# Class Management in Improving Mathematics Learning at SMP Negeri 1 Bilah Hilir

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## ABSTRACT

Classroom management is one of the efforts to improve mathematics learning, both planning for mathematics learning. Planning is preparing mathematics learning materials that will be delivered by the teacher, what is taught is students, teachers monitor students' activities, by preparing the tools, readiness of the classroom environment, class comfort, conducive, the teacher prepares students in such a way before the mathematics learning process. Organizing is making learning tools. The online math learning uses the WhatsApp application. The mathematics learning material delivered is in the form of a file in which the file contains a photo of the material along with an explanation, a video with the material along with some exercises and assignments. Teachers are able to lead and manage classes at SMP Negeri 1 Bilah Hilir by recognizing classes that are getting bored, by changing learning methods so that students can understand mathematics learning. The evaluation carried out by the teacher saw that students were able to work on questions, assignments, exercises and exams. This is done by giving questions, quizzes, pre-tests, assignments, exercises and exams. Efforts to improve students' mathematics learning at SMP Negeri 1 Bilah Hilir are by carrying out learning activities that relate to everyday life in accordance with the learning materials. Efforts to improve it are also carried out by providing several questions, assignments, exercises and pre-tests. Efforts improve mathematics learning teachers provide questions, assignments, exercises, with the results of these answers students are able to explain the results of answers to questions, assignments, and exercises.

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## 1. INTRODUCTION

Educational management is an educational organization that has been established to improve the effectiveness and efficiency of a collaborative effort management system in a group of people who join in a place or school. The purpose of education is currently directed at the demand to be able to produce a generation of character and quality, namely a generation that is able to adapt to this modern era. With the existence of an educational strategy, it must be directed at the formation and mastery of certain competencies to fulfill this. Education is the obligation of a country, but the foundation of success and the success of educational goals is the teacher.

Teachers have the main task in learning, the classroom and the school environment, teachers play a very important role in increasing their competence in creating an effective learning environment. In order to achieve learning objectives, teachers must be able to complete learning activities that create and maintain in such a way that the learning process can take place effectively and interestingly. The teacher must have the ability and competence in classroom management, with this ability the teacher in the class carries out its main activities, namely teaching activities and management activities or managing classes. Teacher quality is one of the most important factors (Nur'aini & Ruslau, 2020)

Planning (planning) in learning, organizing (organizing) learning activities, and evaluating (assessing) learning are functions of learning management. A teacher must be able to plan learning because it is one of class management and or learning management. Classroom management is an activity of one of the educational efforts which is the "core kitchen" of all educational management within the school. In the process of teaching and learning activities the teacher's efforts to manage the class in collaboration with students. The teacher is the class leader in the teaching and learning process, with all the competencies and abilities that will manage the class well.

In accordance with the above opinion, Oliver et al., (2015);Sieberer-Nagler, (2016) explained about classroom management, "classroom management is a complex set of behaviors the teacher uses to establish and maintain classroom conditions that will enable students to achieve their instructional objectives efficiently – that will enable them to learn." Classroom management is a complex set of behaviors that teachers use to organize and maintain classroom conditions that will enable students to achieve their instruction achieve efficient learning goals.

Sinha et al., (2017) define "teacher leadership: Process by which teachers influence their colleagues to improve teaching and learning practices with the aim of increased student learning and achievement". Teacher leadership is a process carried out by teachers to influence their students by improving learning practices with the aim of improving student learning and achievement. Teachers should be good at classroom management so that learning runs effectively and optimally. In the sense that the teacher is able to convey lesson material and can be accepted by students well. Creating a comfortable class is the study of class management (Wixom, 2016). Because classroom management is a series of teacher behaviors in their efforts to create and maintain classroom conditions that allow students to learn well and produce high student learning outcomes. Mohr-Schroeder et al., (2017) adds that "five factors were found that affect college student's attitudes toward mathematics: the teacher, the teaching, the classroom, the assessments and achievement and the individual perceptions". Students' attitudes towards mathematics are influenced by five factors, namely teachers, learning, classrooms, assessment and achievement as well as individual perceptions (Mazana et al., 2019).

With the advancement of technology and science developments in various fields, including one of the basic sciences in the field of mathematics, which is how important it is in the development of other sciences. However, until now mathematics is still a scary subject for students, because they feel inadequate in mathematics, it is not uncommon for some students to be lazy to learn it. Therefore, there is a tendency that mathematics is increasingly developing into a subject that is considered very difficult.

Mathematics is one of the subjects taught at all levels of education (Siregar et al., 2021) which can be said to be basic science mathematics in the field of education. Abstract mathematical concepts, making the process of learning mathematics with continuous practice given by the teacher to students, without this practice students cannot understand and cannot master mathematics well. To be able to understand and be able to master mathematics, it is necessary to have self-awareness in students of course. Mathematics will be a fun subject if it is taught by interesting teachers, namely teachers who have the right strategies and are able to master learning. The teacher's determination in managing the class properly is expected in delivering mathematics learning materials. Mathematics subjects need to be given to all students starting from elementary school (Siregar, 2015).

In order to increase the effectiveness of learning, especially in the field of mathematics, there are things that need to be considered by a mathematics teacher. Teachers should be able to manage the class so that learning takes place optimally and effectively. In the sense that the teacher is able to convey lesson material and can be accepted by students well, creating a comfortable class into the analysis of class management. Because classroom management embodies a series of teacher behaviors in their efforts to maintain and create classroom conditions that allow students to learn well and produce high student learning outcomes.

Quote from Amalia, (2019) said class management consists of two words, namely management and class. Management comes from English, namely management, which is also translated into management, which means the process of using resources effectively to achieve goals. While what is meant by class is a group of people who learn together by getting teaching from a teacher. Classroom management is an activity that creates and maintains optimal conditions for the learning process to occur (Sari & Hadijah, 2017). According to the language (Etymologically) management comes from English, Management, which means management, governance, management (Nugraha, 2018). Good classroom management is very important to encourage the achievement of positive educational outcomes Arfani & Sugiyono, (2014);Andriani et al., (2018).

According to arista & kadri, (2019) Teachers are important as activity managers who work based on the ideal framework of a classroom management approach. The capacity of a teacher in classroom management is very important. In Law No. 20/2003 concerning the National education system Article 1 point 1 explains "teachers are professional educators with the main task of educating, guiding, directing, training, assessing, and evaluating students in early childhood education through formal education, primary education, secondary education.

Improving mathematics learning in schools is one of the main tasks of a mathematics teacher, with the ability of a mathematics teacher, it is hoped that the mathematics teacher can manage classes and carry out class management in the subjects being taught.

The focus of his research will be limited to the scope of classroom management in planning, organizing, leadership and evaluating, classroom learning activities in learning the field of mathematics. The benefits obtained from this research are expected to contribute to knowledge, especially regarding classroom management in improving mathematics learning and are expected to make a positive contribution to prospective teachers, mathematics teachers, and schools in order to improve classroom management in learning mathematics regarding learning strategies that will taught to students for the effectiveness and optimization of student learning processes. Based on this description, this study aims to determine classroom management in improving mathematics learning.

#### 2. METHODS

This research was conducted at SMP Negeri 1 Bilah Hilir, in the village of Negeri Lama, District of Bilah Hilir, Labuhanbatu Regency, North Sumatra Province. The research method used in this article is a qualitative approach or qualitative research in the form of case studies Yates & Leggett, (2016);Mohajan, (2018). Qualitative research methods seek to understand and interpret the meaning of an event of human behavior interaction in certain situations according to the researcher's own perspective. Data collection techniques used participant observation, interviews, and documentation (Henricus Suparlan et al., 2015).

Observation is one way to collect information or data. The term observation comes from the Latin word meaning to see and pay attention. In general, people associate observation with seeing, observing, carefully reviewing an object. Observation is a method of collecting data through observing behavior in

certain situations and then systematically recording the observed activities and interpreting the observed events. Observations by examining classroom management activities in learning mathematics at SMP Negeri 1 Bilah Hilir, Negeri Lama Village, Bilah Hilir District, Labuhanbatu Regency.

Interviews are one of several ways to collect information or data. Interviews are important in collecting data because they are a method used to obtain information through social interaction activities between researchers and those being studied. In this regard, the object of the interview is people who know and understand carefully about classroom management problems in learning mathematics at SMP Negeri 1 Bilah Hilir, Negeri Lama Village, Bilah Hilir District, Labuhanbatu Regency.

Documentation is one of several techniques in collecting data in the form of images, notes, photos, files, books and letters. With the documentation, it is hoped that it can strengthen observations and interviews related to classroom management issues in improving mathematics learning at SMP Negeri 1 Bilah Hilir, Negeri Lama Village, Bilah Hilir District, Labuhanbatu Regency.

Referring to the qualitative research method with a case study approach, the focus of the research or the component to be studied, namely the management of mathematics learning classes, the source of data regarding learning activities and classroom management by mathematics subject teachers. Therefore, the data sources for this study were the principal and curriculum teachers of SMP Negeri 1 Bilah Hilir, mathematics teachers and students.

In this study, to strengthen the collection of data collected, it was documented in the form of recorded interviews, photos, books, and notes so that the results from observations and interviews could be strengthened regarding classroom management issues in improving mathematics learning at SMP Negeri 1 Bilah Hilir.

Checking the validity of the data is very necessary in qualitative research for the validity and reliability and level of trust of the data that has been collected. The data validity technique is by using triangulation, member checking and auditing techniques. This is one of the checks for the validity of the data by utilizing something other than the data for the purposes of checking or as a comparison against the data.

This study is more about the formation of abstractions based on the parts that have been collected, then grouped. By using inductive analysis, it means that the search for data is not intended to prove the hypothesis that was formulated before the research was conducted, so the theory formulation here comes from the bottom up, namely from a number of parts where a lot of data is collected and interconnected using Miles and Huberman.

#### 3. FINDINGS AND DISCUSSION

Class management at SMP Negeri 1 Bilah Hilir, when starting class learning activities by the teacher there must be a learning plan that the teacher plans for what class learning will be carried out by the subject teacher, followed by organizing it, namely making learning tools. According to Sugihartini et al., (2019);Tati & Bahri, (2019) Classroom management is the art or praxis (practices and strategies) of work, namely a teacher with or with other people (working with colleagues or with students themselves) to optimize class resources for the creation of an effective and efficient learning process. According to Afriadi, (2018) Classroom management is class management, namely the teacher's skills to create and maintain optimal learning conditions and restore them if there are disturbances in the teaching and learning process.

The learning plans for mathematics subject teachers at SMP Negeri 1 Bilah Hilir, mathematics subject teachers have prepared mathematics learning materials that the teacher will deliver, what is taught is students, the teacher monitors the activities of students, By preparing the tools, readiness classroom environment, class comfort, conducive, the teacher prepares students in such a way before the mathematics learning process. The first math lesson plan prepares learning tools. The second is class readiness where the method that will be used when providing mathematics learning and then material, mental readiness, physical readiness, material readiness as a mathematics teacher in the classroom must

exist. The third is learning equipment. This plan is supported by the opinion of Bengtsson, (2016) said planning is determining what will be done. Planning contains a wide series of decisions and explanations of objectives, determination of policies, determination of programs, determination of certain methods and procedures and determination of activities based on daily schedules.

On the student's admission schedule in the first semester of learning mathematics at SMP Negeri 1 Bilah Hilir, online learning is also held face-to-face. Due to a government regulation where the Covid-19 virus has hit health and Labuhanbatu was hit by a red jona and also Jona Labuhanbatu recovered gradually because it was held face-to-face for two months. The online math learning uses the WhatsApp application. The mathematics learning material delivered is in the form of a file where the file contains photos of the material along with explanations, videos with material along with some exercises and assignments that are collected every Friday if there are assignments that have been given. Face-to-face meetings are held for 20 minutes in one mathematics lesson which is carried out for two months by dividing students into two groups in one class, namely for group A and group B, group A enters on Monday, Wednesday and Friday. at compliance with health protocols. For group B, enter on Tuesday, Thursday and Saturday by complying with health protocols. For the second semester, initially, we wanted to hold face-to-face learning or offline learning for all students, due to the government regulation that requires vaccines for the sake of continuing learning, students and teachers are required to be vaccinated, so learning is still carried out by dividing two groups in one class but time increases. to 30 minutes during mathematics learning by subject with plus one time of 15 minutes for students to rest for one day at school by complying with health protocols.

The teacher leads and manages learning activities in the classroom, teacher leadership in the classroom, the teacher remembers the names of students, provides direction and relates the objectives of learning mathematics to everyday life. At the time of student learning, the mathematics teacher at SMP Negeri 1 Bilah Hilir multiplied the learning method which was originally the lecture learning method, the teacher recognized the condition of the class when the students were bored so that the learning method in class changed to a game method.

The method is carried out so that the learning activities can be fun, interesting and do not make them bored. Game method according to the definition of Heruman, (2014);Jalinus, (2021) is a method that stimulates students to think by playing so that they can instill mathematical concepts. Definition of according to Ardani & Setyaningrum, (2018) the method of playing mathematics as a fun (exciting) activity that can support the achievement of instructional goals in teaching mathematics both cognitive, affective, and psychomotor aspects. According to Suryawati & Osman, 2017) that the game method is a method that provides opportunities for practice and thinking, learning experiences, encouraging children's natural abilities, physical development, developing social meaning, solving problems, and working together, self-confidence, and encouraging cognitive development.

The mathematics learning method used adjusts the understanding that is easily captured by students and adapts to class conditions as well as adapts to the material, the teacher also prioritizes student learning activities to be active and the teacher only as a facilitator. This is included in the 2013 curriculum by applying the scientific method. The scientific method is a method that contains the 5 M (observing, asking, reasoning, trying and presenting). According to Karwati, E., & Priansa, (2014);Hodges et al., (2020) explains the information management method, scientific inquiry, namely: a method that aims to develop students' ability to solve problems, students are faced with conditions to compare what should happen with the reality that occurs, so that students are able to design research systematically with structured steps. This method encourages the creation of a cooperative classroom climate that requires active student discipline.

Efforts to improve students' mathematics learning at SMP Negeri 1 Bilah Hilir are by carrying out learning activities that relate to everyday life in accordance with the learning materials. Efforts to improve it are also carried out by providing several questions, assignments, exercises and pre-tests. Efforts to improve mathematics learning teachers provide questions, assignments, exercises, with the results of these answers students are able to explain the results of answers to questions, assignments, and exercises so that there is a reciprocal effort between teachers and students.

Evaluation of mathematics learning at SMP Negeri 1 Bilah Hilir, the teacher saw that students were able to work on questions, assignments, exercises and exams. Evaluation of students' mathematics learning at SMP N 1 Bilah Hilir is done by giving questions, quizzes, pre-tests, assignments, exercises and exams. According to the opinion of Renata et al., (2018) One of the activities that must be carried out by teachers in carrying out their duties and roles is evaluation activities.

## 4. CONCLUSION

The conclusions obtained from the results of research and discussion are Class Management in Mathematics Learning at SMP Negeri 1 Bilah Hilir with its planning, organization, teacher leadership and evaluation. Planning is preparing mathematics learning material that the teacher will convey, what is taught is students, the teacher monitors the activities of students, By preparing the tools, the readiness of the classroom environment, class comfort, conducive, the teacher prepares students in such a way before the learning process mathematics. The first math lesson plan prepares learning tools. The second is class readiness where the method that will be used when providing mathematics learning and then material, mental readiness, physical readiness, material readiness as a mathematics teacher in the classroom must exist. The third is learning equipment. Organizing is making learning tools. The online math learning uses the WhatsApp application. The mathematics learning material delivered is in the form of a file in which the file contains a photo of the material along with an explanation, a video with the material along with some exercises and assignments.

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The suggestions for school principals are to provide more direction and guidance to teachers, especially mathematics teachers in order to improve mathematics learning and manage classes well. Suggestions for mathematics teachers are that there must be a lot of mathematics teachers and can understand the character of students and be able to develop and learn more about the existing learning methods in learning mathematics. Suggestions for further researchers are to expand the scope of their research so that research in classroom management in improving mathematics learning is more accurate.

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