

APPLICATION OF FLASH CARD LEARNING MEDIA FLAT BUILDING MATERIALS FOR MATHEMATICS SUBJECTS FOR GRADE IV STUDENTS OF SD NEGERI 2 MUARA KATI BARU 1

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Abstract: This study aims to improve students' mathematics learning outcomes in flat geometry material through the application of flash card learning media in class IV of SD Negeri 2 Muara Kati Baru 1. The background of the study is the low interest in learning and student involvement in mathematics learning which has an impact on learning outcomes that have not met the Minimum Completion Criteria (KKM). The method used is an experiment with two cycles of action. Each cycle consists of one meeting with learning outcome measurements at the end of the activity. The subjects of the study were 16 students, consisting of 8 male students and 8 female students. The instrument used was a learning outcome test. The results of the analysis showed that in cycle I, the average student score was 72 with a completion percentage of 50%, while in cycle II it increased to 85 with completion reaching 85%. Media validation by material, media, and language experts showed a validity level of 89.16% with a very valid category, while the assessment of feasibility by teachers reached 96% (very feasible). The effectiveness of the media was also confirmed through the calculation of a gain score of 0.91 which was categorized as very effective. Based on these findings, the use of flash card media has been proven to significantly improve student learning outcomes. Further research is suggested to explore the combination of flash cards with digital media or collaborative learning methods to expand the positive impact on student learning outcomes and motivation.

Keywords: Flash Card, Planar Shape, Learning Outcomes, Learning Media, Elementary School Mathematics

INTRODUCTION

Learning is a process of interaction between students and educators and learning resources in a learning environment to achieve learning goals. Learning is an effort and effort from educators to facilitate students in order to achieve mastery

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of knowledge, skills and attitudes (Nurzannah, 2022). learning process so that students actively develop their potential to have spiritual religious strength, self-control, personality, intelligence, noble morals and skills needed by themselves and society. (Jaelani et al., 2023). Learning is a process of determining choices wisely regarding the goals to be achieved in learning, by using various potentials and resources available to support the achievement of these goals. (Nur Nasution, 2017). Learning can be supported by assistive media that function to facilitate the learning process, so that learning activities can take place efficiently and achieve the goals that have been set (Fadilah et al., 2023)

Flash card media is a card containing images, text, or pictures that are used to help remember and learn material. Flash cards are learning media in the form of picture cards. The images are made to utilize existing images that are attached to flash card sheets. The images on the picture cards are a collection of messages presented in the form of images, with descriptions or information available behind the images (Ni'mah & Siddiq, 2023). Flash Card media is very helpful in attracting students' attention rather than interest in the learning process (Jellina &, Siti Zahara H. Harahap, 2024). Flash cards are a learning aid in the form of material content cards with a size that can be adjusted according to student needs. This media is very interesting, fun, and effective to use as a reminder. (Silitonga et al., 2023). Flash cards are expected to be able to encourage student involvement and interest in mathematics lessons. (Ananda & Sutriyani, 2023)

Plane shapes are two-dimensional geometric shapes that have length and width. Plane shape material discusses various shapes with flat surfaces such as squares, rectangles, parallelograms, rhombuses, kites, trapezoids, circles, and triangles. Each of these plane shapes has a formula for calculating its area and circumference. (Oktaviani et al., 2023). Plane planes are one part of mathematics that plays an important role in everyday life (Medan, 2023). Learning about plane shapes has not been implemented effectively, minimal use of learning media in the classroom, low student motivation in learning, and lack of student attention during the learning process (Ulia, 2016)

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Based on interviews conducted directly with fourth grade students of SD Negeri 2 Muara Kati Baru 1, the learning process, especially in mathematics, is still very low. Students still have difficulty when solving problems about flat shapes given by the teacher during the learning process. This causes them to often make mistakes in applying formulas when working on the questions given. So that it makes student learning outcomes low and there are still many students who have not reached the minimum completion criteria (KKM) which is 70. The purpose of this study is to improve the learning outcomes of flat shape material in mathematics learning for fourth grade students of SD Negeri 2 Muara Kati Baru 1.

Based on the results of the study, it shows that the application of flash card media can improve student learning outcomes. This is evident in the learning outcomes of students in cycle I at the end of learning, an average score of 72 was obtained from 26 students, 13 students were declared to have completed learning and 13 students did not complete it. At the end of cycle II, the average score reached 85 from 26 students, 22 were declared to have completed learning and 4 students had not completed it. In percentage terms, an increase in learning outcomes can be seen from the original 50% to 85%. (Aprilian et al., 2024)

Based on the results of the validity study consisting of material experts, media experts, and language experts who obtained results of 89.16% with a very valid category. The results of the feasibility of educators obtained results of 96% with a very feasible category. The difference between the learning outcomes of students who have not used media with an average value of 34.5 and after using the media the average value obtained was 95. The results of the effectiveness obtained from the pretest and posttest obtained results of 0.91 with a very effective category (Yovita Dewi et al., 2024)

From the two previous studies, the treatment was used with classroom action research. So in this study, the researcher used quantitative research with an experimental approach. This study was to determine the effectiveness of flash card media in improving students' abilities in flat building material lessons for grade IV Elementary School students.

METHODOLOGY

This study applies the type of experimental research. This research is used to improve the ongoing learning process. The essence of this is done in order for educators to be willing to introspect, reflect, reflect or evaluate themselves so that their abilities as educators are expected to be professional enough and have an impact on the quality and quality of education.

Research Subject

In this experimental research, it was carried out in 2 cycles. Cycle 1 on May 27, 2025 and cycle 2 on May 31, 2025. The subjects in this study were 16 students of grade IV of SD Negeri 2 Muara Kati Baru 1 consisting of 8 male students and 8 other female students.

Data Collecting

The research data collected is student learning outcome data on the subject of mathematics, Flat Buildings. The research instrument used to collect data in this study is a test

Data Analysis

The data analysis technique used in the study was experimental. Data analysis was carried out using the formula:

Calculating the percentage of student learning completion using the formula

1. Percentage of Completion = (Number of students completed) / (Total number of students) x 100%
2. Calculating the improvement score (Gain score)

Gain score = (Posttest-Pretest) / (Maximum Score-Pretest)

3. The learning completion criteria are said to be successful if at least 85% of students achieve a score above the KKM.

The pretest and posttest data were analyzed using the following steps: Calculating the average pretest and posttest scores for each cycle, calculating the percentage of learning completion in each cycle, calculating the increase in learning outcomes, comparing the results in cycle I and cycle II to see the effectiveness of using flash card media

RESEARCH RESULT

After implementation for 2 cycles, each cycle consisting of one lesson meeting, it is proven that flashcard media can improve the learning outcomes of fourth grade students of SDN 2 Muara Kati on Flat Building material. The following describes the results of improving learning outcomes through the use of flashcard media on Flat Building material during mathematics learning in fourth grade students of SDN 2 Muara Kati, which are displayed in the table.

TABLE 1. Recapitulation of Student Learning Outcome Percentage

No	Completeness	Cicle 1		Cicle 2	
		Student	Percentage	Student	Percentage
1.	Complete	8	50%	14	85%
2.	Incomplete	8	50%	2	15%

From table 1, it can be explained as follows:

- After the implementation of Action cycle 1, the number of students who completed was 8 students or 50% and the number of students who had not completed was 50%.
- After the implementation of Action cycle 2, the number of students who completed increased to 14 students or 85% and the number of students who had not completed was 2 students or 15%.
- This means that there is an increase in learning outcomes from the original 50% to 85%. If described in a graph, the increase in learning outcomes of grade IV students of SDN 2 Muara Kati in learning mathematics using flash card media for flat shapes can be described as follows:

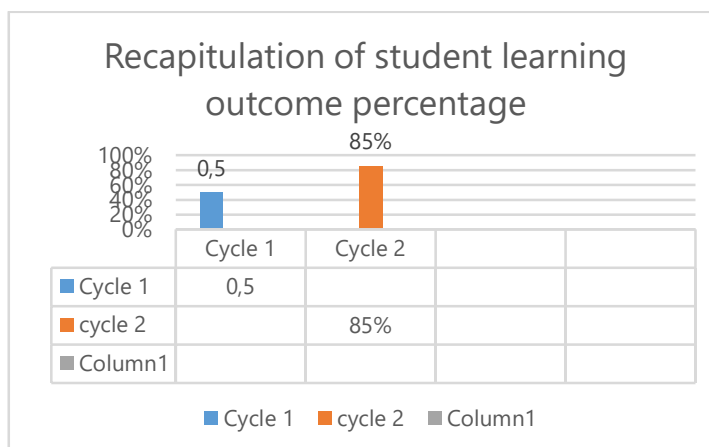
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DISCUSSION

Based on the results obtained in the first cycle of research, many shortcomings were found that can be seen from the results of observations and reflections. This can be seen when the teacher explains that many students do not pay attention, some talk to themselves with friends and the teacher has not conditioned the class and built a meaningful learning atmosphere for students so that in this first cycle research it has not been achieved properly, continued to cycle 2, there is an increase in student learning outcomes in the application of flash card media.

CONCLUSION

Based on the results of the research that has been carried out in two cycles, it can be concluded that the application of flashcard media can improve student learning outcomes. This is evident in the learning outcomes of students in cycle I at the end of learning, an average score of 16 students was obtained, 8 students were declared to have completed learning and 8 students did not complete it. At the end of cycle II, the average score reached 85 out of 16 students, 14 were declared to have completed learning and 2 students did not complete it. In terms of percentage, it can be seen that the increase in learning outcomes from the original 50% increased to 85%. Thus, it can be concluded that the application of flashcard

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media can improve the mathematics learning outcomes of fourth grade students of SD Negeri 2 Muara Kati Baru 1.

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