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The Use of "Time Board" Learning Media in Mathematics Learning Theme 8 Grade II Elementary School Griya Bandung Indah

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Abstract
Currently students do not like mathematics. This phenomenon occurs due to the unavailability of interesting learning media for them. Not a few teachers who rely on books only. This study intends to see how the use of timeboard learning media in learning mathematics theme 8 class II SDN Griya Bandung Indah. The results obtained showed that the activeness of students during the learning process reached 91.95%, which means that the active category was fulfilled. The results of the student response questionnaire reached 89%, which means that the positive category was fulfilled. So the use of time board learning media in learning mathematics theme 8 class II SDN Griya Bandung Indah is said to be effective.
Keywords: Time Board Learning Media, Mathematics Learning

INTRODUCTION

Education is an effort to maximize the various potentials that humans have. Learning that produces knowledge and experiences that are useful for everyday life can develop this potential. Education can also utilize the advancement of Science and Technology (IPTEK) in helping to elevate the excellence of Human Resources. Quality human resources in the field of education will certainly produce a learning process that can provide knowledge and direct experience for students. Education is an action that aims to influence students as human beings who live in a unified socio-cultural system (Taufiq, 2014). Education in question can be pursued by way of formal education. The formal education pathway is a structured and tiered learning process carried out in a school agency (Junaeda et al., 2021). Thus Elementary School becomes the initial formal education passed by students.

The learning process at the elementary school level contains several subjects, one of which is mathematics. School mathematics can be defined as branches of mathematics which are determined based on education as well as the development of science and technology (Rahmah, 2013). Another opinion interprets mathematics as a scientific group that teaches pattern and structure, change and space (Susanti & Nusantara, 2020). Mathematics can train humans to be able to think clearly as well as thoroughly (Permatasari, 2021). Mathematics itself is the science of logic, shape, composition, quantity, and concepts related to one another. The definitions above are in line with the topic of mathematics in grade II elementary school, namely the measurement of time.

Elementary school itself is the initial formal education in understanding mathematical concepts. Therefore, the delivery of mathematics learning materials in elementary schools should be aligned with the abilities and development of students. At this time mathematics is often a subject that is less attractive to students. This can happen for various reasons. The

things that cause less interest in mathematics are the use of the lecture method which is considered boring and the teacher simply distributing assignments to students (Handayani & Mahrita, 2020). Apart from that the teacher also only uses learning media in the form of textbooks and blackboards. Teaching aids or simple media have also not been developed as innovation and creativity in the teaching process (Haluti et al., 2022). The process of students being able to understand the material presented by the teacher during the learning process can be accelerated with learning media (Nurfadhillah, Rizkiya, et al., 2021).

Delivering material in learning certainly requires media that can support the delivery of material properly. Learning media is an object or various resources that are used in delivering learning material by educators to students throughout the learning process (Nurfadhillah, Ramadhanty Wahidah, et al., 2021). Lack of student activity can be influenced by physical, psychological, or fatigue factors (Supraptiasih, 2013). Therefore the use of learning media is really influential in the learning process. Engaging and effective learning media can increase their desire and enthusiasm for learning. Supriyono (2018) says that good learning media must be in line with teaching materials, made simply so that students understand more easily, and come from materials that are easy to obtain (Supriyono, 2018).

Basically the use and form of time board learning media is more or less the same as a wall clock. The difference lies in the availability of the movement. In the time board learning media there is no clock machine, so the clock hands can be moved manually by hand. This time board learning media is made of styrofoam. The styrofoam is then pasted with circular paper that resembles a wall clock. On the outside of the circle paper there are numbers that correspond to the time of day and night (13.00-24.00). On this time board the words “Morning”, “Afternoon/Evening”, and “Night” are also affixed. This section is used to determine the writing time that will be carried out by students.

In Mathematics Class II-C Theme 8 there is material regarding the measurement of time contained in Basic Competency 3.6 namely explaining and determining length (including distance), weight and time in standard units, which are related to everyday life. The learning process regarding time measurement carried out at Griya Bandung Indah Elementary School, Bojongsoang District, Bandung Regency, can be said to be quite good because the teacher uses concrete media in the form of a wall clock. However, students find it difficult to distinguish between writing the time for day and night (13.00-24.00) which is different from the numbers on the wall clock. Thus the researcher seeks to use the Timeboard learning media during the teaching and learning process so that the time measurement material is more interesting and easy to understand. Research that supports this has been carried out by (Rohmawati et al., 2019) which proves the effectiveness of using timeboard media in learning time counting for class III elementary school students.

RESEARCH METHODS

Researchers apply a quantitative approach. The quantitative approach relies on the word quantity which means the amount or amount of something (Donatus, 2016). Thus research using a quantitative approach will produce something that is given a quality determination in the form of numbers or can be called a quantification process. The method used is descriptive analysis method. Nasution (2017) says that descriptive statistics can explain conditions, symptoms and problems (Nasution, 2017). This method can adjust the facts that occur in the field with the research variables studied so that it will produce a conclusion in the form of numbers that have a certain meaning.

This research was conducted at Griya Bandung Indah Elementary School, Bojongsoang District, Bandung Regency in the even semester of the 2022/2023 school year. The research

subjects in this study were 31 students in class II-C elementary schools. The research used observation and questionnaire instruments.

1. Observation. Observation is defined by Morris in Syamsudin (2014) as all activities of writing events using recorded/recorded instruments to achieve a goal (Syamsudin, 2014). Thus the principle of observation is that the subjects in the study are not given certain treatment, but free the subject to act as usual. In this case the researcher saw the activeness of students in learning using the time board learning media. Learning is said to be active if the percentage of activity is ≥ 75%.
2. Questionnaire. The questionnaire contains positive statements and negative statements regarding time measurement learning using time board learning media in which the questionnaire will be answered by students. The positive category is fulfilled if the percentage reaches ≥ 75%.

RESEARCH RESULTS AND DISCUSSION

Student Activeness in the Learning Process

After conducting research on the activity of class II-C students in the learning process of measuring time using time board learning media, the following results were obtained.

Table 1. Student Activity Data in Learning

No	Attention Aspect	Number of Students	Percentage (%)
1.	Pay attention/listen to the teacher's explanation	31	100%
2.	Don't disturb friends/chat while the teacher is explaining	29	93,5%
Percentage of Average Score			96,7%
No	Aspects of Activeness	Number of Students	Percentage (%)
1.	Observing or investigating the problem	31	100%
2.	Active reading (notes important things)	27	87%
3.	Active listening (responding)	25	80%
Percentage of Average Score			89%
No	Participation Aspect	Number of Students	Percentage (%)
1.	Practice (try on your own will)	26	83,8%
2.	Express opinions and explain them	31	100%
Percentage of Average Score			91,9%
No	Understanding Aspect	Number of Students	Percentage (%)
1.	Provide comments and conclusions from the material presented	28	90,3%
2.	Correct errors or deficiencies	27	87%
3.	Summarize in your own words	29	93,5%
Percentage of Average Score			90,2%

Student Responses to Timeboard Learning Media

After conducting research on students' responses to the time board learning media, the following data were obtained:

Table 2. Questionnaire of Student Responses to Learning Media

Statement Number	Answer Option					(R)	Score
	SS	S	KS	TS	STS		
1	29	1	1	0	0	31	152
2	8	23	0	0	0	31	132
3	26	5	0	0	0	31	150
4	24	6	1	0	0	31	153
5	19	12	0	0	0	31	143
6	0	0	5	12	14	31	133
7	0	0	3	10	18	31	139

8	0	0	0	24	7	31	131
9	0	0	1	19	11	31	153
10	0	0	2	13	16	31	138

The student response questionnaire was divided into five positive statements and five negative statements in which five answer options were given, namely SS (Strongly Agree), S (Agree), KS (Disagree), TS (Disagree), STS (Strongly Disagree). The first positive statement is that I am interested in learning to use the timeboard learning media. The second positive statement is that I prefer learning to use a time board rather than an ordinary wall clock. The third positive statement is that I understand more about the material for measuring time using time board media. The fourth positive statement is that the time board learning media allows me to easily distinguish between writing in the morning, afternoon/evening and evening. The fifth positive statement is that the learning process using the time board is very enjoyable.

The first negative statement is that I do not understand the material for measuring time using time board learning media. The second negative statement is that learning to use the time board learning media makes me bored. The third negative statement is that I feel that time board media is not appropriate for time measurement materials. The fourth negative statement is that I prefer learning to use wall clock media rather than time board media. The fifth negative statement is that I feel unenthusiastic during the learning process using timeboard media.

In the first positive statement, 29 students chose the SS option, 1 student chose the S option, 1 student chose the KS option, 0 students chose the TS option, and 0 chose the STS option. In the second positive statement, 8 students chose the SS option, 23 students chose the S option, 0 students chose the KS option, 0 students chose the TS option, and 0 students chose the STS option. In the third positive statement, 26 students chose the SS option, 5 students chose the S option, 0 students chose the KS option, 0 students chose the TS option, and 0 students chose the STS option. In the fourth positive statement, 24 students chose the SS option, 6 students chose the S option, 1 chose the KS option, 0 students chose the TS option, and 0 students chose the STS option. In the fifth positive statement, 19 students chose the SS option, 12 students chose the S option, 0 students chose the KS option, 0 students chose the TS option, and 0 students chose the STS option.

As for the first negative statement, 0 students chose the SS option, 0 students chose the S option, 5 students chose the KS option, 12 students chose the TS option, and 14 students chose the STS option. In the second negative statement, 0 students chose the SS option, 0 students chose the S option, 3 students chose the KS option, 10 students chose the TS option, and 18 students chose the STS option. In the third negative statement, 0 students chose the SS option, 0 students chose the S option, 0 students chose the KS option, 24 students chose the TS option, and 7 students chose the STS option. In the fourth negative statement, 0 students chose the SS option, 0 students chose the S option, 2 students chose the KS option, 19 students chose the TS option, and 11 students chose the STS option. In the fifth negative statement, 0 students chose the SS option, 0 students chose the S option, 2 students chose the KS option, 13 students chose the TS option, and 16 students chose the STS option.

Based on the data above, it can be analyzed that the results of observing students' activeness in the learning process reached 91.95%, which means the active category was fulfilled, and the results of the student response questionnaire reached 89%, which means the positive category was fulfilled. On the basis of available data and the results of the analysis that reach the categories fulfilled, thus the use of timeboard learning media in Mathematics Learning Theme 8 Class II SDN Griya Bandung Indah for the 2022/2023 school year can be

said to be effective. This also supports the research of Rohmawati, et al. (2019) which proves the effectiveness of using timeboard media in learning time counting for class III elementary school students.

CONCLUSION

Based on research conducted in class II-C SDN Griya Bandung Indah for the 2022/2023 academic year, the researchers concluded that the use of timeboard learning media in learning mathematics theme 8 is said to be effective. This research can be used as a source of reading to carry out new research on learning media. As for suggestions for schools, both principals and teachers, to be more innovative in providing various learning media that can increase students' activeness and understanding of the material.

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