems in a mathematical context.

Mathematical literacy skills are important, because mathematics is also related to everyday life (Rizki & Priatna, 2019). Apart from that, mathematics as a discourse has a special language in the form of images and symbolism that is different from everyday language, so teachers must use correct mathematical language, including symbols and notation when teaching mathematics lessons (Planas, 2018). This is the key to increasing students' conceptual understanding and procedural fluency. With mathematical literacy skills, students can make it easier to understand symbols and improve students' ability to solve problems in mathematics lessons and be able to express these problems.

Mathematical literacy is an ability which includes how to apply, formulate and translate mathematics into various situations, including the ability to reason systematically, mathematically, using various concepts, facts, various mathematical tools, procedures, to explain, predict and describe something. event (phenomenon) (Afsari et al., 2023). Mathematical literacy provides positive benefits, there are many advantages that have a good influence so that it can improve abilities in the field of mathematics as explained above regarding mathematical literacy, namely that it can provide a systematic understanding of reasoning, which can provide facts about mathematical concepts, can explain and solve problems. a problem or an incident.

However, in reality, students' mathematical literacy skills in Indonesia are still relatively low when compared to other countries. This is proven by the results of the PISA (Program for International Student Assessment) survey. The results of the PISA survey in 2018 showed that Indonesian students' mathematical literacy skills were low, scoring below the average set by the OECD. In 2018, Indonesia's PISA results obtained an average score in mathematics of 379, while the average set by the OECD was 489. Indonesia was ranked in the bottom 10 of the 79 countries involved. The average reading, mathematics and science abilities of Indonesian students are respectively 42 points, 52 points and 37 points below the average for students in ASEAN. This means that the abilities of Indonesian students are not only below the average OECD score, but also below the average for students in ASEAN (Anwar, 2018).

Renanda et al. (2015) stated that there are three factors that influence students' mathematical literacy abilities, namely personal factors, instructional factors, and environmental factors. Aspects of Personal Factors in terms of a). Students' perceptions of mathematics b) students' self-confidence in mathematical abilities, environmental factors in terms of a). Teacher characteristics and b) the existence of learning media in schools. Instructional Factors are viewed from the intensity, quality and teaching methods, which include learning strategies and approaches (Suciawati et al., 2023).

To improve students' cognitive aspects in learning mathematics, good classroom management is needed. Therefore, a teacher has a very important role in determining the quantity and quality of learning. Classroom management is one aspect of learning that teachers must master so that students can learn optimally. Good classroom management can make the classroom atmosphere conducive to the teaching and learning process, so that learning objectives can be achieved (Pamuji, 2021). According to Arlianti (2019) classroom management is a teacher's efforts involving planning, organizing and optimizing various resources, materials and learning opportunities in the classroom to create effective and quality learning activities for students. Teacher-led classroom management is a form of administrative action necessary to manage a classroom effectively and achieve the extent to which effective classroom management responds to complex situations.

It can be concluded that a teacher has the goal of realizing effective learning by improving a comfortable classroom atmosphere. There are factors that cause difficulties in classroom management, namely teachers, students, family environment, and learning facilities. As educators, teachers also have many shortcomings. This deficiency may be the cause of hampering teacher creativity. Students have rights and obligations that must be implemented during the learning process. Students who violate their obligations such as being noisy, disturbing friends who are studying, and not complying with existing rules and regulations also cause difficulties in classroom management. However, learning facilities can

also be an important factor in a teacher's efforts to maximize the program. Inadequate facilities can also be a major obstacle for a teacher in carrying out effective learning activities (Rahayu et al., 2020).

Learning facilities can help create learning activities at school, support student learning both at school and at home. With the facilities, students' learning needs can be met. However, of course not all of these things can be fulfilled because there are so many differences between students, the most important thing is that the facilities must be met, especially at school, so that teachers are able to provide comfort to students during the teaching and learning process (Pujiman et al., 2021). Based on observations, interviews with one of the mathematics teachers at SMP Negeri 2 Rantau Selatan, mathematics is a difficult subject for class VII students. This can be proven by the results of interviews and studies Teacher-made documents show that students' mathematical literacy skills are still very low. Matter This is indicated by several situations or conditions. First, the results of interviews with teachers, Most students' mathematical abilities only reach the calculation process and not yet able to model real problems into mathematical models, especially for finish it. Students tend to learn to memorize mathematical formulas. This is visible on students' inability to solve problems starting by formulating, then applying, even interpret mathematics into various real situations. Meanwhile, capability demands Mathematics students are not just able to count, but must have the ability to reason, think logically and be more critical when solving a problem. This could happen because dominant teachers use direct learning models or less centered learning to students in class. There are students who do not easily understand and formulate mathematics because the level of intelligence for students is different, some are quick to respond, some are difficult to understand mathematics lessons, each student has criteria or way to solve problems in mathematics, such as, what a teacher does so that students can easily understand it is by inviting students to answer questions first by giving examples in their daily lives, holding discussions and repeating lessons before starting new material. With this, a teacher is able to invite students so that students' mathematical literacy skills can increase because in order to provide understanding to students, students are invited to discussions and given examples so they can formulate, identify and solve mathematical problems using everyday examples.

In class management for class VII students of SMP Negeri 2, the teacher hereby provides a form of class management, before entering the class of course a teacher must make preparations to create good class management, with that it is necessary to provide a description of what will be done when entering class, the main thing that teachers do is pay attention to students in terms of mathematical literacy skills in class VII students at SMP Negeri 2 Rantau Selatan. The aim is to find out how students are managed in the classroom, find out how students' mathematical literacy skills are, and find out whether there is an influence of classroom management on mathematical literacy skills.

RESEARCH METHODS

The method in this research uses quantitative methods, namely research data in the form of numbers and analysis using statistics. In this study, a research instrument was used using a questionnaire or questionnaire in the form of questionnaire questions distributed to respondents who were taken using a sampling technique, namely simple random sampling. This research aims to determine whether there is an influence on the problem, which in this research uses two variables, namely the independent variable (independent) is class management and the dependent variable (dependent) is mathematical literacy ability.

This research was conducted at SMP Negeri 2 Rantau Selatan, Kab. Labuhan Batu, North Sumatra 2022/2023 academic year. The population used in this research was 60 students in class VII of SMP Negeri 2 Rantau Selatan with the sample used in this research totaling 30 students. Data collection techniques in research are to quote data information through school observations, interviews, questionnaires and also recording important things.

The technique for measuring the data analysis instrument test uses a simple linear regression analysis test technique for research numerical data and calculates the coefficient of determination (coefficient, simultaneous test and ANOVA F test). Based on the results of the analysis calculations, to

carry out the analysis, prerequisite tests are first carried out, namely validity, reliability and hypothesis tests. In this study, the research results were calculated using the SPSS program.

RESULTS AND DISCUSSION

In the research carried out and presented with the results of the analysis using simple linear regression analysis in this research, it will be known whether or not there is an influence on classroom management on mathematical literacy skills. The results of this research will be discussed appropriately and in accordance with the results that have been determined from those has carried out research at school.

Table 1. Influence of classroom management on output results
Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	12.944	12.307		1.052	.302
Classroom Management	.659	.224	.486	2.946	.006

a. Dependent Variable: Mathematical Literacy Ability

In table 1. It can be seen by using the variable class management variable (X) on the variable Student Mathematical Literacy Ability (Y), to determine the magnitude of the influence, the results of the analysis of variance (ANNOVA) of this model are shown in the table.

$$Y = 12,944 + 659X \qquad\qquad (1)$$

The table 1 above produces a coefficient with a calculated t value of 2.946 and a t table value of 2.048. This shows that t calculated 2.946 > ttable 2.048. With a significance figure of 0.006 <0.05. In this figure it shows that H1 can be accepted and H0 rejected. This is done in the SPSS application program used by researchers to find out information from the following table to verify the coefficients:

Table 2. Number of Class Management Influences determined by Output Results
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.486	.237	.209	6.40144

a. Predictors: (Constant), Class Management

Based on the SPSS output results in the table 2, the correlation coefficient between classroom management and mathematical literacy abilities is 0.486 (R) and 0.237 (R2). This can be shown how much of the students' mathematical literacy abilities are explained by the model created in classroom management, namely 23, The remaining 7% is worth 76.3%. In the next stage, to see the results of the hypothesis testing research, the F test is used with the aim of finding out the simultaneous impact on important independent variables on the dependent variable.

Tabel 3. Annova Uji F

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	355.570	1	355.570	8.677	.006[b]
	Residual	1147.397	28	40.978		
	Total	1502.967	29			

a. Dependent Variable: Mathematical Literacy Ability
b. Predictors: (Constant), Class Management

In table 3, this simultaneous test or Annova F test shows that if Fcount > F table and the number of significances is t(sig) > 1 and the probability value is 0.006, the Fcount value is 8.677. This is sufficient evidence that to reject H0, a decision can be made on the number of probabilities (sig) < the applied significance value (0.006 < 0.05) as well as the results based on Fcount (8.677) so that it is proven that classroom management influences mathematical literacy skills. student.

Discussion

Of the concept of classroom management can be explored from the following points, including the meaning of the term management, essence class management, understanding class management. Browse from Etymologically, it is explained that the term management comes from Latin, namely manus or mano or mantis which means hand and agere means to do. Furthermore, the two terms (manus and agere) were then combined into one term which contains the verb, managere, which means to handle, take care of, manage. The term managere is then translated into English in the form of words work becomes "managing" with the noun "management" and manager for people who carry out mathematics classroom management activities to achieve goals effectively and efficient, (Hidayat et al., 2020).

At the level of classroom management it does not guarantee success in the educational process. However, this also makes it impossible for the learning process to be successful. The achievement of classroom management can be seen from the goals to be achieved, therefore a teacher must determine goals by creating strategies to manage them in order to achieve effective learning goals. In general, the aim of classroom management is to provide for students' academic, social and psychological needs. The services available make it easier for students to build a social environment that supports learning, work, satisfaction, a sense of discipline, development of intelligence, emotions and attitudes as well as student appreciation (Harahap et al., 2023).

Regarding the direct learning model, the teacher explains the material step by step and Students are given the opportunity to take notes or ask questions. Next, the teacher gives questions students work. Then students are asked to write the solution to the problem on the blackboard and students others complete the solution. These questions are used as a way to get results feedback from students regarding their understanding of the concept. However, this was ignored in learning that is only used as a routine, without being felt deeply problems faced by students so that they have a poor or weak understanding of concepts. Model Direct learning implies that the teacher is the sole source of learning and the student is not given space to build their knowledge in their own and more flexible way. Process Learning makes students recipients of knowledge without building and developing ideas themselves. One of the weaknesses of the direct learning model is that it emphasizes one direction so the opportunity to control students' understanding of the material is limited. So that This research provides a conclusion that students' mathematical literacy abilities are using the PBL learning model assesses portfolio assessment better than students' mathematical literacy abilities that use direct learning models for students class VII of SMP Negeri 2 Rantau Selatan.

CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that this has a significant influence on the Class Management variable on the Mathematics Literacy Ability variable. In this research, classroom management is quite good, however, students' mathematical literacy skills are still lacking due to difficulties in solving mathematical problems. So it can be said that classroom management can influence the mathematical literacy skills of students at SMP Negeri 2 Rantau Selatan regency. Furthermore, the implications of this research extend to advocating for schools to bolster students' active participation in the learning process. By implementing effective classroom management techniques, students are anticipated to become more actively engaged in project-based learning activities, allowing them to apply acquired knowledge and skills in real-world contexts.

However, it's worth noting that implementing effective classroom management necessitates additional resources, be it in the form of equipment, reading materials, or manpower. Hence, meticulous planning is imperative to ensure the availability of adequate resources to support a sustainable and

effective learning process. This underscores the need for careful consideration and allocation of resources to facilitate an environment conducive to optimal student learning outcomes.

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