

Improving Student Learning Outcomes Through Video Learning Models In Class IVA Mathematics MIS Islamiyah GUPPI Medan

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Abstract

The aim of this research is to improve the mathematics learning outcomes of class IVA MIS Islamiyah GUPPI students by using a video learning model. This research is classroom action research. The data collection techniques used are conducting reviews, data collection and observation. The data collected is a test of student learning outcomes carried out in the second cycle. From the analysis of the data obtained, it can be concluded that there is a significant increase in learning outcomes after using the video learning model. It can be seen from the average (mean) value of test I, which is 76.67, while the learning results in test II have an average (mean) value of 87.33, which means there is an increase in each test carried out. So we can conclude that learning using instructional video media can improve the mathematics learning outcomes of class IVA MIS Islamiyah GUPPI students on the subject of simple fractions.

Keywords : Learning Outcomes, Simple Fractions, Learning Video Models

INTRODUCTION

Researcher John Dewey (2017) stated that education is "a process of experience". So education is very important for our lives. Researcher Kurniawan (2017) stated that "education prepares and grows students or individual humans whose process takes place continuously from birth until they die." Mathematics is one of the most important parts of education. As Tampubolon and Tamba (2022) stated that through learning mathematics, students are expected to develop the ability to think critically, systematically, logically, and creatively. We learn mathematics from elementary school to college. The problem is that many students have difficulty understanding mathematics learning, which affects their learning outcomes in class. They consider mathematics to be quite difficult, because it requires high thinking and reasoning power to understand it. This assumption results in mathematics learning outcomes always being low and almost below average. Based on information obtained from mathematics teachers at MIS Islamiyah GUPPI, the grades for mathematics lessons have not shown satisfactory results. This can be seen from the average class score obtained by students, namely 68, this score does not meet the completion standards set by the school, namely 74. So the students' learning completeness does not meet the KKM (Minimum Completeness Criteria).

The subject of this research is simple fractions. Where several class IVA MIS Islamiyah GUPPI students experienced difficulty in determining and describing fraction values. Some students did not understand how to solve the questions given, so some of them just lazed around, and in the end there was a commotion. The lack of activeness of students in asking questions to the teacher is also a concern for researchers. If students don't understand the material or questions given, they just keep quiet. This happens because students do not understand the concept of the material taught by the teacher. This is the reason researchers conducted research where the problem of this research was related to the low mathematics learning outcomes of students on the subject of simple fractions. So in mathematics learning at MIS Islamiyah GUPPI, especially Class IVA, improvements need to be made to improve student learning outcomes. This implementation begins by improving the learning process carried out by teachers, namely offering learning methods that can improve student learning outcomes in solving mathematical problems. One method used is by using learning videos.

Eldarni, et al (in Cahyo and Hera. 2020) learning video media is a tool used to produce audio and visuals containing concepts, studies and pillars in learning. Meanwhile, Putri Anike and Yuliani Fitri (2021) stated that learning video media is a tool in learning that contains learning material. Teachers must encourage students to continue to improve learning outcomes in mathematics learning. Therefore, it is necessary to conduct classroom action research to prove that using a video learning model can help students improve their mathematics learning outcomes. Based on the problem limitations above, the problem formulation in this research is whether using the video learning model can improve the learning outcomes of class IVA MIS Islamiyah GUPPI students in solving mathematical problems through learning simple fractions.

The aim of this research is to describe student learning outcomes and determine the effectiveness of mathematics learning using the video learning model. The benefit of this research is that choosing the right learning model can increase students' active learning in the learning process, so that good and increasing learning outcomes are obtained, as well as increasing insight and consideration for teachers.

METHOD

This research is Classroom Action Research, so this research was carried out in several cycles. There are 4 steps in the procedure for implementing classroom action research, namely: (Arikunto 2019:42)

1. Planning
2. Implementation of Actions
3. Observation
4. Reflection

This Classroom Action Research was planned in two cycles, each cycle meeting twice. The subjects in this research were 30 students in class IVA MIS Islamiyah GUPPI for the 2023/2024 academic year. And the object of this research is the results of students' mathematics learning on simple fractions and efforts to improve it. The research variable

is the learning outcomes of students in learning simple fractions and the indicators in this research are the scores obtained from test results taken from each student's activity from the results of observations in each cycle. The tools used to collect data in this research are tests and observations.

FINDINGS

The results of observations in cycle I are shown in the following table:

Table I Cycle I Observation Results

NO	Assessment Aspects	Score		Average
		RPPI	RPPII	
1	Direction about learning objectives to students.	3	4	3.5
2	Preparation and use of learning media	3	4	3.5
	Suitability of student groupings			
3	• Each group consists of 4-6 students	3	4	3.5
	• Homogeneity of each group	3	3	3
	• Activeness of each group member.	3	3	3
4	Students' courage to express opinions or discuss between students and students and between students and teachers	3	3	3
5	Presentation of concepts in a real and clear manner	3	4	3.5
6	Students can draw conclusions from learning.	3	3	3
7	Students' ability to solve the problems presented	3	3	3
8	Efficient use of time from stage to stage	3	3	3
Results		30	34	32
Score max		40	40	40
Average		75	85	80
Information		Good	Good	Good

Students core data obtained from the first learning outcomes test is as follows:

Table 2. Results Scores and Values of Student Learning Results in Cycle I

No	Student Code	Total score	Student Learning Outcome Values	Information
1	PS1	18	60	Not Completed
2	PS2	18	60	Not Completed
3	PS3	28	93	Complete
4	PS4	15	50	Not Completed
5	PS5	28	93	Complete
6	PS6	19	66	Not Completed
7	PS7	26	86	Complete
8	PS8	23	76	Completed
9	PS9	21	70	Not Completed
10	PS10	20	66	Not Completed
11	PS11	26	86	Complete
12	PS12	22	73	Not Completed
13	PS13	26	86	Complete
14	PS14	19	63	Not Completed
15	PS15	23	76	Complete
16	PS16	26	86	Complete
17	PS17	21	70	Not Completed
18	PS18	24	80	Complete
19	PS19	17	56	Not Completed
20	PS20	28	93	Complete
21	PS21	25	83	Complete
22	PS22	24	80	Complete

23	PS23	21	70	Not Complete
24	PS24	28	93	Complete
25	PS25	21	70	Not Completed
26	PS26	25	83	Complete
27	PS27	24	80	Complete
28	PS28	22	73	Not Completed
29	PS29	28	93	Complete
30	PS30	26	86	Complete
Results		692	2300	
Average		23,07	76,67	

From table II it can be seen that students' initial ability in solving fraction problems is still low, not as expected. Of the 30 students, 17 people (56.66%) have reached the level of learning completeness, while 13 people (43.33%) have not reached the level of learning completeness. The average student learning outcome score is 76.67.

The difficulties experienced by students in learning using the Reciprocal Teaching method are as follows:

Table 3. Difficulties Encountered in Learning

NO	Student difficulties	Solution
1	Group division takes up a lot of time.	The teacher divides student groups based on serial numbers so that students do not choose their own groups.
2	Students do not really understand the visual images given.	The teacher briefly explains the purpose of the picture and answers any questions asked by students.
3	Students do not understand the instructions given on the LKS.	The teacher comes to each group to ask questions and explain the instructions that must be carried out
4	Students are still embarrassed inside delivery of discussion results	The teacher appoints groups to read the results discussion and provide motivation to students.

From the first learning outcomes test, the average score for student learning outcomes was 23.07 with an average score of 76.67. Of the 30 students, there are 17 students (56.67%) who have reached the level of learning completeness (total score ≥ 74),

while 13 students (43.33%) have not reached the level of learning completeness (total score <74) .So the completeness of classical learning in cycle I has not been achieved.

Cycle II

Observation results in cycle II:

Table 4. Cycle II Observation Results

NO	Assessment Aspects	Score		Average
		RPP I	RPP II	
1	Direction about learning objectives to students.	4	4	4
2	Preparation and use of learning media	4	4	4
3	Suitability of student groupings			
	• Each group consistsof4-6 students	4	4	4
	• Homogeneity of each group	3	3	3
	• Activeness of each group member.	3	4	3.5
4	Students' courage to express opinions or discuss between students and students and between students and teachers	3	4	3.5
5	Presentation of concepts in a real and clear manner	4	4	4
6	Students can draw conclusions from learning.	3	3	3
7	Students' ability to solve the problems presented	3	4	3,5
8	Efficient use of time from stage to stage	3	4	3,5
Results		34	38	33
Score max		40	40	40
Average		85	95	90
Information		Good	Very Good	Very Good

Students core data obtained from the cycle II learning outcomes test is as follows:

Table 5. Score Results and Values of Student Learning Results in Cycle II

No	Student Code	Total score	Student Learning Outcome Values	Information
1	PS1	23	76	Completed
2	PS2	23	76	Completed
3	PS3	29	96	Complete
4	PS4	20	66	Not Completed
5	PS5	30	100	Complete
6	PS6	26	86	Completed
7	PS7	29	96	Complete
8	PS8	28	93	Complete
9	PS9	26	86	Complete
10	PS10	23	76	Not Completed
11	PS11	24	80	Complete
12	PS12	26	86	Complete
13	PS13	26	86	Complete
14	PS14	25	83	Not Completed
15	PS15	30	100	Complete
16	PS16	26	86	Complete
17	PS17	25	83	Complete
18	PS18	28	93	Complete
19	PS19	21	70	Not Completed
20	PS20	30	100	Complete
21	PS21	26	86	Complete
22	PS22	28	93	Complete
23	PS23	28	93	Complete
24	PS24	29	96	Complete

25	PS25	28	93	Complete
26	PS26	24	80	Complete
27	PS27	25	83	Complete
28	PS28	26	86	Complete
29	PS29	29	96	Complete
30	PS30	29	96	Complete
Results		685	2243	
Average		23,62	77,34	

DISCUSSION

From table VII it can be seen that the students' ability to solve fraction problems has increased even though there are still 2 more students who have not finished. However, of the 30 students, 28 people (93.33%) have reached the level of learning completeness, while 2 people (6.67%) have not reached the level of learning completeness. With the average student learning outcome score being 87.33, the line result means an increase from the previous result.

From the data analysis, it can be concluded that by using the video learning model, students can improve their learning outcomes on the subject of mixed fraction calculation operations.

In the II learning outcomes test the average student score was 87.33 with a completion level of 93.33%, an increase in the average student score of 10.66. From the results of observations, the learning activities carried out in cycles I and II were included in the good category with an average value of 80.00 and 90.00, an increase of 10.00 from cycle to cycle.

From the results of the research conducted, it can be concluded that using the video learning model can improve student learning outcomes on the subject of simple fractions in class IVA MIS Islamiyah GUPPI for the 2023/2024 academic year.

CONCLUSION

Learning using the video learning model can improve student learning outcomes on the subject of simple fractions in class IVA MIS Islamiyah GUPPI Academic Year 2023/2024

Student learning outcomes after implementing learning using the video learning model in cycle I, there were 17 people (56.67%) who had reached the level of learning completeness, while 13 people (43.33%) had not reached the level of learning completeness. The average student learning outcome score is 76.67. Meanwhile, student

learning outcomes in cycle II through the II learning outcomes test showed that 27 people (93.33%) had reached the level of learning completeness, while 2 people (6.67%) had not yet reached the level of learning completeness. With the average student learning outcome score being 87.33, the line result means an increase from the previous result.

Activities during learning went well, this can be seen from the results of the observation sheet during learning in cycle I which was 80.00 (good category) and in cycle II it was 90.00 (very good category), so there was an increase of 10.00.

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