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OBSTACLES FOR MIDDLE SCHOOL STUDENTS IN ONLINE LEARNING THROUGH THE *GOOGLE CLASSROOM (GCR)* APPLICATION

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Abstract

Distance learning through the Google Classroom application is the main alternative for seventh grade junior high school students during the COVID-19 pandemic. However, there are many obstacles faced by students during the learning process. This study aims to identify the obstacles experienced by seventh grade junior high school students when participating in post-COVID-19 learning through the Google Classroom application. The research method used is qualitative with data collection techniques through interviews and observation. The results showed that the main obstacles experienced by students were limited internet access, lack of motivation and self-discipline, and difficulties in understanding the material being taught. In overcoming these obstacles, students need support and assistance from parents and teachers. Therefore, more intensive efforts are needed to provide adequate infrastructure and necessary training for students and parents to be able to take part in distance learning properly through the Google Classroom application.

Keywords: *google classroom*, online learning, the obstacles

Abstrak

Pembelajaran jarak jauh melalui aplikasi Google Classroom menjadi alternatif utama bagi siswa SMP kelas VII selama pandemi COVID-19. Namun, banyak kendala yang dihadapi oleh siswa selama proses pembelajaran. Penelitian ini bertujuan untuk mengidentifikasi kendala-kendala yang dialami oleh siswa SMP kelas VII saat mengikuti pembelajaran pasca COVID-19 melalui aplikasi Google Classroom. Metode penelitian yang digunakan adalah kualitatif dengan teknik pengumpulan data melalui wawancara dan observasi. Hasil penelitian menunjukkan bahwa kendala-kendala utama yang dialami oleh siswa adalah keterbatasan akses internet, kurangnya motivasi dan disiplin diri, serta kesulitan dalam memahami materi yang diajarkan. Dalam mengatasi kendala-kendala tersebut, siswa membutuhkan dukungan dan bantuan dari orang tua dan guru. Oleh karena itu, dibutuhkan upaya yang lebih intensif dalam menyediakan infrastruktur yang memadai dan pelatihan yang diperlukan bagi siswa dan orang tua untuk dapat mengikuti pembelajaran jarak jauh dengan baik melalui aplikasi Google Classroom.

Kata kunci: google classroom, kendala-kendala, pembelajaran online

INTRODUCTION

A quality education system can be seen from a process perspective, if the learning process takes place effectively and is supported by adequate resources, optimal quality learning outcomes will be produced (Leu & Price-Rom, 2006). However, what is happening now is that the world is being hit by an epidemic *Corona Virus Disease* (Covid-19). This virus can be very contagious quickly and has expanded to various countries, including Indonesia. The Covid-19 pandemic has had a major impact on all sectors of life in Indonesia, one of which

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is the education sector. The pandemic forced the world of education to get out of the comfort zone

During the Covid-19 pandemic, the learning system in Indonesia became less focused. The learning process carried out by students is not paid enough attention to both the learning aspects and aspects of the students' own understanding of the material presented by the teacher. One of the factors that caused this was because they were not used to the education system that was implemented during the Covid-19 pandemic (Suripah, Abdurrahman, et al., 2022)

The absence of face-to-face classes requires teachers and students of mathematics education to maximize the use of methods *elearning* and *distance learning* (Amelia & Sthephani, 2022). The government's decision in dealing with Covid-19 in the field of education is the learning process using an online system at home. The Indonesian Ministry of Education issued a 2020 Minister of Education Circular Letter No.4 concerning 'Implementation of Education Policy in the Emergency Period of the Spread of Covid-19". The circular letter explained that the learning process in schools was replaced by using an online system at home.

Online learning is learning that can be done anytime and anywhere *online* or remotely using information technology and a variety of applications supported by an adequate internet connection (Aptriyana, Lestari, & Januardi, 2021). Online learning is learning that is carried out without face to face directly through *platform* available. All forms of learning materials are distributed randomly *online,* communication *online* and tests are also carried out *online* (Lin, Jin, Zhao, Yu, & Su, 2021).

Factors that are the key to successful online learning are the availability of facilities and infrastructure (Fauzi & Khusuma, 2020). This online learning system is assisted by several applications, such as *Google Classroom, Google Meet, Edmudo* and *Zoom* (Pratama & Mulyati, 2020). These applications can help teachers convey learning material and facilitate the learning process. *Google Classroom (GCR)* act as a learning medium *online* which used by teachers, lecturers, students, and students to share *file* in teaching and learning activities. *GCR* can be accessed in two ways, namely via *website* and non-paid applications.

GCR helps teachers quickly and easily create and organize classwork effectively provide direct feedback to students and communicate with students without time and time

constraints. *GCR* regarded as *platform* best way to improve teacher performance. *GCR* provides very useful facilities that students can use. *GCR* help teachers organize lessons using time and improve the quality of communication with students (Latif, 2016). It is hoped that online learning will be effectively applied during the Covid-19 pandemic as a solution so that teaching and learning activities can continue even though conditions do not allow for face-to-face learning in the classroom. However, in practice, online learning that seems sudden causes sub-optimal preparation, especially in mathematics.

Mathematics is a science that is very necessary in human life, because from mathematics students are trained to be able to think systematically, logically, critically and be able to solve the problems they live in real life (Yunitasari, Sahrudin, Kartasasmita, & Prakoso, 2019). Mathematics needs to be taught to students starting from the elementary school level of education to the tertiary education level. This shows that mathematics as a subject has an important role, both in terms of thinking about mathematics to train students to become qualified and its use in everyday life.

One of the mathematics materials for seventh grade junior high school students is the One Variable Linear Equation System (SPLSV) material. A system of one-variable linear equations is an open sentence that has only one variable raised to the first power and is connected by an equal sign (=). To solve problems in SPLSV generally model these problems into mathematical sentences first. This one-variable system of linear equations is very important because it is the basis for other mathematical subjects, such as algebra. In this algebraic calculation, it is often applied in everyday life, so it is very useful to learn it.

Based on the results of initial observations conducted at SMPN 34 Pekanbaru, it was found that the use *GCR* as an online learning tool is still not effective, this is because when online learning uses an application *GCR* there are obstacles experienced by teachers and students, namely the internet network which is less stable when students or teachers are accessing it GCR*,* the limited ability of parents of students to buy internet package quota for their children because the required quota is also quite a lot so there are still many students who do not enter into the application *GCR* to participate in learning, lack of education regarding the use of technology in learning so that it makes it difficult for students to use the application GCR, as well as not all students who have *smartphone* to be able to access GCR.

Several researchers have conducted an analysis of online learning using applications *GCR*. Zulherman et al., (2021) analyzes the usage situation *GCR* on physics online learning and the results obtained that use *GCR* in learning physics has advantages and disadvantages. The advantage is that teachers can use various types of media in the learning process. The drawbacks include the teacher's difficulties in presenting physics material and students having difficulty understanding the material so that it has an impact on the low ability of students. Research conducted by Asrivi, (2020); Fatmahanik, (2021) analyzes the supporting and inhibiting factors of online learning through *GCR* in the Integrated Thematic learning course for PGMI IAI Bakti Negara Tegal students during the Covid-19 pandemic. In this study it was found that students are the millennial generation who usually use accounts *GCR* can improve the understanding and character of student discipline and responsibility. The inhibiting factors are technical constraints such as device and network limitations.

Based on the relevant studies above, it has been identified several deficiencies and inhibiting factors for online learning *GCR.* In this study, the focus will be on the constraints experienced by students when learning mathematics online. These constraints are then analyzed for the causative factors and solutions are sought so as to minimize deficiencies in the use of the application *GCR* in online mathematics learning.

METHODS

This type of research is a qualitative research that looks at students' constraints when using *Google Classroom (GCR)* on online learning. The approach used in this study is a descriptive approach. What is described is how the student learning process is during online learning and what obstacles students experience during online learning. This description will be directly observed by researchers through interviews and questionnaires filled out by research subjects. In this study the subject to be studied was class VII SMPN 34 Pekanbaru. This class is given treatment, namely web-based learning using *GCR* then given a questionnaire.

The selection of this class was based on the school's active implementation of online learning through GCR during the pandemic, and it was chosen purposively due to its representativeness in terms of student demographics, digital accessibility, and learning behavior. A total of 30 students participated as respondents, which is considered sufficient

for qualitative inquiry to capture diverse student experiences and to strengthen the credibility and trustworthiness of the findings through data triangulation.

The instrument used in this study was an instrument in the form of a questionnaire sheet which was used to determine students' constraints in participating in learning through applications *GCR*. Questionnaires will be given to students based online so that it saves more time and is more flexible. In this study there are three indicators that will be assessed including: (1) Technical obstacles; (2) The obstacles during the implementation of learning; (3) External factor obstacles. This questionnaire will contain 30 statements based on the 3 indicators with the following scale:

Table 1. Validation Sheet Category

Skor Penilaian	Kategori
4	Very agree
3	Agree
2	Disagree
1	Don’t agree

The data analysis technique used in this research is descriptive and quantitative with the help of Microsoft Excel. Data processing is obtained by calculating the percentage of each assessment indicator on the student's interest questionnaire starting from technical constraints, constraints during the implementation of learning, and external factor constraints. After getting the results of the data analysis, conclusions will be drawn from those that will be classified on the percentage scale criteria as below.

Table 2. Questionaire Score Criteria

Interval	Kriteria
0-20%	Wery weak
21% - 40 %	Weak
41% - 60%	Enough
61% - 80%	Strong
81% – 100%	Very strong

Source : (Octaberlina & Muslimin, 2020)

RESULTS AND DISCUSSION

Data related to junior high school students' obstacles in participating in Post-Covid learning through the *Google Classroom* (GCR) application obtained based on a questionnaire consists of three indicators, namely: (1) Technical obstacles, (2) The obstcles during learning implementation, and (3) external obstacles. The results of the questionnaire data analysis are presented in Figure 1.

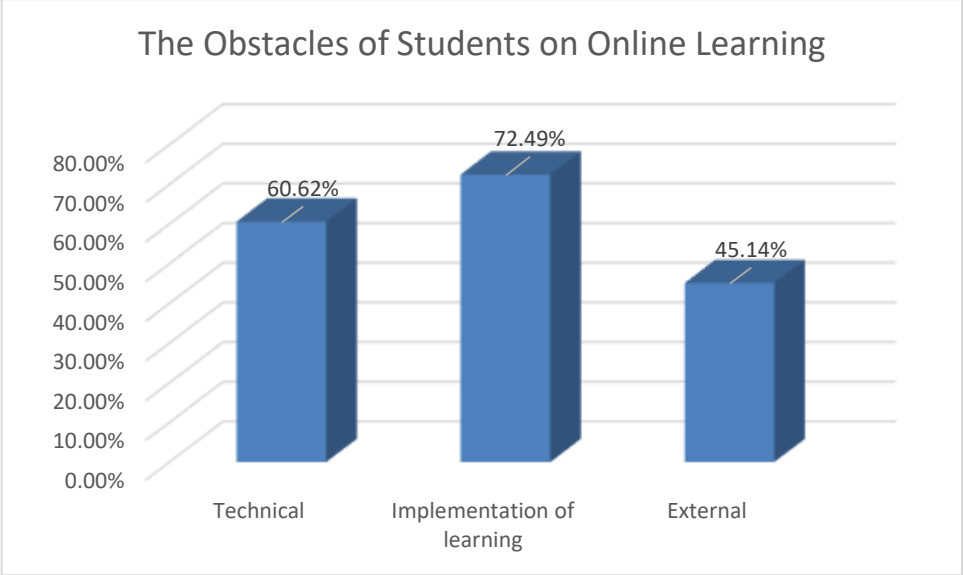

Figure 1. Percentage Diagram of Student Obstacles Analysis Results

Based on Figure 1, it can be described the obstacles of SMP Negeri 34 Pekanbaru students in participating in learning using the GCR Application after Covid-19 as follows.

Technical obstacles. Based on the average percentage for statements indicating that technical obstacles to learning in mathematics are in the "Enough" learning difficulty category. When viewed from this percentage, it turns out that technical obstcles have contributed significantly to the implementation of online learning. This is also corroborated by the results of previous research by Asrivi, (2020), that technical obstacles related to learning can be overcome by students themselves, so that learning can continue.

Constraints during the implementation of learning. Based on the average percentage value for statements on the obstacle indicators when implementing learning is equal to 72,49%. This percentage figure is in the "Strong" criterion, meaning that the constraints when implementing student learning affect learning outcomes. This finding is in line with research results Proborini & Herawati, (2021); Simbolon, (2021), that obstacles when implementing learning often occur in the classroom. Especially if learning is not packaged in the right design.

The use of GCR, which is only used for assignments and delivery of worksheets, will make students bored. Students miss a normal classroom atmosphere that facilitates social interaction, both with friends and teachers (Wati, Jafone, & Amelia, 2021).

Based on Figure 1, external factor constraints fall into the "Moderate" category of learning difficulties, with an average percentage of 45.14%. These data indicate that external obstacles have a considerable impact on students' participation in online learning. One of the statements with a high percentage response is: "No one around me can help with online assignments." This suggests that one significant barrier is the lack of support from the surrounding environment during online learning. Such situations often occur when learning takes place outside regular hours. For example, at night making it difficult for students to seek help from friends or others who are unavailable. According to Ramanta & Widayanti (2020), one possible solution is to provide alternatives that allow students to complete assignments at times when assistance from others is accessible.

Several factors, such as limited internet access, lack of motivation, and difficulty in understanding the material, are interconnected and can provide valuable insights. Technical issues, such as unstable internet or device limitations, often lead to frustration and a lack of student engagement, ultimately reducing learning motivation. Low motivation then exacerbates the challenge of understanding the material, especially without direct interaction with teachers or collaboration with peers. These interrelated problems create a cycle of disengagement and learning difficulties. Addressing only one aspect may not be sufficient; a comprehensive strategy that simultaneously addresses accessibility, motivational support, and pedagogical clarity is essential to enhance the effectiveness of online learning through platforms like GCR. The learning process through GCR requires comprehensive integration of various interrelated aspects (Shalgimbekova, Smagliy, Kalimzhanova, & Suleimenova, 2024). Furthermore, to see the overall obstacles, data analysis can be presented in Table 2.

Indikator	Average Persentase (%)	Category
Technical obstacles	60,62%	Enough
The obstacles during the implementation of learning	72,49%	Strong
External factor obstacles	45,14%	Enough
Average	59,41%	Enough

Based on the questionnaire data as a whole, the students' constraints on the implementation of learning using GCR as an assistant in the online learning process shows a sufficient category of average results for all indicators, namely 59.41%. These results indicate that there is meaning in the quality of learning. The quality of learning faced as a result of the outbreak of the Covid-19 virus is a challenge in itself. Therefore, an alternative to online learning was chosen as a solution to the existing problem. This online learning process causes several aspects of the quality of education such as motivation, interest, and the quality of education cannot be achieved optimally (Sadikin & Hamidah, 2020; Sobana, 2020). Therefore, innovation and reconstruction are needed in the online learning process in order to achieve learning objectives (Susanti & Suripah, 2021).

Learning should not be stopped just for certain reasons. One of the means that can be used to facilitate students in online learning is through application *Google Classroom* (GCR). GCR is a very popular and widely used online learning platform by many schools and educational institutions. However, like other technology platforms, GCR is subject to technical difficulties that may affect the user experience. As stated Suripah, Firdaus, & Novilanti (2022)(Suripah, Firdaus, et al., 2022), some technical problems that may occur in GCR: Internet network problems, Problems with devices, Errors in the process of sending and receiving assignments, Problems with collaboration features, and Problems with scheduling. However, GCR regularly updates and improves their platform to minimize these technical issues. In addition, students and teachers can seek solutions to technical problems through the resources available in GCR or through the technical support team provided by educational institutions or Google itself.

Learning on GCR can provide many benefits, such as allowing students and teachers to interact online, share materials, and do assignments. However, as with other forms of learning, the implementation of learning on GCR can experience several obstacles. The following are some of the obstacles that may occur: Difficulty in understanding the material, Lack of social interaction, Lack of supervision, and Difficulty in providing feedback. However, these obstacles can be overcome by developing effective online learning strategies and utilizing the various resources available in GCR. For example, teachers can take advantage of interactive features such as learning videos, online chat, or video calls to increase social interaction and provide real-time feedback. In addition, teachers can also develop challenging

and creative assignments to motivate students and build independent learning abilities. However, there are still external constraints that may hinder the implementation of the process of using GCR.

External factors can also affect the implementation of learning in GCR. Some of the external factor constraints that may occur are: environmental conditions, technological limitations, natural disturbances, regulations and policies and health problems. To overcome the constraints of external factors, teachers and schools can develop strategies to accommodate the different needs of students, such as providing options to study in a quieter environment or providing alternatives to access materials learning. In addition, schools can also collaborate with local communities to ensure that students who are less fortunate have adequate access to technology and the internet (Fadhilah, Fitri, & Wibowo, 2021).

The three categories of obstacles technical, implementation, and external are not separate entities, but rather interconnected factors that collectively influence the success of online learning using GCR. Technical problems, such as unstable internet connections or device limitations, can directly disrupt the implementation process, making it harder for students to follow lessons or submit assignments. In turn, ineffective implementation may reduce student engagement and understanding, which can be further exacerbated by external factors like a lack of parental support or an unconducive home environment. These external conditions often determine whether students can access the technology needed to overcome technical issues or participate fully in online learning. Therefore, to improve the overall learning experience, it is essential to address all three types of obstacles in an integrated manner (Kabilan & Annamalai, 2022). A comprehensive strategy that combines technological readiness, effective pedagogical approaches, and strong external support systems will be key to minimizing learning disruptions and enhancing student outcomes in online settings.

CONCLUSION

Based on the results of the study, it can be concluded that class VII SMP Negeri 34 Pekanbaru students in participating in post-COVID-19 learning through the Google Classroom (GCR) application vary greatly. Some of the obstacles that students often experience include difficulties accessing the internet, limited devices owned, difficulties in understanding materials independently, and lack of social interaction between students and teachers. The

biggest obstacle experienced by students when learning using GCR was the obstacle during the implementation of learning, which reached 72.49% with strong criteria.

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