

## **Application of Visual Learning Media in Mathematics Learning Class II Fractional Materials at Griya Bandung Indah Public Elementary School**

**Dinie Anggraeni Dewi<sup>1</sup> Lara Sati<sup>2</sup> Juansah<sup>3</sup>**

Elementary School Teacher Education Study Program, Universitas Pendidikan Indonesia,  
Bandung City, West Java Province, Indonesia<sup>1,2</sup>

Sekolah Dasar Negeri Griya Bandung Indah Bojongsoang, Bandung Regency, West Java  
Province, Indonesia<sup>3</sup>

Email: [dinieangraenidewi@upi.edu](mailto:dinieangraenidewi@upi.edu)<sup>1</sup> [larasati02@upi.edu](mailto:larasati02@upi.edu)<sup>2</sup> [juansah68@gmail.com](mailto:juansah68@gmail.com)<sup>3</sup>

### **Abstract**

Mathematics is one of the subjects that plays an important role at an educational level. In order to increase students' interest or enthusiasm for learning in mathematics, the teacher must create a pleasant learning atmosphere. The main purpose of conducting this research was to see the results of student learning in mathematics, especially fraction material using visual learning media in grade II elementary school. Quantitative method is the method used in this study. The place for this research was SDN Griya Bandung Indah. The subjects in this study were class II A students who had a total of 24 people, namely 11 boys and 13 girls. Based on the analysis of learning outcomes and student responses with fulfilled results, the use of visual learning media in elementary school mathematics class II can be applied.

**Keywords:** Learning Media, Visual Learning Media, Mathematics



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### **INTRODUCTION**

At an educational level, one area of learning whose role is quite important is mathematics. (Najiyah & Faizah, 2019). In addition, mathematics is a subject area that is almost at all levels of education, including elementary school education. In elementary school mathematics is a concrete activity. Mathematics lessons in elementary schools cannot be taught by definition (Mahanani, 2018). Mathematics is sometimes thought of as a scary and difficult subject for students (Kamarullah, 2017). The importance of teaching Mathematics to all students is to provide provisions for students so that in the future they can have analytical skills, think rationally and logically, critically, systematically, creatively and also be able to work together. (Nurfadhillah, Ramadhanty Wahidah, et al., 2021)) Mathematics learning should be carried out in a pleasant learning atmosphere, this is also done so that students' fear during the learning process decreases or subsides. This also needs to be done to make it easier for them to understand more about learning material (Arita, 2017). Therefore in learning mathematics the teacher must be able to carry out learning using various appropriate, interesting and appropriate strategies, methods, models and approaches, starting from pre-learning to closing.

By creating a pleasant learning atmosphere, of course, it will be able to increase student learning interest. There are several delivery techniques that teachers can implement to create an exciting learning atmosphere. One of the things that can be applied is to use learning methods that are able to create active learning. In addition to these methods, teachers can also use learning media that are used as a link during the process of delivering learning material so that they can increase students' interest in learning and create more active, creative, and innovative students (Astra et al., 2014; Margarita et al., 2018; Widyaputri & Agustika, 2021).

Learning media are devices, instruments, materials, objects or various sources that can be used to provide learning objects from the teacher which are conveyed to their students during the learning process (Rohmawati et al., 2019). By using learning media the teacher can attract the focus and attention of students so that they can increase interest in learning to be more creative, active and innovative and so that the material provided is easy to convey, especially for low grade students. However, the fact is that the use of mathematics learning media is often not utilized optimally, as a result the learning activities carried out by students in learning look uniform and that's all. Only limited to using printed books as a learning medium. Currently teachers can use many learning media, such as visual learning media. What is meant by visual learning media is the type of media that is visible to the senses of sight (Sahuni et al., 2020), such as concrete objects that are brought according to the theme of the lesson to be taught. By using visual learning media the teacher can create interest in learning for students, and can provide clear learning and can obtain the desired learning direction effectively.

Based on some of these explanations, the researcher is interested in carrying out studies related to the application of visual media in mathematics subject matter for class II fractions at Griya Bandung Indah public elementary school. In this study will apply visual media in the form of pictures of fractions as learning media. The important objective of conducting this research is to see the results of students' learning, especially in mathematics with fractional material using visual learning media in grade II elementary schools and see whether this visual learning media can be applied in elementary schools.

## **RESEARCH METHODS**

The research method is a scientific way to obtain and collect the desired data and has a specific purpose. The quantitative method is the research method used in this study. The quantitative method is a way of collecting data with data in the form of numbers as an analysis of the results of research (Djollong, 2014). This research was carried out precisely at SDN Griya Bandung Indah. This study has a student subject or students who have a total of 24 people, namely 11 men and 13 women. In this study it is hoped that the use of visual learning media can be a reference for learning media for further learning and can increase student learning activeness and can maximize student learning outcomes. Questionnaires and learning outcomes tests are research instruments applied in this study. The data obtained will be analyzed. The type of data obtained includes learning outcomes and students' responses to learning while using visual learning media.

## **RESEARCH RESULTS AND DISCUSSION**

Furthermore, below is attached data from student learning outcomes in mathematics subject matter of fractions. The data will be shown in Table 1.

**Table 1. Data on Student Learning Outcomes in Elementary School Learning**

<b>No</b>	<b>Student Name</b>	<b>Gender</b>	<b>Score</b>
1	Aditya Hafizh	M	70
2	Aditya Prayoga	M	100
3	Azahra Umulauro	F	100
4	Faalih Ubaidillah	M	100
5	Fathir Naim Argani	M	100
6	Geralda satya yuda	M	100
7	Hafiza Khaira Lubna	F	70
8	Lazaro Michael Lumban	M	100
9	Lubna Achmad	F	100

10	Maheswari Prili Argista	F	100
11	Marlin	F	100
12	Melly Azrini	F	70
13	M. Raka Wilman	M	100
14	Nafeeza Balqis P	F	100
15	Nasya Syaqla S	F	100
16	Nataka Juro Z	M	100
17	Rafi Ahmad	M	100
18	Shaina Azahra P	F	100
19	Silva Rizkia Juniar	F	100
20	Tyas Ageng Nurlinda	F	100
21	Viara Qasdina	F	100
22	Jhio Crisna Wijaya	M	100
23	Violla Oktara Nur N	F	100
24	Ridwan	M	100

Based on research that has been carried out at Griya Bandung Indah Elementary School, from the data shown in table 1, as many as 21 students complete learning with a classical percentage of 87.5% but there are 3 students who do not complete learning with a classical percentage of 12.5%. With the results that have been described, the research was successful because it had achieved learning mastery  $\geq 75$ . Then it can be determined that visual learning media can be applied to learning mathematics in class II elementary school fractions. Below will be explained related to the questionnaire data in the form of student responses in the application of visual learning media that can be applied to learning mathematics material for class II elementary school fractions.

**Table 2. Recapitulation of Elementary School Student Response Questionnaires**

No	Answer Choices					Score
	SS	S	KS	TS	STS	
1	19	5	0	0	0	115
2	17	7	0	0	0	113
3	16	8	0	0	0	108
4	17	7	0	0	0	113
5	18	6	0	0	0	114
6	17	6	1	0	0	112
7	0	0	4	13	7	99
8	0	0	8	12	4	92
9	0	0	5	12	7	103
10	20	2	2	0	0	114

In the questionnaire made there were 10 statements, of which 7 statements were positive and 3 statements were negative. The questionnaire was filled out by 24 students. The results of the questionnaire show that in the first statement, namely the learning that has been carried out is attractive to students, while the answer choices chosen by students are as many as 19 students choose SS, and 5 students choose S. In the second statement, I prefer when learning to use visual media, the answer choices chosen by students were 17 students who chose SS, and 7 students chose S. In the third statement, I understand fractional material more easily when using visual media, while the answer choices selected students, namely there were 16 students who chose SS, and 8 students chose S.

In the fourth statement, learning using visual media is very enjoyable, while the answer choices chosen by students are as many as 17 students choosing SS, and 7 students choosing S. In the fifth statement, I can complete the task given by the teacher, while the answer choices

are was chosen by students, namely 18 students chose SS, and 6 students chose S. In the sixth statement, learning using visual media made me more active, while the answer choices selected by students were as many as 17 students chose SS, 6 participants students choose S, and 1 student chooses KS.

In the seventh statement, I feel bored during the learning process using visual media, while the answer choices chosen by students are as many as 4 students choose KS, 13 students choose TS, and 7 students choose STS. In the eighth statement, I feel that visual media is not appropriate for fractional material, while the answer choices chosen by students were 8 students choosing KS, 12 students choosing TS and 4 students choosing STS. In the ninth statement, namely that I do not understand fractional material using visual media, the answer choices chosen by students are as many as 5 students choose KS, 12 students choose TS, and 7 students choose STS. In the tenth statement, namely the teacher gives enthusiasm and makes learning fun, while the answer choices chosen by students are as many as 20 students choose SS, 2 students choose S, and 2 students choose KS.

From the results of data analysis that had previously been carried out, which showed that (1) the learning outcomes obtained had met the completeness criteria, namely with a classical percentage of 87.5% (fulfillment fulfilled); (2) the result of the student response questionnaire is 90.25%. Based on the analysis of learning outcomes and student responses with fulfilled results, the use of visual learning media in elementary school mathematics class II can be applied. Visual learning media has quite an effect on students' learning (Sahuni et al., 2020). This is also related to the opinion (Nurfadhillah, Rizkiya, et al., 2021) which states that the application of visual learning media is important in the process of delivering learning material. These visual learning media can facilitate understanding and can improve and develop students' memory.

## CONCLUSION

Based on research that has been done at SDN Griya Bandung Indah, researchers conclude that learning using visual learning media in class II can be applied. Then, based on the research conclusions regarding the application of visual learning media to mathematics learning for class II fraction material at Griya Bandung Indah Public Elementary School, the researchers submit suggestions that it is better for the school to direct and guide teachers to carry out learning that is creative and innovative. And for teachers, they should be able to innovate using learning media as media that can be used as a tool in the learning process, so that students also have enthusiasm for the learning that will be carried out so that the implementation of learning activities by teachers and students does not look monotonous. It can also create a new and fun learning atmosphere.

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