

## Online Learning on Mathematics Learning Outcomes of Class II Students of SD Negeri 191320 Raya Tongah

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### ABSTRACT

Research to describe online learning information results of learning mathematics for students learning to teach at home. Research using descriptive qualitative research. Sample of study were parents and teachers, class II students at SD Negeri 091320 Raya Tongah, totaling 25 people, namely 12 students, 12 parents and 1 class II teacher. Data collection techniques using documentation, interviews, observations namely. The results of the analysis of the research data obtained show that the impact experienced by students, teachers and parents learning activities of students' math scores has increased, what parents and teachers feel is still lacking in mastery of technology, additional internet quota fees, additional work in accompanying children learning, communication and socialization between students, teachers and parents is reduced.

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## **INTRODUCTION**

Education is the main factor in the formation of the human person, realizing this, the government is very serious about dealing with the education sector. The government hopes that a good education system will emerge future generations who are qualified and able to adapt themselves to live in society, nation and state. Education is always undergoing renewal in order to find effective and efficient curriculum structures, education systems and learning models. Therefore, schools as places of education providers as students, education must be able to realize the expected educational goals. Teachers play an important role in developing abilities and forming dignified national character and civilization.

The development of information and communication technology has also had a significant impact on several aspects of people's lives. One of them is in the aspect of education, people can easily gain knowledge or insight from the internet. Indonesia has been faced with the challenges of the industrial revolution era. Not only the economic, social and technological sectors, but the education sector now inevitably has to be able to adapt to this era. This development began to be used by several elementary schools in Indonesia in the implementation of educational programs. These programs are known as online learning programs or online systems.

During the Covid-19 outbreak in Indonesia, several government regulations were issued to prevent the spread of the outbreak. One of the things that has been implemented is social distancing. Social distancing is an effort to maintain distance, such as avoiding crowds and physical contact. The existence of social distancing is clearly very influential in the world of education. Learning conducted in schools has been disbanded starting in March 2020. Even until May 2020 and at this time learning is still being carried out from each other's homes.

The cause of online learning, with the presence of Covid-19 in Indonesia currently has an impact on the whole community. According to Kompas, 28/03/2020 the impact of the Covid-19 virus occurred in various fields such as social, economic, tourism and education. In a circular issued by the government on March 18 2020, all indoor and outdoor activities in all sectors were temporarily suspended in order to reduce the spread of the corona virus, especially in the education sector. On March 24, 2020 the Minister of Education and Culture of the Republic of Indonesia issued circular letter Number 4 of 2020 concerning the implementation of the Education Policy during the emergency period of the spread of Covid-19, in the circular letter it was explained that the learning process was implemented at home through online/distance learning implemented to provide meaningful learning experiences for students. Studying at home can be focused on life skills education, among others, regarding the Covid-19 pandemic.

Structure good management in online learning settings. Even though there are many obstacles, the online learning process can still be followed and carried out properly. In this study using interviews to determine implementing the online learning process. Learning to make consistent and accountable

assessments of the quality of student learning can also be used as feedback on the quality of student learning. Learning that is carried out in class II of SD Negeri 091320 Raya Tengah also uses online/distance learning through parental guidance. According to Isman, online learning is the use of the internet network in the learning process. With online learning students have the flexibility of study time, can study anytime and anywhere. This learning is an educational innovation to answer the challenge of the availability of varied learning resources.

In carrying out the online learning process there is an impact on students, there are several impacts felt by students in the teaching and learning process at home, namely students feel forced to learn remotely without adequate facilities and infrastructure at home. This facility is very important for the smooth running of the teaching and learning process. For online learning at home, facilities such as laptops, computers, or mobile phones should be provided first which will make it easier for students to listen to the online teaching and learning process. The impact of online learning for parents, the obstacle faced by parents is the additional cost of purchasing internet quota increases, online technology requires a network connection to the internet and quota.

Therefore, the level of internet quota usage will increase and will increase parents' spending burden. And the impact of online learning on teachers is felt, namely that all are proficient in using internet technology or social media, not yet fully able to use devices or facilities to support online learning activities and need assistance and training first. Through online learning, students and parents can take part in online learning programs at home so that parents actively guide students so that the process of teaching activities online goes well.

However, online learning is considered less effective in learning because it is not as maximal as possible, there are many impacts in the learning process regarding study time, increasing internet quota and disruption in sending assignments due to the network, constraints in learning facilities, and student learning that is always forced. With students playing a lot before starting the teaching and learning process it still doesn't go well, so that the value of learning mathematics for students increases because more often than not parents play a more important role in learning lessons, the learning process at home is carried out using various alternative online/online WhatsApp group media, students study subject matter and carry out assignments given by the teacher, the teacher conducts monitoring of the implementation of the online learning process, the teacher provides explanations if there are questions from students and also makes feedback for online learning that has been done.

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Negeri 091320 Raya Tengah also uses online/distance learning through parental guidance. According to Isman, online learning is the use of the internet network in the learning process. With online learning students have the flexibility of study time, can study anytime and anywhere. This learning is an educational innovation to answer the challenge of the availability of varied learning resources.

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## **IMPLEMENTATION AND METHODS**

This type of qualitative descriptive research according to experts Mukhtar (2013: 10) qualitative descriptive research is a method used by research to find knowledge or theory of researchers at a certain time. The type of qualitative descriptive research used in this research is intended to obtain in-depth information about student learning when carrying out online learning for class II SD Negeri 091320 Raya Tengah. In addition, with a qualitative approach it is hoped that the situations and problems encountered in online learning can be disclosed.

Design in this study the researcher uses a case study research design in the sense that the research is focused on just one phenomenon that is chosen and wants to be understood in depth. One of these phenomena can be a person, namely parents as teachers in learning at home. A learning process is carried out online, so parents will be more effective in teaching and learning activities at home. This is an implementation of a policy, or a concept.

Based on these limitations it can be understood that the limitations of the case study include:

- 1) The research targets can be students, parents and teachers.
- 2) These objectives are examined in depth as a totality according to their respective backgrounds or contexts with the aim of understanding the various relationships that exist between the variables.

The sample is part of the population. Sample is a number of members taken from a population. The size of the sample is determined by the amount of data or observations in the sample. Based on this description, the authors took some samples to represent the existing population to make it easier to obtain concrete and relevant information from the existing samples. As for the sample of this research are parents of students and teachers. This sampling was based on the opinion of Sutrisno Hadi (2004: 81) who said that, in fact, there is no absolute certainty, a number of percent of a sample must be taken from a population with no absolute certainty, there is no need to doubt a researcher. From the above opinion it can be concluded that the size of the sample in the size of the study is not determined by the population but is determined by the theoretical basis, quality of implementation, and management, so that researchers do not have to hesitate in taking samples.

In qualitative research, the instrument is the researcher himself who is the main data collection tool, because it is humans and only humans who can connect with informants or other objects, and are able to understand the realities in the field. Therefore researchers as instruments are assisted with qualitative research methods, mastery of insight into the areas studied in this study using assessment rubrics, interview sheets, observation sheets, documentation sheets

The observation sheet is an instrument used to obtain data from the impact of online learning conducted by parents on students. Observations regarding learning activities or programs given by class II teachers at SD Negeri 091320 Raya Tengah Pematang Raya. The documentation that became the instrument in the research was the results of photo documentation of activities in implementing the impact of online learning at home which was carried out by class II students at SD Negeri 091320 Raya Tengah. The research subject according to Suharsimi Arikonto (2016: 26) defines research subjects as objects, things or the person where the data for the research variable is attached, and who is at issue.

This research was conducted in Class II of SD Negeri 091320 Raya Tengah Pamatang Raya, the subjects were students, parents and teachers. The dominant subjects of this study were parents as teachers and students as students. The reason for researchers taking research on the impact of online learning on learning outcomes for second grade students at SD Negeri 091320 Raya Tengah is to find out the level of effectiveness and information on student learning patterns, the impact and constraints of online learning. According to the research subject, there are several activities that can be carried out by the subject in online learning at home.

Analysis in data collection according to Miles and Huberman (in Sugiyono, 2013: 337) suggests that activities in qualitative data analysis are carried out interactively and continue continuously until complete, so that the data is saturated. Researchers in this stage carry out a series of qualitative data analysis processes up to the interpretation of the data that has been obtained previously. These continuous observations resulted in very high data variations. The data obtained is generally qualitative data, so that the data

analysis technique used does not have a clear pattern and is also called triangulation or mixed data analysis. The process of data analysis is by collecting data first then the researcher anticipates the data followed by reducing the data after that the researcher displays the data and finally the researcher draws conclusions from the data that has been collected.

Data analysis in this study was carried out when data collection took place and after completing data collection within a certain period. At the time of the interview, the researcher had already conducted an analysis of online learning information at home. The researcher recorded all data that was in accordance with the research focus, namely the impact of online learning on the results of learning mathematics for class II students at SD Negeri 091320 Raya Tongah. Conclusion is the final stage in the research process to give meaning to the data collection that has been analyzed by online learning information at home.

#### *Data Reduction*

According to Sugiyono (2015: 249) Data reduction is a sensitive thinking process that requires high intelligence and breadth and depth of insight. For researchers who are new to doing data reduction, they can discuss it with friends or other people who are considered experts. The next process of data analysis is that the researcher performs data reduction. After studying and reviewing the results of data collection, the next step is to conduct data reduction. Data reduction refers to the selection, focusing, simplification, abstraction and transformation of "raw data" that occur in field notes. In data reduction, the researcher ignored various data that were believed to be unrelated to the impact of online learning on the mathematics learning outcomes of grade II students at SD Negeri 091320 Raya Tongah when implementing online at home.

#### *Data Displays*

After the data is reduced, the next step is to display the data. According to Sugiyono (2015: 249) in qualitative research data presentation can be done in the form of brief descriptions, charts, relationships between categories, flowcharts and the like. After the data is reduced, the next step is presenting the data. The description of this type of data is in the form of sentences, not table numbers. For this reason, the data obtained must be organized in a structure that is easy to understand and describe. By displaying data, it will make it easier to understand what happened, plan further work based on what has been understood.

#### *Conclusion Withdrawal*

Conclusion drawing is the final stage in the research process to give meaning to the data that has been analyzed. The final step after focusing on data and analyzing data is for researchers to draw conclusions regarding the impact of online learning on student mathematics learning outcomes. By implementing online learning at home students are more active in learning because in the online learning process parents are also actively learning with

students, so parents are more effective when teaching and learning activities are carried out at home and know the impact of online learning on students. Online learning on the results of learning mathematics for second grade elementary school students has an impact on the results of learning mathematics to increase as can be seen from the results of the interviews that have been carried out.

## RESULTS AND DISCUSSIONS

Data obtained from the field when observing online learning data on the results of student mathematics learning carried out by parents to class II students at SD Negeri 091320 Raya Tongah, namely: Observations regarding learning activities or programs given by class II teachers at SD Negeri 091320 Raya Tongah. The teacher provides materials lessons, the learning process at home is carried out using various alternative online/online WhatsApp group media, students study subject matter and carry out assignments given by the teacher, the teacher conducts monitoring of the implementation of the online learning process, the teacher provides explanations if there are questions from students and also makes feedback for online learning that has been done.

Standards are needed in assessing the results of interviews to clearly identify what students should know and what they should be able to do. According to Sugiyono (2011: 317) interviews are used as a data collection technique if the researcher wants to conduct a preliminary study to find a problem that must be studied, and also if the researcher wants to know things from respondents that are more in-depth and the number of respondents is small. Researchers conducted interviews to obtain data related to the impact of online learning on student mathematics learning outcomes through homeroom teachers, students. parent. Regarding the results of learning mathematics online, there has been an increase because there was assistance when studying with parents to study mathematics so that math scores could increase during the online process.

However, online learning is considered less effective in learning because it is not as maximal as possible, there are many impacts in the learning process regarding study time, increasing internet quota and disruption in sending assignments due to the network, constraints in learning facilities, and student learning that is always forced. With students playing a lot before starting the teaching and learning process it still doesn't go well, so that the value of learning mathematics for students increases because more often than not parents play a more important role in learning lessons, the learning process at home is carried out using various alternative online/online WhatsApp group media, students study subject matter and carry out assignments given by the teacher, the teacher conducts monitoring of the implementation of the online learning process, the teacher provides explanations if there are questions from students and also makes feedback for online learning that has been done.

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## **CONCLUSIONS AND RECOMMENDATIONS**

So the researchers conducted interviews with class II teachers, students, and parents of SD Negeri 091320 Raya Tengah to find out online learning on students' mathematics learning outcomes felt by teachers, students and parents when carrying out the online learning process. This online learning has a good impact on students who are included in student scores. Math scores are increasing, unlike grades while studying at school, because every time parents start a lesson, parents always accompany students to study, sometimes parents do student assignments. Another obstacle felt by students in the online teaching and learning process at home is that students feel forced to study remotely without adequate facilities and infrastructure at home. Because previously students did not have a distance learning culture because so far the learning system was carried out face-to-face, students were used to being at school to interact with their friends, playing and joking around with their friends and face to face with their friends and face to face with their friends. the teachers therefore the value of learning mathematics increases as parents learn more.

Therefore, the level of internet quota usage will increase and will increase parents' spending burden. And the impact of online learning on teachers is felt, namely that all are proficient in using internet technology or social media, not yet fully able to use devices or facilities to support online learning activities and need assistance and training first. Through online learning, students and parents can take part in online learning programs at home so that parents actively guide students so that the process of teaching activities online goes well. Research to describe online learning information results of learning mathematics for students learning to teach at home. Research using descriptive qualitative research. Sample of study were parents and teachers, class II students at SD Negeri 091320 Raya Tengah, totaling 25 people, namely 12 students, 12 parents and 1 class II teacher. Data collection techniques using documentation, interviews, observations namely. The results of the



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