The Effect of Use Of Blended Learning On Motivation To Learn Mathematics
With Collaborative Learning Media Whatsapp And Zoom In Class X
Mipa 3 Upt Sma Negeri 1 Parepare

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Abstract

This study aims to determine whether or not there is an effect of using the *blended learning* strategy in Math online learning via WhatsApp and zoom. This research method uses a qualitative descriptive method. The data in this study were collected through observation, interviews, and documentation. The results obtained indicate that online learning using the WhatsApp and zoom application with the *blended learning* strategy during the Covid-19 pandemic can provide more enjoyable learning so as to increase student enthusiasm and activity. The conclusion obtained from this study is that the use of the *blended learning* strategy affects online math learning via WhatsApp and zoom can be an alternative in online biology learning via Whatsapp in conditions that do not allow face-to-face learning.

Keywords: Blended Learning, Whatsapp, Zoom, Covid-19

INTRODUCTION

We all realize that the Covid-19 outbreak is a pandemic that affects activities in all fields, including education. This situation has become a challenge for all educational institutions, including UPT SMA Negeri 1 Parepare. In response to this, the Government has made a policy for every level of education to carry out face-to-face learning directly in classrooms and urges every school to carry out online learning (online). Through the initial observations delivered by the civil servant teacher, in this case Mrs. Sunarti, S.Pd., M.Pd. as a teacher in Class X MIPA 3, it was concluded that the learning media used by the school were WhatsApp and zoom applications. The application of WhatsApp and zoom applications initially became a problem for teachers, students and parents of students because most teachers, parents and students were not used to using these online learning media, especially in the technical operation of using the zoom program model, difficulty accessing the network, and there are many other obstacles.

However, when observing the reality that is happening, in Indonesia social media has become one of the main digital needs of the public. The current use of social media is not only as a medium of communication and information, but also as a medium for students to use social media in education. The growth of the world today is shown by the development of technology, it is undeniable that the presence of the internet has become indispensable in everyday life, both in social activities, learning, business, and so on. Without realizing it, the internet has now become a part of people's lives. The use of social media is increasing day by

day due to increasingly sophisticated digital growth and innovation, online learning is expected to make the teaching and learning process always run well.

Alternatives that can make it easier for students to take learning that are constrained in terms of face-to-face directly, in this study, indirect education is prioritized. E-learning education (online education) is part of distance learning which generally combines electronic technology and internet-based technology. But on the other hand, students are also not good if they only carry out online learning without direct coordination from educators. In line with what was stated by the Minister of Learning and Culture, in this case Mr. Nadiem Makarim, that there is a focus of attention on online teaching and learning activities at this time, one of which is the possibility of Lost Generation. For Mr. Nadiem this situation is very dire, because students will miss lessons. This is felt not only by one or two children, but also by a generation. Therefore, a new educational strategy is needed that does not only rely on online education. And the blended learning strategy is a matter that is very suitable to be applied, namely a combination of online and offline education.

The term blended learning was originally used to describe subjects that tried to mix face-to-face education with online education. Not only blended learning, there are other terms that are often used, namely hybrid learning. The term has the same meaning, namely a combination, mixing or a combination of offline and online learning. Umar assumes that educational media are tools, methods and techniques used as communication intermediaries between a teacher and students in order to make communication and interaction between teachers and students more effective in the learning process at school. ^[1]Research conducted by Suryadi in Sahidillah, et al (2019) explains that WhatsApp affects student learning discipline, so that student learning activities decrease and are weak in participating in learning.

There are many things that affect, such as the absence of direct contact between educators and students, direct communication is not established. Then we need other applications that support and learning strategies that will be used. Therefore, the practitioner collaborates on WhatsApp and zoom learning media. In order to equally cover the other's shortcomings. WhatsApp makes up for the shortcomings when learning on zoom. Likewise, zoom covers the shortcomings when learning through WhatsApp.

Not only that, it is well known that mathematics lessons are one of the lessons that are considered complicated by most students, so educators are required to be creative in improving the material to be taught through online education using the WhatsApp application with certain strategies so that student learning outcomes increase. . An increase in student learning outcomes can be obtained through an efficient and fun education.

Motivation is an internal process that activates, guides, and maintains behavior over time. There are many different types, intensities, goals, and directions of motivation. Motivation to learn is very important for students and teachers. Independent learning, refers to learning that comes from students' self-generated thoughts and behaviors that are systematically directed to the target

Therefore, the purpose of this research is to determine the effect of using blended learning on the motivation to learn mathematics with WhatsApp and Zoom collaborative learning media in class X MIPA 3 UPT SMA Negeri 1 Parepare.

The results of this research are expected to be an alternative option for educators in online learning mathematics through the WhatsApp application and zoom in on situations that do not allow full face-to-face education.

According to Larasati, et al (2013), WhatsApp is an application for instant messaging, and allows us to exchange images, videos, photos, voice messages, and can be used to share information and discussions. Larasati concluded that the use of the WhatsApp application as a means of learning discussion was included in the effective category .^[2]

METHOD

The type of research used is a qualitative research. Cresweel said that qualitative research is an approach or search to collect data and information with the encouragement of various library sources such as documents, books, magazines, and historical stories. The subject of this research is class X MIPA 3 with 36 students, at the UPT SMA Negeri 1 Parepare school. The purpose of this study is to describe how the influence of the use of *blended learning* on the motivation to learn mathematics with WhatsApp and Zoom collaborative learning media in class X MIPA 3 UPT SMA Negeri 1 Parepare. The online learning referred to in this study is learning that uses learning media that can be accessed using internet services, namely WhatsApp and zoom learning media. Data collection techniques used in this study are observation, interviews, and documentation.

RESULTS

The results of observations and interviews that have been carried out in class X MIPA 3 show that online education uses WhatsApp and zoom and by practicing blended learning strategies students are more enthusiastic, motivated and play an active role in following lessons with instructions given by practical students. The enthusiasm of students can be seen when practical students provide opportunities for students to ask questions, and students respond / actively participate in providing answers related to questions from their friends. In addition, student activity can also be seen from the number of messages that enter the WhatsApp group simultaneously and the student's response to the learning taking place, to ask questions first as well as when answering questions asked by their friends. Actively ask on zoom. It can be seen from the enthusiasm and activeness of students participating in online learning, it can be seen that there is an influence of emotional closeness/feeling.

Through the group feature on the WhatsApp application, students and students can carry out discussion activities. Usually, student practitioners provide learning material and then give students the opportunity to ask questions if there is something that is still not understood about the learning material provided, this discussion is somewhat monotonous and only some students are active. So that the discussion is not boring, the student practitioners try to use a *blended learning* strategy where this learning model is via online, namely meeting all students on WhatsApp and Zoom. As for via offline, namely a practical meeting with group leaders from 6 groups. The group leaders serve as mentors for members of each group. They are also given the task of coordinating the group members.

Besides using WhatsApp, the zoom application is also used. After holding an online meeting, the following week, instructing the leader of each group to come to school. Hold offline meetings with practitioners. The goal is to explain the main tasks of each group to coordinate its members. Provide external motivation to group members who rarely participate in online learning. The advantages of this strategy can increase critical attitudes in finding problems or things that are not understood and students' ability to express opinions. Another advantage is that the questions given by practical students make students interested and students' attention is focused on providing material, students' critical thinking power is honed by asking questions that they do not understand, including memory power and giving students the courage and skills to answer. and expresses his opinion without any inferiority, because he

already has a self-confident spirit. The method I use in learning is *Problem Based Learning*. By collaborating with the WhatsApp application with zoom. Via WhatsApp, the practitioner stimulates students' critical attitudes by raising problems at the beginning of learning. Sharing the PPT slides that have been made on November 1, 2021, don't forget to also share the links to the learning videos that have been prepared. Regarding the making of learning videos, the practitioner looks at references from google and youtube. Then instruct students to listen and record important points on the video.

Via zoom, the practitioner gives students the opportunity to ask questions. Regarding what things they did not understand from the PPT slides and learning videos that they had watched before. The practitioner will also explain the important points of learning. The material taught is solving a system of linear equations with three variables using the matrix method and in a contextual way. As for the procedure for doing it, namely: writing the questions / what is known, asked and answered; express the quantities in the problem as variables (denoted by letters) a system of equations. Use the x, y, z instance; formulating a system of equations which is a mathematical model of the problem (making a system of linear equations with 3 variables); determine the solution of the mathematical model of the system of equations obtained in step 2 (Use the matrix method); interpreting the results obtained according to the original problem (enter the values of x, y, z into the SPLTV to match the results).

After that, the practitioner will give group assignments. With a collection deadline of 15 minutes before the learning time runs out. Via WhatsApp, students begin to discuss the questions given by the practitioner. This is where the practitioner also assesses students who are active in discussion. Which students are active and which students are not. Because one of the assessments in the lesson plan is to monitor which students work together, are responsible, disciplined, and honest. Honesty here is more directed to the personal condition of students. For students who have never participated in practical learning, they will be contacted. After all participants have completed their group assignments, then one of the group representatives shares and presents the group's answers in the "MATHEMATICS X MIPA 3" group. And other participant members respond to the answers from each group. Of the many arguments that exist, the practitioner provides confirmation of answers and conclusions. Finally, the practitioner provides feedback to equalize the perceptions of students to match the objectives to be achieved in learning. I don't forget to coordinate with the civil servant teacher regarding the psychological condition of the students, during online learning.

(Figure 1) Praktikan condition the participant students to learn. Starting from reflecting back on students' understanding previously obtained, related to SPLTV with substitution, elimination and mixed methods, conveying goals (targets) to be achieved in learning and students being divided into groups and then making their respective wa groups (via online)

(Picture 2) Practical students distribute presentation slides (PPT) and learning video links (via online)

(Picture 3) Learning activities on zoom (via online)

From the observations made on Zoom, the students were quite enthusiastic in learning. They are quite active in answering when the practitioner asks questions.

The leaders of class X MIPA 6, I give directions to provide external motivation to their group mates. Because we can't deny, online learning has some obstacles. I instruct his group mates who are lazy to do their homework, whether it's due to an unsupportive network, to help their parents with their work. In order to always remember that the main task of students is to learn. It is hoped that in the final process of graduation the percentage of regrets is not high. The main task of the group leader is to act as a mentor in the group. As for determining the group leader, before doing the lesson I communicated with one of the students. Regarding who has a good mastery of mathematics, there are 6 people. Because the number of students there are 36 students, so each group there are 6 people.

Blended learning / hybrid learning strategies can provide a more enjoyable learning process and sometimes require control or ability in the preparation of speaking contexts and it is sometimes quite boring if it is not filled with jokes or interesting things. The application of the *blended learning* learning model in online mathematics learning activities has become more interesting in its application for students so that students are more motivated in learning and are also active in online mathematics learning activities that take place. Learners are fairly active in entering their opinions, whether it is in the form of giving sentences that they don't know which contain misunderstandings related to what is being discussed (teaching material) or answers that train students to dare to speak and grow students' confidence in their own abilities. In the results of the learning which took 3 weeks for 6 meetings, it can be seen that the learning went smoothly, while the motivation to be achieved could be seen from the results of the tasks given and the results of the responses that were returned. The average result obtained is 79,16667 which is included in the very good predicate.

CONCLUSIONS AND SUGGESTIONS

Conclusion

From the research conducted by practical students, it can be concluded that the use of *blended learning* strategies on student motivation has a good effect on online learning of mathematics via WhatsApp and zoom. Online learning using WhatsApp and zoom applications with *blended learning* strategies can make the learning process more fun so that learning mathematics does not seem scary and can increase student enthusiasm and activity. Thus, the use of *blended learning* strategies can be a suggestion or way for teachers in online learning mathematics via WhatsApp and zoom in conditions that do not allow full face-to-face learning (distance learning).

Suggestion

Suggestions given to other researchers, namely the use of *blended learning* strategies, researchers must pay close attention to what obstacles students experience when learning online. With the hope that the existing obstacles (obstacles) can be minimized as much as possible. And also the use of this strategy is very suitable for use in learning to

have a positive influence on motivation in online learning mathematics via WhatsApp and zoom and can be an alternative in online learning via WhatsApp and zoom in conditions that do not allow face-to-face learning. It's just that it needs to be considered again whether the students have a good signal to do online class learning. For offline meetings, it is enough to bring in a group leader as a representative from each existing group.

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