IMPROVING MATHEMATICS LEARNING OUTCOMES THROUGH LONG BOARD MEDIA FOR CLASS III STUDENTS AT SDN MOJOPITU

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ABSTRACT

This study aims to determine whether the long unit board learning media can improve student learning outcomes at SDN Mojopitu, Slahung sub-district. This research is a classroom action research using Kurt Lewin's research design. In this classroom action research, it was conducted at SDN Mojopitu, Slahung District, Ponorogo Regency by taking the research subject for grade 3 as many as 6 students. Data collection techniques used in this study were interviews, observation, documentation, posttest and pretest. The instruments used in this study include teacher interview texts, posttest and pretest instruments. The results showed that the long unit board learning media could improve students' understanding of the length unit material for grade 3 students at Mojopitu State Elementary School, Slahung District, Ponorogo Regency. It shows that learning the length unit material using the long unit board media that the average class in the initial conditions is 56.66 with a classical mastery level of 33.33%. In the first cycle the average class was 61.66 with 50% classical completeness. Then in the second cycle the class average was 63.33 with 73.33% classical completeness.

A. Introduction

Mathematics is a science that studies a count in numbers, quantities, geometry and others. Mathematics is a basic subject in all levels of formal education and has an important role in IT development (Nahdi, 2019). Thus mathematics lessons are said to be very important for humans to learn, because in everyday life learning mathematics is used to solve problems that require a calculation or mathematical concept, for example, daily problems in changing the magnitude of a length.

In learning mathematics, of course, a teacher wants his students to understand the material as a whole and hopes that his students understand the material. The use of learning media is very important and is expected to support student learning outcomes. Learning media is a component whose function is so crucial to help teachers convey a material concept to students (Mahmun, 2012). The existence of appropriate and interesting media will be able to support learning outcomes and increase student interest in learning (Magdalena et al., 2021). This certainly has a positive impact on improving the quality of education.

One of the mathematics materials in grade 3 elementary school is the unit of length. Based on the results of a preliminary study conducted on 3rd grade students at SDN Mojopitu, most of the students had difficulty understanding the length unit material. In fact, this material will be understood more easily if the teacher can contextualize the material and use appropriate learning media. Therefore, the researcher will conduct classroom action research using long unit board media to improve understanding and learning outcomes of Class 3 students at SDN Mojopitu.

B. Method

In this classroom action research, the Kurt Lewin model is used. According to Kurt Lewin, there are four components of action research design, namely planning, action, observation, and reflection (Wulandari, 2017). This research was conducted at SDN Mojopitu. The subjects of this class action research were grade 3 students at SDN Mojopitu, totaling 6 students consisting of 5 male students and 1 female student. In collecting data to conduct this research, several techniques were used, namely interviews, observation, tests, and documentation with analytical techniques. quantitative descriptive data.

C. Result and Discussion

Precycle

The following are student learning outcomes at the early stage or pre-cycle stage before being given action:

Table 2. The Results of the Initial Stage Unit Length Material Test

No	Description of Achievement Results	Score
1	The average ability of students in unit length material	56,66
2	Student score <70	4
3	Student score >70	2
4	Classical Terms (%)	33,33

In this study conducted at SDN Mojopitu, the results of the initial conditions in the length unit material knowledge test described that 4 students got a score of <70 as the complete limit of the unit length material understanding value. Meanwhile, as many as 2 students achieved a score of >70 out of 6 students overall. With these results, the average value of student understanding at the initial stage of the unit length material is 56.66 and the classical provisions are 33.33.

Average value = 340:6 = 56.66

The learning outcomes in the initial conditions were 2 students who got a score of 70 (41.17%). 1 student who got a score of 60 (17.64%). 2 students who got a score of 50 (29.41%). 1 student who got a score of 40 (11.76%)

Table 1. The Results of the recap of Students' Scores for the Initial Stage Unit Length Material

No	Score	Total Students	Total Score
1	70	2	140
2	60	1	60
3	50	2	100
4	40	1	40
	Amount	6	340

Cycle I

Implementation of Classroom Action Research in cycle I, it begins with information or student direction regarding long unit math subject matter, the teacher gives students the opportunity to ask questions about material that is not clear. The results of the research in the first cycle students took the learning seriously but the students had not fully absorbed the learning material well. The problem of students' confusion in multiplying and dividing when going down or up the ladder unit length became an obstacle in students' understanding of the length unit material or it could be said that students had difficulty changing units of length. In this case, learning is not optimal due to online due to Covid-19. In the implementation of the first cycle, the teacher teaches according to the lesson plans

that have been prepared in the first cycle. The steps are also carried out well. However, the drawback of cycle I is that students are also less active in asking questions when participating in learning. Student learning outcomes in Cycle I are described in the following table:

Tabel 3. The results of the test for the unit length of the cycle

No	Description of Achievement Results	Score
1	The average ability of students in unit length material	61,66
2	Student score <70	3
3	Student score >70	3
4	Classical Terms (%)	50

In the implementation of the first cycle of the unit length material knowledge test, it was described that there was an increase but not yet the students fully understood the material being taught. It was found that 3 students got a score of <70 as the complete limit for the value of understanding the length unit material. Meanwhile, as many as 3 students achieved a score of >70 out of 6 students overall. With these results, the average value of student understanding at the initial stage of the unit length material is 61.66 and the classical provisions are 50%. In this first cycle, it can be said that half of the students complete the KKM.

Tabel 4. The results of the recap of students' grades for the unit length of cycle I

No	Score	Total Students	Total Score
1	70	3	210
2	60	1	60
3	50	2	100
4	40	-	-
	Amount	6	370

Average value = 370:6 = 61.66

The learning outcomes in the initial conditions were 3 students who got a score of 70 (56.76%). 1 student who got a score of 60 (16.21%). 2 students who got a score of 50 (27.02%). 1 student who gets a score of 40 (0%).

Cycle II

In the implementation of the second cycle, there were 5 students who completed or scored >70 so that there was only 1 student who did not complete or the score was <70. In the implementation of cycle II, it can be said that students are able to understand the material well, change units of length, determine multiplication and division when going down or up stairs of units of length, able to memorize units of length. In the implementation of Cycle II, students are also able to work on questions by getting good grades. The following is the result of the implementation of cycle II:

Table 5 The Results of the Second Cycle of Unit Length Material Test

No	Description of Achievement Results	Score
1	The average ability of students in unit length material	63,33
2	Student score <70	1
3	Student score >70	5
4	Classical Terms (%)	73,33

In the implementation of the first cycle of the unit length material knowledge test, it was described that there was an increase but not yet the students fully understood the material being taught. It was found that 1 student got a score of <70 as the complete limit for the value of understanding the length unit material. Meanwhile, as many as 5 students scored >70 out of 6 students overall. With these results, the average value of student understanding at the initial stage of the unit length material is 63.33 and the classical provisions are 73.33 %. In this second cycle, it can be said that 5 out of 6 students have completed or passed the KKM.

Table 6. The Results of Recap of Students' Scores for the Unit Length of Cycle II

No	Score	Total Students	Total Score
1	80	3	240
2	70	2	140
3	60	1	60
4	50	-	-
5	40	-	-
	Amount	6	460

Average value = 380:6 = 63.33

The learning outcomes in the initial conditions were 3 students who got a score of 80 (63.15%). 2 students who get a score of 70 (30.04%). 1 student who got a score of 60 (13.04%). students who scored 50 and 40 (0%).

E. Conclusion

Based on the classroom action research that was carried out in 2 cycles, it can be said that the long unit board learning media is effectively applied in mathematics lessons with unit length material. Learning activities are effective because students can immediately see the sequence of units of length clearly and also the form of operation, both multiplied and divided. Through the unit length board learning media students can receive the subject matter well. Student activity in participating in learning from the beginning to the end or cycle II showed that in the early stages of classical mastery students were 33.33%, in the first cycle it was

50%, then in the second cycle the classical mastery increased by 73.33%. The indicator of completeness is set at 70% of students actively participating in long unit material learning. So that at the end of cycle II the classical completeness of 73.33% has met the predetermined completion limit. The results of the study on learning long unit material using long unit board media showed that the average class in the initial conditions was 56.66 with a classical mastery level of 33.33%. In the first cycle the average class was 61.66 with 50% classical completeness. Then in the second cycle the class average was 63.33 with 73.33% classical completeness. From the results of the study, it was shown that in the early stages until the implementation of the second cycle, it showed that there was an increase in students' understanding of the length unit material by using the long unit board media. Based on the description above, it is concluded that the long unit board learning media can improve the learning outcomes of third grade students at SDN Mojopitu for the 2021/2022 academic year.

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