

Analysis of The Difficulties of Student Learning Mathematics In Online Learning In The Pandemic Time Covid-19

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Abstract

This study aims to analyze the impact of COVID-19 on students' mathematics learning difficulties in online learning at school. The research conducted was qualitative research. Data collection method used is the interview method with the interview guide instrument. Meanwhile, the data analysis technique used is to use interactive techniques with three procedures. Based on the results of an interview by one of Bengkulu City's SMPN 4 students named Muhammad Radja Al-Farabi, he experienced difficulties in learning mathematics online, difficulty in focusing on learning mathematics, and difficulty in getting internet network access

Keywords: Mathematics Study Difficulties, Online Learning, Covid-19

INTRODUCTION

Each student has a diverse character, as well as knowing academic abilities which are often referred to as intelligence. Most of the students have intelligence below average, average, even above average maximum achievement, and this affects the academic achievement of children in school. When students do not achieve well and satisfactorily based on their intelligence, the students are said to have learning problems or learning difficulties.

Barriers to learning can be called learning difficulties. Learning difficulties are a condition currently characterized by disruption in activities to achieve learning goals, so that more active efforts are needed to overcome them (Mulyadi, 2010). These obstacles can occur understandably or unacceptably to the person who does it.

Barriers to exploring mathematics students have basic difficulties. In this connection, (Hasibuan, 2015) argues, namely difficulty in applying a concept, difficulty learning in requiring a principle, and difficulty solving problems in oral form. Therefore, it can be concluded that mathematics is concerned with form ideas whose relationships are logically arranged. This shows that mathematics is very abstract, that is, it deals with real concepts and deductive thinking. The argument that is obtained deductively is then used to solve various kinds of problems, including in real life.

Learning difficulties are defined as the students' lack of awareness in doing the tasks that have been shared by the teacher as an educator. Learning difficulties describe the real disruption in students related to regular and additional tasks, which are caused by nervous dysfunction factors, psychological processes or other causes, so students who have learning difficulties in a class show that learning achievement is still very low (Masroza, 2013).

Learning difficulties become a failure in achieving learning objectives, which is characterized by not mastering the minimum level of mastery, not being able to achieve the desired

achievement, unable to realize the developmental task, and unable to achieve the level of mastery needed as a prerequisite for continuation of learning at the next level (Suwanto, 2013).

Mathematics is an essential part of science. Semua disciplines take advantage of the lessons of mathematics. From basic education to higher education. from the student level from elementary to college students, studying the science of mathematics. And also, Math including principal disciplines which shall be taught right from the level of SD / MI to SMA / MA, even until college (Nursalam, 2016).

Mathematics has more important goals for students in school (Hidayat, 2017: 1). It makes the students must understand the math, because math me prepared a student to have the power thought logic, analysis, structured, critical, and creative and able to be rpartisipasi. Thus, the math necessary dib ebankan to all students starting from the level of primary, secondary to higher education (Astuti, 2016: 12). Mathematics is highly desired by students in fulfilling the need to solve problems in everyday life, for example applying calculations, such as addition, subtraction, multiplication and division, and can connect concepts. Mathematics is a field of study that is most important to learn because of the nature of mathematics is an understanding of the pattern of changes that occur in the real world and in the human mind as well as continuous between the patterns ter call in case Mangasi an (Jamaris, 2014).

Mathematics is not only studied to solve problems. However, it is also for students' ability to think, reason, solve problems, communicate, relate mathematical material to the actual situation, and be able to take advantage of technology (Sadiq, 2014). Math not only learn in the process of cognitive alone but me average ability students' thinking can be able to solve real problems, concerning the matter of mathematics with state se benarnya, this will lead to the achievement of the asp oak affective and psychomotor. the acquisition of these three domains is the key to the successful achievement of students' mathematics learning outcomes (Madjid, 2014).

Learning that sealed uka n in secondary schools using online learning/distance through referrals from parents. Distance learning is the use of internet networks during the learning process. With distance learning students have the opportunity to study time, can study anytime and anywhere. Students can meet face to face with the teacher through a number of applications such as *google classrooms*, *video conferencing*, *live chat*, *zoom* and *whatsapp groups*. This learning world of hope of learning in men ghadapi challenge will be to the preparation of learning resources are diverse. The success of a learning method or media depends on the character of the students. All media in the world of *e-learning* wheezing otherwiserequire that only some learners can succeed in learning remote. This is caused by factors of learning conditions and student character. (Nakayama, Yamamoto, 2007). With the COVID-19 pandemic in Indonesia, it currently impacts all aspects of society. According to Kompas, 28/03/2020 the impact of the COVID-19 pandemic occurred in all areas such as social, economic, tourism and education. Circular (SE) released by the government on March 18, 2020 all activities inside and outside in all sectors postponed until an undetermined time limit demi reduce the spread of the pandemic virus covid-19, especially in the field of education.

On 24 March 2020 Education Minister of the Republic of Indonesia shortly erbitkan Circular Number 4 2020 About Perubahan Education Policy In the Emergency Deployment COVID, the letter was in to convey that the learning process carried out at home by learning as remotely executed in the hope of giving pengetahuan learn which is useful for students. Studying at home can focus on skills education, including regarding the Covid-19 pandemic.

Based on the results of interviews conducted with 1 grade 8 student at SMPN 04 Bengkulu City as one of the state junior high schools implementing the 2013 curriculum in Bengkulu City, it was found that there were still many answers to problem questions for 1 student who became a reference for difficulties in learning mathematics online or on line. So that it becomes a trigger that learning mathematics online or online still has shortcomings and difficulties in how to use it and make good use of it.

This is evident from the tasks given by the teacher are still unable to be done online in accordance with the correct procedures. Based on the documentation of student assignments carried out by the researcher on the seventh grade student interview, the researcher saw that there were students who had difficulty learning mathematics, so that the researcher only took one research subject (one student) who was having difficulty learning mathematics online because there were still errors that occurred. done while doing the homework given. Researchers want to examine more deeply the "difficulties in learning mathematics students in online learning during the Covid-19 period". The purpose of this study is to analyze the impact of COVID-19 on students' math learning difficulties in online learning in schools.

RESEARCH METHODS

Research subject

The subjects of the research were Grade VII students of SMP Negeri 4 Bengkulu City in the even semester of the 2019/2020 Academic Year. This research activity was carried out on June 26, 2020 or around the end of June 2020. This research activity took place at home. Based on the results of interviews conducted on 1 grade 8 student at SMPN 04 Bengkulu City as one of the SMPNs implementing the 2013 curriculum in Bengkulu City, it was found that there were still many answers to problem questions for 1 student who became a reference for difficulties in learning mathematics online or online. . So that it becomes a trigger that learning mathematics online or online still has shortcomings and difficulties in how to use it and make good use of it.

Research Instruments

According to Gulo, the research instrument is a written guideline for question and answer, or monitoring, or a list of statements provided to obtain information. This instrument is called an interview guide, observation guide, or questionnaire guide (questionnaire) according to the method used (Gulo, 2000) . In this qualitative research , the most appropriate instrument to use in this study is an instrument in the form of an interview .

Data and Data Sources

Data or information collected in this study comes from data in the form of interviews with students. The data is sought and collected directly by the researcher, so that the main research is the researcher himself, assisted by an assistive instrument in the form of an interview guide instrument .

Sampling Technique

The sample in this qualitative research acts as a resource, participant, informant, and so on. The sample in this study was a class VII student of SMPN 4 Bengkulu City as a participant. The sample is referred to as a constructive sample, because the data source of the sample can be structured signs that were not very clear before.

Data collection technique

The techniques collected in the data this time, namely interviews and questionnaires. Which is where the researcher is a key instrument in qualitative research.

Data analysis technique

The data analysis technique in this study uses interactive techniques consisting of 3 procedures, namely *data reduction*, *data display*, and *conclusion drawing / verification*.

RESULTS AND DISCUSSION

Research Results (interview)

To see the results of further research regarding the difficulties of learning mathematics among students in online learning during the Covid-19 pandemic, an interview was conducted with one of the VII grade students of SMP Negeri 4 Bengkulu City, Muhammad Radja

Teacher: With what learning methods are used by schools? Is it with visuals (with pictures) or just audio?

Student: With Pictures

Teacher : Which method is preferred?

Student: With Pictures

Teacher : What are the difficulties in learning online?

Student: Sometimes I forget to make assignments

Teacher : Do you have your own cellphone or android?

Student : have

Teacher : Does your android have signal interference?

Student : yes, sometimes

Teacher : Is your data package provided for free by the school or purchased by yourself?

Student : buy yourself

Teacher : Are you given homework assignments every day by the teacher per field of study?

Students : sometimes given per week

Teacher : Should the assignments be submitted to be on time and in a hurry?

Student : on time., But never rushed once

Teacher : Are you stressed because you have to do your assignments on time?

Student : no

Teacher : Do you focus on studying at home or at school?

Student : At school

Teacher : Does the teacher explain the lesson as in the classroom?

Student : no

Teacher: Does the teacher understand using google classroom, e-learning, whatsapp, zoom, or etc.?

Student : Understood

Teacher : Do your parents help you with online learning?

Students : sometimes

Teacher : Do you have difficulty communicating and collaborating on assignments online?

Student : no

Teacher : Do you have difficulty focusing on studying at home? If it doesn't focus, why?

Student : Yes, lack of focus. Because sometimes or there are other odd jobs

Teacher : Can you study independently because learning in each subject is done online?

Student : can

Teacher : Do you have difficulty remembering the information provided by the teacher, especially the abstract one?

Student : no

Teacher : What was the role of your parents in helping with online lessons during the Covid-19 pandemic?

Student : Care

Teacher : How should government action facilitate online teaching and learning?

Student : If possible, the network will be made smoother

Teacher : What do you suggest to make online learning more fun and fluent, and also more understandable?

Student : When studying online, bring friends to chat so you don't get bored if you have trouble asking friends for help.

Research discussion (interview)

Difficulty

Based on the results of an interview by one of the students of SMPN 4 Bengkulu City named Muhammad Radja, there were several difficulties faced by students in online learning during the Covid-19 pandemic , namely:

Difficulty in Learning Mathematics

Based on the results of an interview by a student of SMPN 4 Kota Bengkulu named Muhammad Radja, he experienced difficulties in learning mathematics online, such as forgetting to do assignments during holidays or when there is free time (empty).

Difficulty focusing on learning Mathematics

Based on the results of an interview by one of the students of SMPN 4 Kota Bengkulu named Muhammad R adja, he had difficulty focusing on learning mathematics online or online at home, due to limitations in the network or having a little signal interference , and / or it could be while there is work anything else was done to him.

Internet network difficulties

Based on the results of an interview by a student of SMPN 4 Kota Bengkulu named Muhammad Radja, he experienced problems with the internet, such as network or signal disruption in any condition or experiencing a quota that was often drained and inadequate. So, he does not get internet access and serves online or online learning properly.

Solution

1. As a teacher or educator, of course, you have to provide a good understanding to students as students regarding mathematics learning that is carried out online in a situation during the

Covid-19 pandemic., So that the material presented by the teacher, students must really understand and be understood in the online mathematics learning material.

2. Students must be even better at learning mathematics online in a situation during the Covid-19 pandemic. and when the teacher explains or provides explanation of mathematics subject matter online, does not focus on other things. Because it can damage the student's own academic abilities.

3. In accessing the internet, of course to providers who work together related to education and teaching issues, in the future it must be able to improve internet network access services to a better and wider scope. So that online or online learning carried out by Gu Ru to students during the Covid-19 pandemic , can be maximized.

CONCLUSIONS AND SUGGESTIONS

From the results of an interview conducted with one of the students of SMP N 4 Bengkulu City regarding the difficulty of learning mathematics by learning online during covid-19, it can be concluded:

1. The difficulty of learning mathematics in online learning, of course, the teacher has not found a good method or way of learning to students. In the future, in this case, teachers as educators must provide good solutions to students regarding how to learn online properly and correctly, so that online mathematics learning becomes more comfortable and measurable, and well directed.

2. There are still deficiencies and obstacles in learning mathematics online or online, for example, quotas that are increasingly inadequate, or have not had access to a wider internet network. So, students in using the internet and online learning have not been maximal. Suggestions for the future, in this case, the internet providers in collaboration with parties related to education must be more maximal in serving the internet access network widely to the students themselves.

3. In this online learning, there are still problems with the students themselves, such as lack of focus in explaining learning material, or forgetting to make assignments. So that students do not understand what material has been delivered by the teacher or do not collect assignments on time. We recommend that parents always pay attention and guide their children or students in online learning. So, of course, when the teachers explain the material or give assignments, students become better understood and understood and can also do the assignments properly and on time.

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