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STUDENT RESPONSE TO ONLINE LEARNING IN MATHEMATICS MATERIAL DIVISION USING BRIDGE CARD MEDIA

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ABSTRACT

Learning mathematics is an important aspect for students in everyday life. For that we need a very good method of learning mathematics so that students feel fun in learning takes place. This article aims to provide an overview of the effectiveness of the application of playing card learning media in mathematics during online learning at Banyuajuh 2 elementary school. This research is a mixed quantitative and qualitative research (mix method). Data were initially collected using quantitative methods followed by qualitative methods. The target population of this study were students at Banyuajuh 2 Kamal elementary school. In addition, the samples used by the researcher were 2 elementary school students in grades 3, 6 and 4. The instruments used by researchers are interviews and observation and documentation. The results of the study show that during online learning the teacher has used various media to be able to increase students' motivation and understanding of the mathematics subject in the distribution material. However, the media that is most popular and increases student motivation and understanding is playing cards. As many as 88% of students stated that they preferred playing card media compared to other media during online learning. This makes their motivation and understanding of the division material in mathematics subjects greater. From the results of this study it can be concluded that playing card media is effective in increasing students' motivation and understanding in the distribution of mathematics subject matter.

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A. Introduction

The learning process can come from anywhere and anytime. The learning process that we often hear about is learning in the scope of education such as schools and tutoring places. However learning and learning are different things. Learning is a process or way of making an individual learn. While learning activities in an effort to gain intelligence or knowledge, changes in behavior or changes in assumptions based on experience. (KBBI, 1996:14).

Learning in the world of education, especially elementary school children, comes from various things, for example, academic learning at school. At school students learn a lot of lesson content that is already available in learning resources. Learning mathematics is one of the various lessons presented. According to (Irmawati, 2020:1) mathematics is a science that deals with patterns so that mathematics is always present in every concept of calculation, be it small calculations or complex calculations. In learning mathematics itself has material that varies at each grade level. One of them is material for low class regarding arithmetic operations on integers. According to (Sudihartini (2014) in Ruqqoyah, 2021:23) there are four kinds of arithmetic operations on integers as follows (addition, subtraction, multiplication, and division)

Learning mathematics prioritizes how to think using logic. Therefore there is a need for good interaction between teachers and students. According to ((Johnson, 1991) in Irmawati, 2020:10) learning mathematics requires an active role for students in understanding concepts and discovering mathematical principles. Learning mathematics has the impression that it is difficult and boring for students. Therefore, teachers need to create a more lively learning atmosphere to support the success of the learning process. Mathematics teachers must be able to understand the vision, mission, curriculum and approach of each educational unit so that it can be adapted to the level and abilities of students ((Ministry of National Education, 2004) in Irmawati, 2020).

Learning outcomes are abilities that students get after going through the learning process (Sudjana, 2010:22). Meanwhile, according to (Dimyati and Mudjiono, 2006: 3) learning outcomes are the result of interactions that occur in the teaching and learning process. So learning outcomes are abilities possessed by students after carrying out the teaching and learning process. To get learning outcomes the teacher can carry out activities such as evaluations or tests to find out students' absorption abilities during the learning process. Evaluations or tests

carried out by the teacher can be adjusted to the learning that has just been carried out. Learning outcomes are often used to determine the extent to which students have mastered the material being taught.

In the process of teaching and learning by using a learning media makes students increase in their desire and interest in learning as well as motivation and learning stimulation in the learning process of students, psychology towards students also influences when using this learning media. The use of this media is very important for students and teachers. (Derek Rwntree in Rohani, 1997: 7-8) explained that learning media functions to generate learning motivation, repeat what has been learned, provide learning stimulus, activate student responses, provide immediate improvement and promote appropriate training.

The use of games as a learning medium is quite effective and increases students' interest and enthusiasm for learning. According to Sadiman (2002: 78) the game as a learning medium has several advantages, including the game is something fun to do, something that is entertaining. According to Yusuf (2011: 17) there are several benefits of learning while playing, namely getting rid of the seriousness that hinders, eliminating stress in the learning environment, inviting students to be fully involved in learning. One alternative learning media that can be used is playing cards. Playing card games are games that can be played by all groups using 52 cards in one hand and can be played in various ways (Wulandari, 2019:22). Playing Cards are designed as one of the media for learning mathematics which is packaged through educational games. This game was applied to students at Banyuajuh 2 elementary school. The purpose of this study was to analyze more deeply related to students' motivation and understanding of mathematics during online learning at Banyuajuh 2 elementary school.

B. Method

The type of research used by researchers is a mixed research type (mix method). Mixed research is a type of research that combines qualitative and quantitative forms. This research approach involves philosophical assumptions on the application of qualitative and quantitative approaches, then mixing the two approaches in one study. This research began on September 23 2021 at the Banyuajuh 2 elementary school kAMAL. The target population of this study were students at Banyuajuh 2 elementary school Kamal. In addition, the samples used by the researcher were 2 elementary school students in grades 3, 6 and 4. The instruments used by researchers are interviews and observation and documentation.

C. Result and Discussion

Result

In the following, the results of the observation sheet of Banyuajuh 2 elementary school student activities are presented in the use of bridge card learning media (Remi Cards) in cycle 1 for students.

Table 1. Results of Student Observation Sheets in Learning

No	Students	Student activity	Media Use Motivation	Students Understanding of Materials for Operations Counting Division	Student learning outcomes
1	Novar Mubarok	1	3	3	3
2	Nur Aini	2	1	2	2
3	Fira Septiana	2	2	2	3
4	Silviana	1	2	1	2
5	Ibrahim	2	2	3	3
6	Muhammad Reza	2	3	3	3
Amount		10	13	14	8
Percentage of Each Indicator		55%	72%	77%	88%

In the table above it can be seen that the average percentage of each indicator is 88%, thus that 88% of students like and enjoy using Bridge Card Learning Media (Rummy Cards). Based on this, it can be seen that learning media is a very important component in a learning process. With the character of children who like to play, this problem can be overcome through media with the ability to provide the same stimulus, provide experience as well as sufficient learning outcomes and generate the same perception. This method is enough to make students happy and enjoyable in inviting them to learn mathematics, especially in

material that is full of calculations. Because in addition to students who think they are playing but in their minds they also hone their brains in solving arithmetical operations in mathematics.

Observations are carried out by observing the student learning process in mathematics which is carried out online. Observation of the learning process focused on several students who were the subject of observation and interviews. So that the results obtained are that there are students who during the active learning process ask if there are things that according to them are not clear, when the teacher asks a question, there are students who answer there are also those who become silent and do not answer the questions raised by the teacher. When students are introduced to learning media playing cards, students look enthusiastic because they pay close attention to instructions so that they can easily understand how to use them. When faced with arithmetic division operations, some students can easily solve the problem with the correct answer. There are also students who experience difficulties due to not memorizing multiplication. Based on the teacher's evaluation that day, almost all students understood the material and had good learning outcomes.

Interviews with students at Banyuajuh 2 elementary school Kamal were conducted through direct observation and a Google form consisting of 15 questions with the research subject being elementary school students consisting of 4 people, each of which occupied a high class and a low class with this in order to see the suitability of the answers from students. As for the analysis of the results of the Banyuajuh 2 elementary school Kamal student interview data, according to him, the average implementation of the learning process was still online and his feelings towards learning were very unpleasant. The difference he feels during online and offline learning is that online learning is boring and he only studies on a cellphone and offline learning is very fun because he meets lots of friends and also understands the material being studied better. In terms of likes and dislikes while studying mathematics online, there are those who answer that the discussion of mathematics is difficult to understand when learning online as well as boring when explaining, there are also those who answer that on average they like it when there are games there are also those who prefer watching animated videos math learning. On average, these students like mathematics. In understanding the task given by the teacher, the students answered almost thoroughly, sometimes they understood, sometimes they didn't. Students at the elementary school often play

playing cards with their friends and they really enjoy playing it. And in online learning, the average states that it does not increase enthusiasm for learning but rather makes it boring so that it is lazy to study.

The learning media used by teachers during online learning on average use via WA Group and learning videos. If you have difficulty understanding the material, the average student asks someone at home or sends a private message to the teacher. In the process of online learning in mathematics, the average elementary school student answered that it was ineffective and poorly understood. Online learning was considered monotonous, which made students feel bored and used up internet quota. In the frequent constraints on the online learning process, especially math subjects, some answered because of the signal, there were also those who answered that it was difficult to count, there were also those who found it difficult to ask questions if they did not understand the material being explained. However, they overcome these obstacles by looking for wifi around their environment, asking the teacher personally and practicing on their own. In assessing mathematics subjects in online learning it is very influential compared to offline learning, on average they answer very influential. Expectations related to learning mathematics in the future, the average answer is that learning mathematics is not boring and can be fun so that it is more exciting when learning takes place.

Interviews with teachers were carried out by filling out the Google form and interviewing in person to see if there was a match between the answers filled in the Google form and in person. Interviews were conducted with two teachers who had experience teaching mathematics in both high and low grades. As for the analysis of the results of interviews with teachers, namely online learning is felt to be less than optimal because many students still use the same communication devices or cellphones as their parents. This causes students to use cellphones alternately with their parents. Online learning is also felt to be less effective because students become less active due to the teacher's limitations in interacting with their students. In contrast to offline learning which makes it easier for teachers to interact directly with students face to face.

Teachers use learning media in the form of sending videos to help students learn mathematics. The advantages of online learning that are felt are the use of more varied media such as the activities of using learning video media. In finding learning media, teachers often use video media in teaching so they don't have

difficulty finding media. Even though the teacher can communicate directly with students through various existing media, not all students understand the material seriously but sometimes they only listen and answer as if they understand the material presented. Therefore, teachers experience difficulties in determining what learning media is suitable for use when online so that it can be used and does not burden all students. The obstacle faced in teaching mathematics is that students do not memorize multiplication. In addition, the teacher's limitations in interacting with students limit the teacher's flexibility in explaining the material. To overcome these obstacles the teacher provides additional guidance with tutorials and questions and answers to students. The media used by the teacher during the exam is by using the Google form that the teacher has designed. If there are students who do not understand the material explained, the teacher will give an explanation in private. This is a good way of teaching students because the absorption capacity of each child is different so that if this is not done then the student will experience difficulties and be left behind. All forms of communication that the teacher does are carried out through wa grub. The choice of using the Whatsapp application as a communication medium is the right thing. Because this application is owned by almost everyone who has a smartphone. Because online learning is felt to be less than optimal, the teacher hopes that during online learning in mathematics learning content students can be accompanied by parents. Parental assistance can help students more easily learn the material.

Discussion

According to ((Johnson, 1991) in Irmawati, 2020:10) learning mathematics requires an active role for students in understanding concepts and discovering mathematical principles. Learning mathematics has the impression that it is difficult and boring for students. Therefore, teachers need to create a more lively learning atmosphere to support the success of the learning process. The success of a learning process depends on the expertise and creativity of the teacher in the learning process. Based on the results of observations and interviews, it is known that during online learning it is passive and students have a poor understanding of mathematical concepts and principles. This can happen due to several factors including teachers who are confused in finding media during online learning so that teachers only rely on the role of learning videos. Another factor is students who have difficulty accessing the video. Especially in learning mathematics, students find it difficult to understand and need more understanding processes so that they

become bored and unenthusiastic in learning mathematics. It can be seen that based on the results of observations during online learning, there were students who did not activate the camera and did not pay attention to the teacher. There were also some students who paid close attention to the teacher but could not answer the questions the teacher asked.

Learning outcomes are abilities that students get after going through the learning process (Sudjana, 2010:22). The learning outcomes of the students who became the sample in this study for mathematics lessons can be said to be unfavorable. Because most of the students could not answer the questions on the distribution material. According to one of the teachers who were interviewed, the obstacle for students who are very incapable of learning mathematics, especially the arithmetic operations of division, is that they do not memorize multiplication. It is difficult for teachers to be able to provide special directions for students who are lagging behind or do not understand because of limitations. According to him, the most effective way to teach mathematics is to meet face to face. So that the teacher can immediately act if there are students who are lagging behind in understanding the material.

The process of teaching and learning by using a learning media makes students increase in their desire and interest in learning as well as motivation and learning stimulation in the learning process of students, psychology towards students also influences when using this learning media. This is what happened during the observation. When students are introduced to Bridge Card learning media (Rummy Cards) the atmosphere becomes more enthusiastic. Several students who turned off the camera immediately turned on their cameras and several students immediately got excited to take their cards to practice with people near them. Bridge Card Media (Rummy Cards) can be done either online or offline because each student has physical media. For online use, it can be done by holding virtual meetings and each person shows their card in the camera so that the opponent can find out what number the division arithmetic operation will do. Students can also do it offline at home with their parents or other family members. That way, there are no restrictions on using the internet and there is no reason for students not to practice dividing.

D. Conclusion

According to the results of the discussion above, it can be concluded that teachers at Banyuajuh 2 elementary school have tried to use various kinds of media to be able to increase students' motivation and understanding of mathematics, especially in the division of material. However, still the level of motivation and understanding of some students related to this distribution material is still lacking. One of the reasons for this is that most students consider online learning to be monotonous and they find it more difficult to understand the math material conveyed by their teachers through online methods compared to offline methods, namely face to face with the teacher. In addition, some students who also do not memorize multiplication are also a factor causing students' lack of motivation and understanding of the division material. Other causes are technical problems such as network and no gadgets. Based on the results of the data obtained, among the various media that have been used by teachers and researchers during the research period, playing card media is the most preferred media and the one that can most increase students' motivation and understanding of the distribution material is playing cards. As many as 88% of students said that they liked using playing cards more and made them understand math material better than other media. By using playing card media, online learning becomes more active, most students turn on their cameras and actively participate in every learning procedure

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