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THE USE OF COMPARISON BOARD MEDIA AS A TOOL TO IMPROVE STUDENT UNDERSTANDING IN ELEMENTARY SCHOOL

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ABSTRACT

By creating comparison board media, the aim is to help students who experience difficulties in understanding comparative material in class 1 of SD Negeri 1 Astomulyo in 2024-2025. Apart from that, this comparison board media also aims to increase 1st grade elementary school students' understanding of comparative material, increase students' interest and motivation, reduce misconceptions that students may experience regarding comparative material, and improve critical thinking skills through the problem solving process using interaction with comparison board media. The research method used in this best practice activity is a qualitative method with three stages namely 1. Planning stage, 2. Implementation stage, and 3. Evaluation stage. The research subjects were 23 grade 1 students at Astomulyo Elementary School, consisting of 11 boys and 12 girls. The use of this comparison board media is able to improve the assessment results, namely students with a very good predicate from initially 0 to 8 people, a good predicate from 3 people to 10 people, a sufficient predicate from 4 people to 3 people, a moderate predicate from 8 people to 2 people, and with a predicate of less than 8 people to 0. This proves that the comparison board media has a significant impact on the process of children's understanding of comparison material in grade 1 elementary school.

Keywords*: Mathematics,Learning media, Comparison board.Student*

A. INTRODUCTION

Mathematics is a universal science that can integrate with other subjects as well as in real life. According to Maghfiroh & Hardini, mathematics is a science that plays an important role in various disciplines. The benefits of mathematics for students are (1) mathematics can be used in everyday life, (2) mathematics can solve problems, (3) it enhances creativity in learning mathematics in various fields, (4) it can be used as input from various real and effective fields, and (5) it can be used to explain related data in various models. One of the mathematics subjects taught in elementary school is ratios and scales. (Maghfiroh & Hardini, 2021). According to Siyamtini, S., a ratio is a statement of a part of a certain amount or collection. (Siyamtini, 2019). Comparison is written in the form a:b or read as a compared to b. The comparison of numbers is one of the basic concepts of mathematics that studies the relationship between two or more. Students often face problem-solving tasks and exams for assessment when studying mathematics.

However, research conducted by elementary school teachers shows that there are problems with mathematics learning and that students feel anxious when facing mathematics lessons directly. Mathematics education aims to help children learn to solve problems. In the learning process, learning materials are very important because they provide students with

access to new knowledge. In primary education, there are several problems or challenges in the process of learning mathematics. These challenges come from both external sources and within the students themselves. Examples of external issues include facilities, media, and the teaching models used. In addition, there are internal obstacles within the students, such as a lack of motivation or enthusiasm for learning. Based on the results of the interviews conducted, it can be concluded that students believe that mathematics is a difficult and complicated subject. This will certainly have an impact on students' learning outcomes in the end. Therefore, teaching and learning activities must capture students' attention so that they are interested in participating in the learning activities.

In order to enhance students' enthusiasm and motivation, it is necessary to make efforts to find effective and engaging teaching methods and media to be used during the learning activities so that students are more motivated to learn comparative material. For that reason, the use of learning media is necessary. The term "media pembelajaran" comes from the Latin word "Medium," which means "intermediary."

which is the plural form of the Latin word "media". Therefore, learning media can be defined as tools that are often used during the learning process. Media is very beneficial to use in education. There are several experts who argue that learning methods have benefits. Media has several benefits for the student learning process. First, it directs students' attention more towards the material and increases their enthusiasm for learning. Second, it makes the material clearer so that learning objectives can be achieved and students can master the material well. Third, students are very engaged in activities because they not only listen to the teacher's instructions but also participate in other activities. From the opinions of Sudjana and Rivai, it can be concluded that the benefits (uses) of media in learning are to focus teaching and learning activities to be more effective.

Learning media can be used as a method to deliver material and can also be used to create media that captures students' interest. (Nurmaini, 2020). A media used in teaching and learning activities that is appropriate can enhance students' enthusiasm for learning, namely by utilizing comparison boards. So that students become more enthusiastic and eager to participate in learning activities. In the end, the initial learning objectives can be achieved well. Teachers can use comparison boards to create a learning environment that generates student interest in following the learning process from start to finish, making it enjoyable, and facilitating communication and interaction with others. Thus, comparison boards are used by researchers as a tool to enhance elementary school students' understanding of comparison material.

B. RESEARCH METHOD

The research method used in this best practice activity is a qualitative method with three stages: 1. Planning stage, 2. Implementation stage, and 3. Evaluation stage. In the planning stage, the researcher first conducted interviews with the students. Next, in the implementation stage, the author provided lesson material on comparison using the number

comparison board media that had been created. Subsequently, in the evaluation stage, the author observed and assessed the students' performance results after using the comparison board media as a learning tool. The subjects of the study were first-grade students at SD Astomulyo, totaling 23 individuals, consisting of 11 boys and 12 girls. The issues that were questioned during the interview process included the facilities and infrastructure available to students for using the comparison board media, students' responses to the implementation of learning using comparison media, and students' assessment results (achievement) before utilizing the comparison board media as a learning medium.

C. RESULTS AND DISCUSSION

Before the "best practice" activity in the first grade was conducted, it was found that students faced difficulties in understanding each mathematics lesson, especially on the topic of ratios at the elementary school level. Curriculum analysis and needs analysis are one of the types of analyses that were collected. Based on the needs analysis which began with the introduction of a specific problem in the school through observation of first-grade students at SD Astomulyo. The material on number comparison is difficult for students to understand because the learning media used in the study only employed textbooks, resulting in students becoming bored, sleepy, and not paying attention to the teacher, according to the observations. Based on the students' achievement results before using the number comparison board media in learning, they are as follows:

Recapitulation of the results of the number comparison assessment (sebelum memanfaatkan media)

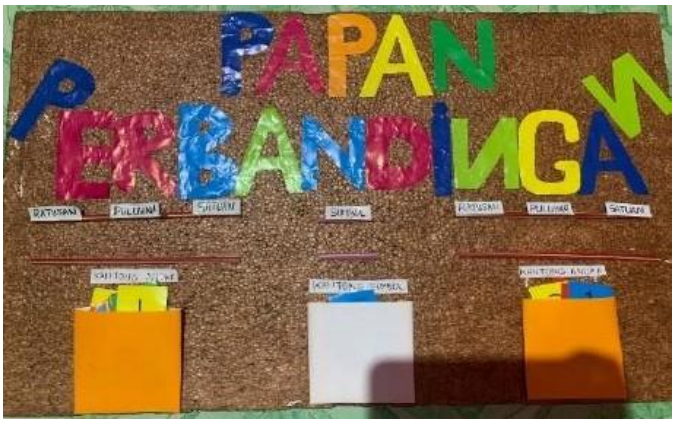
No	Predicate	Number of Students
1.	Very Good	0
2.	Good	3
3.	Enough	4
4.	Moderate	8
5.	Lacking	8
Amount		**23**

From the results of the recapitulation table, it can be concluded that there are still some students who still find it difficult to understand number comparison material in mathematics learning in elementary school. In fact, there are still students who score below the KKM. This makes the author even more convinced for the purpose of this project which is to develop a useful and effective comparison board learning tool that will help students who have difficulty in understanding math. In this case it can make educational materials interesting and able to trigger student interest which is necessary to prevent boredom in students. It is also to sharpen students' attention and make it more visually appealing to students in their learning.

1. **Implementation Process**

   The implementation process of this best practice activity is explained in stages, starting with planning, execution, and also the evaluation stage. The stages are as follows:

   Planning stage



Comparison board media image.

At this stage, the author prepares to conduct learning using the comparison board learning media chosen for this research. The selection of resources for the number comparison material was done by reviewing first-grade mathematics textbooks and searching for several product examples on popular websites. Questions and answers from the homeroom teacher are used as an assessment tool. The first design was created by making a design in a book to assist in the final media creation process.

Implementation phase

At this stage, the author involves a validator (first-grade teacher) to revise ideas and input as well as evaluate the quality of the comparison board learning materials. In carrying out the learning activities for the first grade according to the lesson schedule. Starting with a greeting, the writer then greets the students, leads a prayer, and checks the students' attendance. After ensuring everyone is present, the writer briefly explains the material being taught, then tests the comparison board learning media using questions from the writer and the homeroom teacher, which are used as assessment tools.

Evaluation stage

After the students finished listening, paying attention, and understanding the material provided by the writer earlier, to determine the extent of the students' understanding, the writer gave several questions related to the material that had been provided. The students answered the questions quickly and enthusiastically.

Results of Best Practice Implementation

The results of implementing mathematics lessons using comparison boards significantly

helped improve students' ability to understand comparison material. Many students who initially remained silent and answered questions incorrectly were able to understand and answer questions correctly after the comparison material was taught using the comparison board media. Students no longer felt confused in understanding the comparison material. In addition to the engaging learning media, students can easily understand the material presented by the teacher because the teacher directly provides examples through the comparison board media. Moreover, the time used for learning becomes more effective and efficient. Below are the results of the student evaluations given after understanding the comparison material through the comparison board media.

Recap of the evaluation results (after utilizing comparison board media)

No	Predicate	Number of Students
1	Very Good	8
2	Good	10
3	Enough	3
4	Moderate	2
5	Lacking	0
Amount		**23**

Discussion

Learning using this comparison board media is motivated by the need to offer learning resources to students who have difficulty understanding comparison material. The creation of this media results in a comparison board learning resource that contains number comparison material. The first-grade mathematics learning material involving number comparison serves as the model for this research. The goals are to improve first-grade elementary school students' understanding of comparison material, increase students' interest and motivation, reduce misconceptions that students may have related to comparison material, and enhance critical thinking skills through problem-solving processes with interaction with the comparison board media.

The researcher developed this comparison board media to allow students to actively engage in teaching and learning activities and to serve as a medium that can help facilitate the smooth process of teaching and learning in the classroom. By using the comparison board media, it is hoped that students can actively participate in learning activities and that it can be used as an aid to support the teaching and learning process in delivering comparison learning materials. In addition, the development of this comparison board media was based on the needs analysis of first-grade students at SD Negeri 1 Astomulyo.

After the planning stage has been completed, the next step in conducting the learning activities for this first-grade class is to adjust them according to the lesson schedule. Starting with a greeting, the author then greets the students, leads a prayer, and checks the students'

attendance. After ensuring everyone is present, the author briefly explains the material being taught, then tests the comparison board learning media using questions from the author and the homeroom teacher, which are used as assessment tools.

The use of the comparison board media is done by having the educator input random numbers into the prepared spaces on the comparison board that has been created. Then, the students compare the numbers by first looking at the hundreds place and seeing which number is larger, and then the students place the comparison symbol in the designated space. Initially, the teaching was conducted by explaining the comparison material through lectures, and then the educator wrote example problems on the blackboard. However, this method of teaching made the students confused in understanding the material. After using the comparison board media, the students became quicker in understanding the comparison material. Students answered the questions quickly and enthusiastically.

From this, it means that there is a significant impact on students' learning motivation in following mathematics lessons on the topic of ratios through the use of a ratio board. This can be seen from the students' enthusiasm when the educator asks questions related to ratios. Even when looking at the recap of the assessment results, there is a difference in scores before and after using the ratio board. Overall, the students were satisfied with the learning conducted using this comparison board media.

D. CONCLUSION

First-grade elementary school mathematics learning shows that the comparison board media can enhance students' understanding of number comparison material. Before using this media, students often had difficulty grasping the concept of comparison, leading to confusion and scores below the Minimum Passing Criteria (KKM). However, after using the comparison board media, students were quicker and more enthusiastic in understanding the material and answering comparison questions.

The use of comparison boards as a medium is not only effective in enhancing understanding but also sparks interest in learning and increases student motivation. This makes the learning process more engaging, efficient, and capable of reducing common misconceptions. Thus, learning with the aid of interactive tools like comparison boards not only helps students' understanding but also makes learning more meaningful and memorable for them.

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