

OUTCOMES OF LEARNING MATHEMATICS MATERIAL USING THE SAVI APPROACH (SOMATIC, AUDITORY, VISUAL, INTELLECTUAL) IN PRIMARY SCHOOL

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ABSTRACT

This research was motivated by the problem of learning mathematics in simple fractions. The approach is a qualitative approach with the type of research being classroom action research. The data in this research is based on test results, observations and interview results. The data source in this research was class III UPTD students at SD Negeri 4 Peusangan, totaling 17 students with various levels of ability. Based on the research results, it was found that the SAVI approach was used for class III students at UPTD SD Negeri 4 Peusangan on simple fraction material. This is proven by the increase in the number of students who completed their learning in the initial test, namely from 47% belonging to the poor category before learning took place, in cycle I it increased to 65% belonging to the sufficient category and in cycle II it increased to 88% belonging to the good category. Meanwhile, the results of observations on the activities of teachers and students of class III UPTD SD Negeri 4 Peusangan on simple fractions material have increased with the percentage of teacher activity in cycle I, namely 85% belonging to the good category.

Keyword: *Outcomes Of Learning, The Savi Approach*

INTRODUCTION

Education is important in the current era of globalization where someone can follow developments in Science and Technology [5]. Education consists of various level, but the most important and most basic level for improving the quality of Human Resources is education Elementary school. Elementary School is one of the educational level providers that develops students' potential in cognitive, affective and psychomotor aspects [5]. According to [7] education are various kinds of learning experiences in the entire scope of life, both at school and outside school, intentionally carried out to achieve certain goals. Mathematics as one of the subjects in elementary school has an important role because studying mathematics is the same as training students in solving the problems they face. Mathematics in elementary school is a concrete activity. Elementary school students cannot be taught by definition, so teachers must prepare careful teaching strategies or plans [1]. Mathematics learning is expected to develop students' potential, so that students can construct their own understanding with the teacher's role as a facilitator, not as the main source of learning [10].

In teacher mathematics learning You should use a lot of learning media so that the material can be conveyed more easily, especially in low class because students are in the concrete operational stage [9]. In reality, the use of mathematics learning media is not

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used effectively maximum, so that the activities carried out by students in mathematics lessons are monotonous [8].

Based on the results of interviews with class III UPTD teachers at SD Negeri 4 Peusangan which were conducted during observations on the date September 10, 2023, regarding the title that the researcher will choose, data was obtained that the Mathematics subject had the lowest average score compared to other subjects. During the learning process, teachers still mostly use the lecture method and rarely use learning media in delivering mathematics lessons so that students are less active in participating in the learning process [11].

Based on the list of grades for class III UPTD students at SD Negeri 4 Peusangan, the average mathematics score for simple fractions is still low. The majority of class III students still have difficulty understanding simple fractions. This can be seen from the daily mathematics tests of class III UPTD SD Negeri 4 Peusangan students on fractions, of the 17 students, there were 14 students whose scores did not reach the KKM with a percentage of 82% of students not completing and only 18% of students completed and reached the KKM. The class III teacher determines the KKM value 75.

The low learning outcomes of students in simple fractions are caused because learning is still centered on the teacher (teacher center), while students are positioned as listeners of the material presented by the teacher [6]. This causes students to be less active and the learning atmosphere tends to be boring in every meeting which affects student learning outcomes. Therefore, choosing the right learning approach is very important because it can help and make it easier for students to understand the learning material. One learning approach that can improve student learning outcomes is the SAVI (Somatic, Auditory, Visual, Intellectual) approach [13].

States that the SAVI approach is an approach that involves the body's senses which can support learning, learning by moving physically actively, by utilizing as many senses as possible so that the whole body can be involved in the learning process. Somatic (learning by doing, namely learning by moving and doing), auditory (learning by hearing, namely learning by speaking and listening), visual (learning by seeing, namely learning to use the eye through observing, describing and demonstrating) and intellectual (learning by thinking, namely learning to use thinking skills to solve problems) [15].

The application of the SAVI approach requires students to take an active part in learning, such as conducting experiments, observing, presenting the material they have obtained, then solving problems based on the knowledge or knowledge that students have obtained during learning [1]. So based on background problem above, the author conducted a study with the title "efforts to improve mathematics learning outcomes in simple fraction material using the approach SAVI for class III students at UPTD SD Negeri 4 Peusangan.

The approach used is a qualitative method. According [2] qualitative research is research that explores and understands the meaning of a number of individuals or groups of people originating from social problems. Qualitative research can generally be used for research on people's lives, history, behavior, concepts or phenomena, social problems, and so on.

According to [12] qualitative research is research that intends to understand phenomena about what is experienced by research subjects, for example behavior, perceptions, motivations, actions, etc. holistically, and by means of descriptions in the form of words and language, at a time. special natural context and by utilizing various natural methods the reason why using a qualitative approach is because of its elaborative nature, this qualitative research is very easy to help researchers dig deeper information

related to a research topic so that later the information obtained can be used to determine research objectives, This method can discover and understand what is hidden behind phenomena which are sometimes difficult to understand.

The type of research carried out is classroom action research or what is usually called PTK. According to Burns [4]. Action research is the application of facts found to solve a problem in a social situation in order to improve the quality of the actions taken, which involves collaboration and cooperation between researchers and practitioners. Thus, what is meant by PTK is research that describes the process and results of an action, which involves collaboration between teachers and researchers. To avoid differences in perception towards terms in this research are given operational definitions as follows:

- a. Improving learning outcomes is a process efforts made by an individual to obtain a new change in behavior as a whole as a result of the individual's own experience in interaction with the environment
- b. A simple fraction is one where the numerator and denominator have no common factors except 1
- c. The SAVI learning approach is a creative and effective learning approach because in the SAVI learning approach students not only hear and see the teacher's explanation, but there are new things where there is visual media to see and then practice, there is group work with friends, and there is an evaluation of solving problems. The data analysis technique used in this research is a qualitative data analysis technique.

RESULTS AND DISCUSSION

A. Results

Cycle I Data Exposure

Learning activities for cycle I were carried out on Tuesday 06 June 2023 in class III UPTD SD Negeri 4 Peusangan for the 2022/2023 academic year. The material taught in cycle I is about recognizing simple fractions. The number of students who attended in cycle I was 17 students. Teaching and learning activities are divided into three stages, namely the initial stage, the core stage and the final stage. Each stage can be described as follows.

a) Preliminary Stage

At this stage, the teacher gives greetings, asks how students are doing, the teacher asks students to lead prayer (religious). The teacher checks students' readiness by filling in attendance and checking the neatness of clothing, position and seating. The teacher and students sing the song "Garuda Pancasila". (Nationalist). The teacher carries out apperception (Communication), the teacher motivates students by showing fraction cards (Motivation) and the teacher conveys the learning objectives (Communication). At this stage the time required is ± 10 minutes.

b) Core Stage

In the next stage, the teacher, at the preparation stage, explains the lesson material about simple fractions (Communication) and the teacher divides students into heterogeneous groups, each group consisting of 4-5. At the delivery stage the teacher distributes Student Worksheets (LKPD) to each group and students work on and discuss the LKPD to explore more in-depth information about recognizing simple fractions (somatic, auditory, visual, intellectual). At the training stage the teacher facilitates students by going around monitoring the progress of the discussion and helping direct students who experience difficulties.

In the stage of displaying the results, the teacher chooses 2 groups randomly to present the results of their group discussion in front of the class and the other groups pay attention or provide responses (somatic, auditory, visual). Students summarize the material orally from the beginning of the lesson to the end of the lesson with teacher guidance (Intellectual).

The teacher checks students' understanding by displaying questions using a projector and randomly selecting students to answer (Intellectual) and the teacher gives students the opportunity to ask questions. At this stage the time required is ± 50 minutes.

c) Final Stage

At this stage, the teacher together with the students benefits from learning and looks for solutions to whether the learning approach used is good or needs to be improved. The teacher tells students to study the next material which will be discussed at the next meeting. The teacher closes the lesson by praying with the students and reminding the students to continue learning and never give up (Religious).

The results of the final cycle I test were carried out on Wednesday 07 June 2023. Based on the final test given by individual researchers, the final test scores of cycle I of class III UPTD students at SD Negeri 4 Peusangan can be seen in table 1 below.

Table 1. Final Test Scores for Cycle I

No	Initials of Students' Names	Type Sex	Score	Information
1	2	3	4	5
1	AAS	F	80	Complete
2	BU	F	80	Complete
3	CFZ	F	80	Complete
4	DIH	F	80	Complete
5	KRD	M	80	Complete
6	FA	M	60	Incomplete
7	MH	M	80	Complete
8	AH	M	60	Incomplete
9	AA	M	60	Incomplete
10	HK	M	50	Incomplete
11	KS	F	80	Complete
12	MRA	M	80	Complete
13	RA	F	80	Complete
14	AH	F	60	Incomplete
15	SM	F	80	Complete
16	DS	F	80	Complete
17	WR	F	60	Incomplete
Total Score			1230	
Average Score			72,35	

Based on the data above, it can be concluded that the results of the final test of cycle I of students who obtained a score ≥ 70 , namely 11 students with a percentage $\frac{11}{17} \times 100\% = 65\%$, while those who did not complete the score < 70 were 6 students with a percentage $\frac{6}{17} \times 100\% = 35\%$. After calculating the percentage in cycle I who obtained a score of ≥ 70 , it was only 65%, so in terms of results it was not yet complete, because it did not meet the criteria for completeness, namely $\geq 85\%$. So researchers must carry out cycle II.

Cycle II Data Exposure

Based on the results of discussions carried out by 2 observers, the researcher and the observers carried out improvements to the learning process in cycle II including planning, implementation, observation and reflection. Each activity can be explained as follows: Learning activities for cycle II were carried out on Monday 12 June 2023 in class III UPTD SD Negeri 4 Peusangan for the 2022/2023 academic year. The material taught in cycle II is comparing fractions. The number of students who attended cycle II was 17 students. Teaching and learning activities are divided into three stages, namely the initial stage, core stage and final stage. Each stage can be described as follows.

a) Preliminary Stage

At this stage, the teacher gives greetings, asks how the students are doing, the teacher asks the students to lead prayer (religious). The teacher checks students' readiness by filling in attendance and checking the neatness of clothing, position and seating. The teacher and students sing the song "One Nusa One Nation". (Nationalist). The teacher carries out apperception (Communication), the teacher motivates students by showing fraction cards (Motivation) and the teacher conveys the learning objectives (Communication). At this stage the time required is ± 10 minutes.

b) Core Stage

In the next stage, the teacher, at the preparation stage, explains the lesson material about comparing fractions (Communication) and the teacher divides students into heterogeneous groups, each group consisting of 4-5. At the delivery stage the teacher distributes Student Worksheets (LKPD) to each group and students work on and discuss the LKPD to explore more in-depth information about comparing fractions (somatic, auditory, visual, intellectual). At the training stage the teacher facilitates students by going around monitoring the progress of the discussion and helping direct students who experience difficulties.

In the stage of displaying the results, the teacher chooses 2 groups randomly to present the results of their group discussion in front of the class and the other groups pay attention or provide responses (somatic, auditory, visual). Students summarize the material orally from the beginning of the lesson to the end of the lesson with teacher guidance (Intellectual).

The teacher checks students' understanding by displaying questions using a projector and randomly selecting students to answer (Intellectual) and the teacher gives students the opportunity to ask questions. At this stage the time required is ± 50 minutes.

c) Final Stage

At this stage, the teacher together with the students benefits from learning and looks for solutions to whether the learning approach used is good or needs to be improved. The teacher tells students to study the next material which will be discussed at the next meeting. The teacher closes the lesson by praying with the students and reminding the students to continue learning and never give up (Religious).

The results of the final cycle II test were carried out on Friday 09 June 2023. Based on the final test given by individual researchers, the final test scores of cycle II of class III UPTD students at SD Negeri 4 Peusangan can be seen in Table 2 below:

Table 2. Final Test Scores for Cycle II

No	Initials of Students' Names	Type Sex	Score	Information
1	2	3	4	5
1	AAS	F	80	Complete
2	BU	F	80	Complete
3	CFZ	F	80	Complete

No	Initials of Students' Names	Type Sex	Score	Information
4	DIH	F	80	Complete
5	KRD	M	80	Complete
6	FA	M	80	Complete
7	MH	F	80	Complete
8	AH	F	80	Complete
9	AA	M	80	Complete
10	HK	M	50	Incomplete
11	KS	F	80	Complete
12	MRA	M	80	Complete
13	RA	F	80	Complete
14	AH	F	80	Complete
15	SM	F	80	Complete
16	DS	F	80	Complete
17	WR	F	60	Incomplete
Total Score			1310	
Average Score			77,05	

Based on the data above, it can be concluded that those who completed the final test of cycle II were students who obtained a score ≥ 70 , namely 15 students with a percentage of $\frac{15}{17} \times 100\% = 88\%$, While those who did not complete or who got a score of < 70 were 2 students with a percentage $\frac{2}{17} \times 100\% = 12\%$. After calculating the percentage, the second cycle that obtained a score ≥ 70 was 88%, so in terms of results it was complete, because it met the completeness criteria, namely $\geq 85\%$. Meanwhile, for the 2 students who had not achieved completeness with a percentage of 12%, the researcher decided that the learning process had been successful and complete.

B. Discussion

Based on the results of research conducted by researchers in class III UPTD SD Negeri 4 Peusangan, it can be concluded that using the SAVI (Somatic, Auditory, Visual, Intellectual) learning approach can improve student learning outcomes, this can be seen from the results obtained in cycles I and cycle II. This is because learning directly involves students and the teacher becomes a facilitator.

According to [14], the SAVI (Somatic, Auditory, Visual, Intellectual) learning approach is a learning approach that requires students to be more active in developing their attitudes and knowledge according to their respective abilities so that they gain a more meaningful understanding.

Based on the observations of 2 observers in cycle I regarding teacher and student activities, the researcher's activities in cycle I went as expected with an average percentage of 85%. Student activities in cycle I were said to be good with a percentage of 82.5. Thus, in terms of teacher and student activities in cycle I, judging from the process criteria, it can be said to be successful, because it has met the set criteria, namely $\geq 80\%$.

Based on the results of the final test of cycle I for class III UPTD students at SD Negeri 4 Peusangan, there were 11 students who got a score ≥ 70 , with a percentage score of 65%. Thus, judging from the criteria, the results cannot be said to be complete, because they do not meet the criteria for completeness, namely $\geq 85\%$. If the learning process has achieved greater than or equal to 80% but the results of the learning implementation have not been achieved then the researcher enters cycle II and revises the weaknesses found in cycle I. Based on this opinion, the results of the final test of cycle I of class III students

at UPTD SD Negeri 4 Peusangan are not yet complete, so the researcher enters cycle II and revises the weaknesses found in cycle I.

Based on the results of the final test of cycle II of class III UPTD students at SD Negeri 4 Peusangan, there were 17 students who got a score of ≥ 70 with a percentage of 88%, while those who did not complete or who got a score of < 70 were 2 students with a percentage of 12 %. So, in terms of results, it is complete, because it has met the completeness criteria, namely $\geq 85\%$. So the final test results for class III UPTD students at SD Negeri 4 Peusangan. Because the results of the final test of cycle II have met the criteria for completeness, namely $\geq 85\%$, the researcher does not need to proceed to the next stage, "learning implementation is achieved if at least 85% of the total number of students obtain a final action score of at least 70, while the learning process is said to be good if it has reached a success level of at least 80%."

Based on the results obtained in cycle I and cycle II, it can be concluded that using the SAVI (Somatic, Auditory, Visual, Intellectual) learning approach can improve the learning outcomes of class III UPTD students at SD Negeri 4 Peusangan on material about recognizing simple fractions. In terms of teacher and student activities, it has been said to be successful, because it has met the set criteria, namely $\geq 80\%$. Meanwhile, in terms of results, it is complete, because it has met the completeness criteria, namely $\geq 85\%$.

The increase in student learning outcomes from cycle I to cycle II was caused by the application of the SAVI (Somatic, Auditory, Visual, Intellectual) learning approach which can motivate students to learn where every activity from the SAVI (Somatic, Auditory, Visual, Intellectual) learning approach can provide opportunities for students to practice their own knowledge and skills through real learning activities from the students' environment. Students connect the things they have learned with phenomena in their environment so as to strengthen students' understanding of a problem or can gain new understanding of a problem [3]. In this case This can improve student learning outcomes regarding the concepts being taught.

This is supported by the opinion of [14] who states that the SAVI (Somatic, Auditory, Visual, Intellectual) learning approach begins with group division. Next, the teacher and students choose certain topics with problems developed from that topic. After the topic and problem are agreed upon, the students and teacher determine the method for solving the problem.

CONCLUSION

Learning using the SAVI (Somatic, Auditory, Visual, Intellectual) learning approach can improve student learning outcomes in the material of recognizing simple fractions in class III UPTD SD Negeri 4 Peusangan. Student learning outcomes obtained in cycle I were 65% increased in cycle II to 88% and experienced an increase of 23%. Students' responses to learning using the SAVI (Somatic, Auditory, Visual, Intellectual) learning approach are quite good, students feel happy learning using the SAVI (Somatic, Auditory, Visual, Intellectual) learning approach. Students don't get bored quickly, students it is easier to understand the material and students do not quickly forget the lessons they have learned because the students themselves find the answers to the questions given by the teacher.

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