



Analysis of the Use of Learning Media Applications in Online Geography Subjects During the Covid-19 Pandemic for Senior High School Students

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ABSTRACT

Learning media applications are learning concepts that are carried out through electronic media networks in the form of mobile and non-mobile applications. The development of very advanced technology in the modern era and globalization allows various activities to be carried out quickly and efficiently. Technological developments have had a lot of influence on our way of life, one of which is in the field of education by using online or online learning media applications in learning activities in schools, colleges, courses and even online communities have started using concepts like this. The purpose of this study was to find out how the role of learning media applications in geography subjects in education was during the covid-19 pandemic. As we all know, the losses due to the COVID-19 virus have had a huge impact on all sectors, including the education sector. To achieve this goal, this research will use a qualitative research approach. This research is a type of qualitative descriptive research. Analysis of the data used in processing questionnaire data through google form by describing the results of the questionnaires distributed online.

Keywords: Covid-19 Pandemic, Learning Media Applications, Online Geography Subjects



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INTRODUCTION

In the industrial era 4.0, which prioritizes technology in various activities, none other than learning. Educators are required to be dynamic towards rapidly developing technological developments. If the teaching system used by educators is still conventional, it is feared that students will find it difficult to develop and follow the development of science and technology from around the world. By utilizing this technological media, it is very easy for educators and lecturers to convey their knowledge. Not only that, the use of technology media is also very useful for students to capture and understand lessons easily. Learning media based on Android applications and LMS is an alternative that can be used by schools and universities that consistently want to improve the quality and quality of education by utilizing information and communication technology, including SMAN 01 Karangpandan, Karanganyar is a public school that has used various learning media internet-based using Android and non-Android system applications. At the end of 2019 there is now a virus outbreak known as Corona Virus Disease (COVID-19) and it is spreading rapidly and reaching almost all over the world. The impact of the COVID-19 virus certainly has a big impact on the world of education because if people do not follow health protocols it will make the spread of this virus wider and take more victims, therefore the government recommends doing it online. online learning to reduce the number of victims due to COVID-19. COVID-19 (Sumantyo, 2020). Based on Circular Letter Number 15 of 2020 it is explained that Government Regulation Number 17 of 2010 concerning Management and Implementation of Education as amended by Government Regulation Number 66 of 2010 concerning Amendments to Government Regulation Number 17 of 2010 concerning Management and Implementation of Education; and Regulation of the Minister of

Education and Culture Number 33 of 2019 concerning Disaster Safe Education Units (www.kemendikbud.com). With this policy, the government recommends participating in online teaching and learning activities during the COVID-19 pandemic. This policy must be followed by all educational institutions and all schools in Indonesia. The existence of online learning makes all students and teachers not face to face. In accordance with the recommendations set by the WHO to carry out physical distancing and social distancing, the choice of teaching online is one of the learning methods currently being carried out by our country. With online learning, the role of smartphones, laptops and mobile internet becomes very important in implementing this policy. One alternative to control students is to use video conferencing applications such as zoom, google meet, Microsoft meetings and others according to the policies of each school and campus. In fact, many people use smartphones as online learning. The application of online learning requires the readiness of many parties, be it from education service providers or from the students themselves. (Daheri et al., 2020) argues "the changes forced by covid 19 are so fast. Causing the preparation to face change to be not optimal. So even though we have entered the 4.0 era, people are forced to understand technology as early as possible. The relocation of the conventional era to the age of network technology makes people stutter in technology. Lack of socialization and technical guidance introduces technology to conventional society. This is also felt by the world of education. Readiness to study online (online) set by the government is almost non-existent. Schools, in this case, teachers are required to try to be creative in learning so that it continues even though they are not in school. Known as online learning. However, it takes time to learn the learning system through these online learning platforms. If it is understood there is a possibility of having a positive impact on the learning process (Wiguna & Hajjafiani, 2021). However, online and distance learning requires the help of capable and easily accessible technology. In addition, students or students must also be ready to adapt to changes in learning arranged by schools and universities. Its role and effectiveness has greater power than a laptop or computer (Nugrahani et al., 2020). As we know that smartphones are now widely used in all circles, and also their easy use and many free access features that we can enjoy make this smartphone able to make students more interactive and more flexible in their use. E-learning was first introduced by the University of Illinois at Urbana Champaign by using a computer-assisted instruction system and a computer called PLATO. Since then the development of e-learning has been growing in line with technological developments and advances. On March 24, 2020, the Ministry of Education and Culture of the Republic of Indonesia issued Circular Letter Number 4 of 2020 concerning the Implementation of Education Policies in the Emergency Period for the Spread of Corona Virus Dosease (Covid-19), in the Circular. explain the Implementation of Home Learning Process (BDR). Face-to-face learning conducted at school/campus is shifted to online learning from home. The change in the learning process from face-to-face (offline) to online (online) is a challenge for lecturers in the Biology Education Study Program to change teaching strategies and learning media. (Sadikin & Hamidah, 2020) One form of lecture that can be used as a solution during the COVID-19 pandemic is online learning. Lecturer and student interactions occur virtually (online) through various available applications such as Whatsapp groups, Zoom meetings, Google Classroom with various advantages and disadvantages. There are still many students who experience problems in implementing the online system (Situru, Roberto, 2020). This is in line with (Ahmad et al., 2020) which states that in conducting online learning there are many factors that become obstacles in its implementation, including; 1) the condition of the area where the school is located that has an unstable internet network, 2) the lack of experience of teachers in the online learning process even never do it, 3) the average student does not have an android phone, 4) the lack of students' financial ability to buy quotas. Learning exposure must be effective, interactive, holistic, scientific, collaborative, and student-centered. Learning will be effective if during the learning arrangement it is assisted by using appropriate models, approaches, strategies, methods, techniques, and media according to the type or character of the subjects intended to obtain predetermined learning outcomes. According to Daulay (2014) effective learning is learning that produces useful and

purposeful learning for students through the use of appropriate procedures. (Sholihannisa & Juliawati, 2020) So far, smartphones have become a primary need for all people, because currently there are many smartphone brands that offer a variety of varied and appropriate prices so that they suit their tastes and needs. fast. This role is also very helpful for teachers to overcome the problems they face today. The aim of this research is to find out the analysis of the use of online learning media applications in geography and i subjects during the covid-19 pandemic in 11th grade students at sman 01 Karangpandan, to find out the obstacles faced in the use of learning media applications in geography online subjects during the covid-19 pandemic. 19 for 11th grade students of SMAN 01 Karangpandan.

METHOD

The research method used is descriptive quantitative method with data retrieval done through online questionnaires using google form to class XI IPS SMAN 01 Karangpandan related to the implementation of online learning. The subjects of this study were 80 students who had done online learning on geography subjects. Data analysis in this study was carried out through three activities that occurred simultaneously, namely data reduction, data presentation, and drawing conclusions or verification. Qualitative data analysis is a continuous, iterative and continuous effort. The problem of data reduction, data presentation, and drawing conclusions is a series of analytical activities that follow each other.

RESULTS AND DISCUSSION

Analysis of the use of learning media applications in online geography subjects during the COVID-19 pandemic in class XI students of SMAN 01 Karangpandan.

Distance or online learning is considered no better than face-to-face learning (Fojtík, 2018). Lack of effective interaction, lack of organization is one of the barriers to distance learning, effective distance learning must of course be supported by the content provided, internet connection facilities and considerable attention and availability (Buselic, 2012). Therefore, the use of learning media applications in its application affects the learning and thinking that occurs. The use of non-interactive and unattractive learning media will make it difficult for students to increase their learning motivation, so that the learning media used must be interactive and interesting to produce good student achievement. Special attention in the implementation of distance learning, such as in remote areas or areas that do not have an internet connection and limited ownership of technology must be a big obstacle because educators and schools do not have adequate facilities and facilities for the distance learning process. In addition to these platforms, there are other digital platforms that can be used during learning, including Whatsapp Group (WAG), Google Classroom (GC), Edmodo, and Zoom (Rachmawati Yuanita, 2020). The selection of applications or online learning media is to help students experience the distance learning process without having to meet face-to-face, as well as to reduce the impact of the spread of the Covid-19 Virus. This study explores the difficulty and ease of using online-based applications for students as users. Students are directed to submit criticisms and suggestions, respond and respond as well as opinions on a fact in interesting language, usually based on one's personal experience, during the implementation of distance learning using online-based learning. So according to this researcher, according to the current educational situation, this research aims to find out from the perspective of students as users of online learning with online applications. Based on the results of interviews with students, it is known that the average answers from students during interviews are of the opinion that online learning using the Whatsapp application is very helpful and effective. Students are also happy when learning using the WhatsApp application. Researchers took several quotes from students who were interviewed, firstly, students can do two or more jobs while studying, secondly if they use WA,

students can help ease the burden on parents from an economic point of view and in terms of daily work, thirdly, they are not too burdened with quota fees, the fourth material Material files are automatically saved so that if you want to learn at any time you can use them properly. Those are some quotes from respondents, namely students when using WA in lectures (Wiguna & Hajjafiani, 2021). The following is a questionnaire analysis of the use of learning media applications in geography subjects at SMAN Karangpandan:

Table 1. Questionnaire Analysis of the Use of Learning Media Applications in Online Geography Subjects During the Covid-19 Pandemic (Section of Application Types and Understanding of Geography Teaching Materials)

No	Questionnaire	Student Response	Number of Respondents	Persentase
1	What applications do you often use in online learning?	Zoom	4	5%
		Google Classroom	23	26%
		Whatsapp Grup	50	57%
		Google Meet	10	11%
		Total	87	100%
2	What underlies the use of these learning media?	Teacher/teacher's decision	52	60%
		Class decisions	3	3%
		Study group decisions	2	2%
		Teacher and class decisions	30	34%
		Total	87	100%
3	How well do you understand the learning materials delivered through the media	Very Understand	1	1%
		Understand	13	15%
		Understand enough	57	66%
		Do not understand	13	15%
		Really Don't Understand	3	3%
		Total	87	100%

It can be seen through the questionnaire analysis table, that there are 4 applications used for learning media in geography subjects, namely Zoom by 5%, Google Classroom by 26%, Whatsapp Grup by 57%, and Google Meet by 11%. It is known that there are 2 applications that are often used in online learning, namely Google Classroom and Whatsapp Grup. Application selection is based on the agreement taken through teacher decision making by 60% and teacher and class decisions by 34%. The google classroom application as a learning medium during the pandemic is considered very good because its use is effective and efficient and can be done anytime and anywhere, is practical to use, and can improve learning outcomes. However, the use of Google Classroom must be balanced

and adjusted to a good internet connection, this is also a problem if there is a delay in submitting assignments due to a slow connection. Google Classroom offered by G-Suite for Education has been widely used by internet users because of its enormous benefits. In terms of paper efficiency, user flexibility, a simple and attractive interface, and a relatively easy process of organizing tasks by teachers/instructors are the basic reasons why users take advantage of this platform. Another advantage is that there are several features offered that are very familiar to users because this platform was developed by Google itself and is integrated with other applications that support online learning. There are various excellent features offered by the Google Classroom learning platform. WhatsApp is an application on smartphones whose current existence is very important. This communication application is one of the most widely used communication applications today. In this online learning condition, of course, this application is quite popular and easy to use so that almost every teacher uses the application in online learning. In terms of discussing geography teaching materials online through 2 applications, it was found that students did not experience difficulties in receiving teaching materials, this can be seen from the results of the questionnaire by 66% in the category of quite understanding, of course this is supported by the adaptation of the suitability of teaching materials that are optimized in 2 applications. . Not all geography teaching materials can be explained or discussed through google classroom and whatsapp grub because there are some materials that need to be done face-to-face in class to touch the core of teaching materials to students. (Susilowati, 2020) calls for an application that is simple and does not require a large quota that can be used for online class implementation. The researcher chose the WhatsApp application because Karen was familiar, lightweight, saving quota, easy to use by teachers and students. One of the features contained in the Whatsapp application is Whatsapp Group. This Whatsapp Group is used in the teaching and learning process between teachers and students. In providing material, and the task of this WhatsApp application is quite helpful, it's just that for large-capacity document or video files, this WhatsApp application is not able to match it. The WhatsApp application is very helpful for teachers and students who are in remote areas and in rural areas, where the coverage of the signal network is very weak, but the advantage of this WhatsApp application is that it is able to reach remote areas. So that teachers and students who are in the interior are greatly helped by this application. In essence, this whatsapp application is not an online learning application but is a daily communication application. But from the features available this whatsapp application can also be used for the online learning process. This means that almost all lecturers who teach online in biology education study programs use the WhatsApp Group and Google Classroom applications. Both of these applications are quite popular and relatively easy to apply and can be used only in 3G network conditions. Unlike some other applications that require a 4G (high speed) connection to be used (Irfan & Ariandi, 2021). The next widely used digital platform is Google Facilities. There are three Google facilities that can be used when learning online, namely Google Classroom, Google Form, and Google meet. Google Classroom is an application created by Google that aims to make it easier for teachers and students to carry out learning. This Google Classroom helps teachers easily manage learning and convey information precisely and accurately to students (Barir Hakim, 2016). Utilization of online learning facilities is carried out by using several digital platforms which are widely available with various features in accordance with the interaction objectives to be achieved. The most frequently used digital platforms in elementary online learning include Whatsapp groups, Google Facilities (Google Classroom, Google Forms, and Google meet) and Zoom Cloud Meetings. 4 apps become apps. Most students feel motivated and helped even though they are facing the corona pandemic which forces them to continue to study from home. The applications mentioned above can be used by lecturers and students as teaching media today and even in the future. This is supported by previous research where the results of the study show that the pattern of teacher- and lecturer-centered teaching has shifted to student-centered learning, so that mobile devices with applications that are easily accessible and flexible can motivate students to study independently and does not depend on teachers or lecturers (Wilson, 2020). Google

Classroom offered by G-Suite for Education has been widely used by internet users due to its enormous benefits. In terms of paper efficiency, user flexibility, a simple and attractive interface, as well as the relatively easy process of organizing assignments by teachers/instructors are the basic reasons why users take advantage of this platform. Another advantage is that there are several features offered that are very familiar to users because this platform was developed by Google itself and is integrated with other applications that support online learning. There are various excellent features offered by the Google learning platform.

Constraints faced in the use of online learning media applications for geography subjects during the covid-19 pandemic for class XI students of SMAN 01 Karangpandan.

The spread of the corona virus initially had a major impact on the world economy which was starting to sluggish, but now the impact is also being felt by the world of education. The policies taken by many countries, including Indonesia, by canceling all educational activities, have forced the government and related agencies to present alternative educational processes for students who cannot carry out the learning process that takes place in schools. Activities involving community groups are now starting to be limited, including learning activities in schools. Schools also need to force themselves to use online media, so that the online learning process or distance learning can take place well. However, the use of technology is not without problems, there are many obstacles or obstacles that hinder the implementation of the effectiveness of learning with online methods, including: information that occurs, which is seen from the condition of teachers in Indonesia not yet fully able to understand the use of technology (Andriani, 2015). The online learning process at SMAN 01 Karangpandan is not without problems. The condition of the Karangpandan area which in general has not been supported by stable internet services from all providers, the condition of students who are still not familiar with online learning to the availability of online learning infrastructure. There are several problems or obstacles faced by students in the implementation of distance learning, such as costs, learning motivation, services, feedback, lack of experience and habits (Kumar Attri, 2012). Another obstacle faced by students is the lack of active participation in learning, limited supporting facilities and internet network access (Asmuni, 2020). Therefore, lecturers in determining the use of online learning applications really consider the condition of students. This is what underlies most online learning conducted by Biology education lecturers at the University of West Sulawesi using the WA Group and Google Classroom applications (Irfan & Ariandi, 2021).

Table 2 Questionnaire Analysis of the Use of Learning Media Applications in Online Geography Subjects During the Covid-19 Pandemic (Online Learning Barriers Section)

No	Questionnaire	Student Response	Number of Respondents	Persentase
1	How many obstacles did you face during online learning with these media?	So many problems	6	7%
		Many problems	13	15%
		quite a lot of problems	33	38%
		little problem	34	39%
		No problems at all	1	1%
		Total	87	100%
2	What are the most	Difficult Network Signal	33	38%

common obstacles in online learning?	Limited Internet Quota	33	38%
	Insufficient device	3	3%
	Disturbed by activities outside of learning	18	21%
	Total	87	100%
3 Which learning media do you want to use in online learning?	Zoom	4	5%
	Google Classroom	23	26%
	Whatsapp Grup	50	57%
	Google Meet	10	11%
	Total	87	100%
4 The reason why you use the learning media you chose in no.3?	No need strong signal network	14	16%
	Using minimum internet quota	25	29%
	Does not require high device specifications	15	17%
	It's easier to focus on using media	33	38%
	Total	87	100%

It can be seen from the table data above, it is known that the intensity of obstacles during online learning is 38% in the quite a lot category and 39% in the less category, these numbers represent 33 students who chose quite a lot and 34 students were not many of the total 87 students as respondents. Broadly speaking, it can be concluded that quite a lot of students experience problems during online learning. The obstacles faced by these students are the lack of active participation in learning, limited supporting facilities and internet network access. This is also in line with the results of the questionnaire analysis on problems that are often encountered in online learning, namely the difficulty of the network or signal and the limited quota with the same percentage of 38%. The number and variety of online learning media applications also demands new needs, namely the availability of networks and internet quotas. This obstacle also has an impact on parents, namely additional costs for purchasing internet quota, poor signal access and lack of knowledge in operating online learning applications. Information technology constraints limit the use of online media, as well as teachers whose conditions may be almost the same as students, especially in the need to run online applications and understand the use of technology. So, the support and cooperation of parents for successful learning is needed. Communication between teachers and schools with parents must be established smoothly. In addition to information about the obstacles faced by students, through a questionnaire on the use of online learning media applications, results were also obtained regarding the applications that students wanted the same as those often used by teachers in online learning. The application is Whatsapp Grub with an achievement of 57% by reason of using a minimum internet quota of 29% and it is easier to focus on using media by 38%. Whatsapp Grub was chosen not without reason, indeed this application is very easy to use and uses very little quota compared to the zoom and google meet applications. In order for the online learning process to run smoothly the teacher must guide the learning first, in online

learning students actually prefer it because learning is more interesting, makes students curious in the process, makes students active. But sometimes they find technical problems and obstacles from students, especially students who don't do assignments on the grounds that they don't have supporting technology facilities such as smartphones because the students' parents can't afford it or there is only one at home so they take turns with their other families. signal where they live, and the absence of an adequate pulse. Therefore, the teacher's role in determining the use of online learning applications is very important for smooth online learning and the role of parents and students in supporting the learning process is very important. Distance learning is considered no better than learning that is carried out in person or face-to-face (Fojtik, 2018). Lack of effective interaction, lack of organization is one of the obstacles to distance learning, effective distance learning must of course be supported by the content provided, internet connection facilities and considerable attention and availability (Buselic, 2012). Therefore, the use of learning media in its application affects the learning and thinking that is going on (King et al., 2001). There are generally online learning applications that are used to influence student learning interest. Most students prefer the Whatsapp and Google Classroom applications because they do not take up too much quota and have a positive impact on improving learning outcomes, interest and motivation of students in learning and fostering creative attitudes in students. During online learning, students often experience obstacles such as unstable internet networks, the number of tasks given, difficulty focusing and complicated applications, so that students are more happy with face-to-face learning. Basically, during this pandemic, students miss school, miss real interactions in the learning process and not just the transfer of materials and assignments from the teacher to their students during online learning. Online learning should not only be oriented to providing material and learning targets but also to be oriented towards the personal approach of the teacher to his students, both emotional and cognitive approaches (Kristina et al., 2002).

CONCLUSION

That there are 4 applications used for learning media in geography subjects, namely Zoom by 5%, Google Classroom by 26%, Whatsapp Grub by 57%, and Google Meet by 11%. It is known that there are 2 applications that are often used in online learning, namely Google Classroom and WhatsApp Grub. The selection of applications is based on an agreement taken through teacher decision making by 60% and teacher and class decisions by 34%. It can be seen from the table data above that it is known that the intensity of obstacles during online learning is 38% in the quite a lot category and 39% in the less category, these numbers represent 33 students who chose quite a lot and 34 students were not many of the 87 students as respondents. The application chosen according to the student's wishes is Whatsapp Grub with 57% achievement on the grounds of using a minimum internet quota of 29% and it is easier to focus on media use by 38%.

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