

## THE UTILIZATION OF EDUCATIONAL TECHNOLOGY BASED ON ZOOM MEETING AND GOOGLE CLASSROOM IN THE PANDEMIC ERA: Study at SMPN SATAP Lontar Serang Regency Banten Province

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**Abstract:** This research aims at how Zoom Meeting and Google Classroom media are used as technology media that could be a learning solution in this Covid-19 era. The method used in this study was based on qualitative research based on case studies, where the authors analyzed the collected data to be used as primary data sources in further research. The problem faced by institutions during the pandemic was that there were still most students who did not have adequate communication tools and internet network access. The ineffectiveness of using Zoom Meeting and Google Classroom learning media at the One Roof Middle School in Lontar was caused by the economic level of the parents of students, most of whom rely financially on seafood, so that most of the students found it difficult to provide supporting infrastructure for online learning. In addition, there were still many students who were clueless in the field of information technology (IT), making it difficult for them to operate the two online learning platforms.

**Keywords:** Zoom Meeting; Google Classroom and Educational Technology.

### INTRODUCTION

Corona Virus Disease 2019 has succeeded in changing the entire society and even has its impact on the world of education. The process of teaching and learning activities that were previously carried out as usual has now been stopped which aims to prevent us all from being

exposed to this type of virus. In this case, the government issues various policies and steps that can be taken so that the teaching and learning process can continue to the maximum. The termination of the teaching and learning process in question is the government's step in developing the teaching and learning process using the distance learning model. One of them is by using an online-based educational platform.

Government policies as reported in The Ministry of Education Number 2 of 2020 and Number 3 of 2020 on the handling and prevention of Corona Virus Disease 2019 requires all educational institutions to implement the entire process of teaching and learning activities carried out online. With these regulations, the process of teaching and learning activities that were previously carried out face-to-face are now transformed into online learning or distance learning. This change certainly provides a new experience for all students who were not familiar with this type of learning at all.

In fact, distance learning is a learning that effectively separates students and educators. Distance learning pattern refers to Law Number 20 of 2003 article 1 paragraph 15 which states that distance education is an education that separates students and educators so that in learning using learning resources in this case

communication technology and other media. Distance education is also known as e-learning.

E-learning has developed since the 1970s (Waller, V. and Wilson, 2001). E-learning is a distance learning which in the process uses computer technology and also utilizes the internet network to support the learning process. E-learning can also be interpreted as web-based learning so that it can be accessed through the internet network. In addition, e-learning is a distance learning concept so that e-Learning in its implementation is expected to have a positive influence for students to be active in learning anytime and anywhere (Dahiya et al., 2016).

In the process of implementing, e-learning requires a variety of applications to support the implementation process such as Zoom Meeting, Google Form, and Google Classroom, which can mediate educators with students especially in terms of space and time. With the implementation of e-Learning, educators and students do not have to be in one dimension of space and time in the learning process (Dahiya et al., 2016).

Since the publication of new policies on the education process that requires the teaching and learning process to be conducted online, of course, the implementation cannot run as expected. If we talk about learning done online of course we need media as a supporting tool or as a means of learning. Therefore, there are many platforms that are used as learning media by schools such as Google Classroom, Zoom Meeting, Edmodo, Rumah Belajar, Sekolahmu, Ruang Guru, Google Suite for Education, Kelas Pintar, and Microsoft Office 365 for Education (Daheri et al., 2020). There are many

schools themselves that use the following platforms to support the teaching and learning process, namely Zoom Meeting, Google Classroom, Google Form, WhatsApp, and Google Meet. From the various platforms mentioned above, the most widely used platforms in schools in supporting the online teaching and learning process are Zoom Meeting, and Google Classroom.

The ongoing online learning is certainly a new thing for students. The advancement of information and communication technology in this era certainly has a big impact on the scope of education. In the current pandemic period, of course, all parties involved in education at least get a solution to continue the teaching and learning process. By utilizing the advancement of information and communication technology, the learning process can be carried out even in the current pandemic era. This is certainly expected by many parties, especially in this case the parents and students who always expect that the teaching and learning process continues to be carried out. In addition, it is also expected that the implementation of online learning can be applied in all corners of the archipelago. In other words, students who are scattered in various regions can feel the progress of information and communication technology so that the previous learning is carried out face-to-face and then transformed into online learning can be applied and enjoyed by students who are geographically located far from the urban center.

This online learning process is certainly a challenge for all parties, both for educators, students and even parents who always have to facilitate media in

supporting this online learning process. Parents inevitably facilitate their children with personal computers, laptops, smartphones and internet quotas so that they can participate in distance learning. This has certainly become a new order and habit that has developed in the community along with the pandemic period that until now does not know when it will end.

Many mention that the distance learning process is no less effective than the face-to-face learning process. This is because the online learning process is learning that utilizes video media to help students both in the formal and non-formal education process. Generation Z is a term for children born in the midst of sophisticated advances in information and communication technology so that they are able to use learning media (Lambuan & Letuna, 2019).

One of the apps that provides face-to-face interaction services between one person and another in this case is educators with their students, Zoom Meeting and Google Classroom. Both applications are applications that are often used for online learning media. These applications are long-distance communication media with a pattern of combining video conferencing and online meetings.

Education conducted online is certainly not only able to take place without obstacles. In fact, the learning process that is carried out online can take place and run to the maximum only for students who understand and understand about the advancement of technology and communication. However, there are certainly different conditions of online learning for students who live far from urban centers such as students who live on the coasts whose conditions when

compared to the conditions in the city. Therefore, in the implementation of online learning conducted for students who live on the coast often encounter obstacles in their implementation.

On the other hand, it has also been mentioned that various obstacles experienced by both students and educators in the process of distance learning during the pandemic is inseparable from the availability of supporting facilities and infrastructure. In solving the problem, many of the parties who self-sufficiency present various internet networks for free to be used by both educators and students (Sabiq & Sa'dullah, 2020). This is done because of the geographical location that has not been touched by the provider network.

Previous studies have suggested that education is simultaneously conducted with online learning models. This learning model is considered suitable when the covid-19 virus never stops in its spread. It has been mentioned that the learning process conducted using the Zoom Meeting platform and Google Classroom received good response from various students and almost 90% of them supported in their implementation (Solihin, 2020). In addition, it is also mentioned that the use of digital platforms Zoom Meeting and Google Classroom has brought convenience and is considered practical for the continuity of the online learning process. This is because educators and students can easily communicate orally through virtual (Haqien & Rahman, 2020). This research focused on how the fact of using online platforms in SMPN Satu Atap Lontar Serang regency where the learning process is not used to using online learning modes that use various types of online

platforms. Therefore, the learning process at SMPN Satu Atap Lontar Serang regency combines online learning and face-to-face learning. Of course this becomes the line of difference between other research and this research.

## **METHODS**

This study used a qualitative type of approach with the aimed of investigating the learning process of the participants of the situation and conditions. This research was conducted at SMPN Satu Atap Lontar which was located at Jl. Berangbang, Lontar, Tirtayasa District, Serang Regency, Banten Province, which was geographically located on the coast of Lontar Serang Regency. According to (Sugiyono, 2016), qualitative research was a research method used to research natural objects so that the method in this study was descriptive. Nazir (2017) mentioned that the purpose of descriptive methods was to create systematic, factual, and accurate descriptions, illustrations or depictions of facts, traits, and relationships between phenomena to be examined.

The approach in this study was a case study approach. Case study was a process of investigation or examination that took place in detail, in depth, and detail on a particular event. The selection of using this approach because the researchers concluded that by using a case study the study would find maximum results in answering the formulation of the problem formulated.

This research was conducted at SMPN Satu Atap Lontar, Tirtayasa, Serang. While the data sources in this study were primary data and secondary data. According to (Sugiyono, 2016) data sources were everything that could provide

information about a data. The primary data source was the teachers who were active in the learning process at SMPN Satu Atap Lontar, the participants of this study were pedidik personnel numbering 15 people while for the secondary data source was the students who were selected as reference samples and then could provide clear and accurate data. The total number of students at SMP Satu Atap Lontar was 142 then taken 15% of them to 21 students who were used as an accurate source of information. The selection of teachers and several students who were used as participants in this study certainly met the criteria that the authors had set, such as teachers who were engaged in the process of learning every day in the pandemic period as well as students who are always active in the process of learning in the current pandemic.

The data collection techniques in this study were conducted through observation, interview, and documentation. As reported by Emzir & Pd (2012) which stated that the most common data collection techniques used were observation, interview, and documentation.

The interview conducted in depth which aimed to explore data on the continuity of the teaching and learning process that took place online. In addition, the interview also aimed to know the extent of the benefits of information and communication technology that in this era has got a special place because of its progress and sophistication so that it could be used by students as a medium to support the process of distance learning (PJJ) or online learning during the Covid-19 pandemic. The interview conducted via WhatsApp application because it was still

in a pandemic period that was less conducive.

In addition, observation is also done as a form of direct observation during the online learning process conducted by students and teachers. In detail observations are intended to observe the continuity of the learning process using a combination of Google Classroom and Zoom Meeting in the current pandemic era. In observations, researchers saw that the learning process used two platforms combined with the process of face-to-face defense.

Documentation techniques are also carried out with the aim of exploring what materials have been delivered to students who are in the process of being given digitally.

The data analysis techniques used in this study were interactive analysis techniques. According to Sugiyono (2016), the stages of analysis techniques consist of data reduction, data presentation, as well as data verification or conclusion drawing. As for checking the data itself researchers used the technique of validity of triangulation data was to check the data by comparing from the data source. Therefore, in this study researchers compared the level of truth and accuracy of data obtained from interviews and observations (Kartono, 1990).

## RESULTS

After researchers analyzed the data obtained from observations and interviews optimally, a variety of facts were found about the use of educational technology based on this application both Zoom Meeting and Google Classroom. Facts in the field was concluded in the form of

Theme that has been formulated from the process of coding data.

From the results of data analysis, five themes were obtained as follows: 1) Internet network; 2) Internet quota; 3) Supporting media; 4) Conditions of understanding are diverse and 5) Time limitations.

The five themes that have been obtained are explained as follows:

### 1. Internet Network

Geographically, SMPN Satu Atap Lontar is located in lontar village serang district which is one of the schools located in the countryside and is quite far from the urban center. This school is one of several schools affected by the coronavirus outbreak. As a result of the spread of this virus, the learning process is conducted online. The continuity of the online learning process often found various obstacles such as the limited internet network available in the environment of SMPN Satu Atap Lontar students. So in the implementation of distance learning that relied on the power of the internet network was not maximal and often got disruptions and obstacles.

### 2. Internet Quota

The implementation of distance learning apart from relying on the internet network must also be supported by internet quota. The two components were a mutually supportive entity. In the procurement of internet quota, not all students were able to meet the many internet quotas that must be ready to be used whenever distance learning is done. It was because the economic background of the parents of the students at SMPN Satu Atap Lontar was classified as a lower middle economic level that relied on their

livelihoods through sea catches. This should be a serious issue for the relevant parties so that the implementation of distance learning can be carried out smoothly.

### **3. Supporting Tools (Media)**

Internet network, internet quota procurement costs and other supporting media such as laptops or smartphones are complete packages in the course of the online learning process. Supporting tools in the process of distance learning must be available because as the government has issued its policy to carry out the teaching and learning process online. As a result, if one of the components was not available then the student would experience lags in the materials provided by the teachers. This should be a serious concern for policy makers to meet the needs of students with lower middle economic backgrounds. Just like the procurement of internet quotas that have long been promised by the government that until now can not be enjoyed by students.

### **4. Diverse Conditions of Understanding**

Adequate facilities and infrastructure are important elements that support all online learning plans in the current pandemic. Zoom Meeting and Google Classroom are among the digital platforms that are widely used for learning during this pandemic. The use of both platforms is certainly a new habit for students who conduct face-to-face learning every day. In addition to bringing in new habits, the use of these two online learning platforms is considered by some students as a new issue. This is explained by students located in the countryside such as at SMPN Satu Atap Lontar who consider

that this shopper is new. Therefore, this type of learning requires introduction and adjustment in its operation.

### **5. Time Limitations**

The learning process during the pandemic was conducted online and face-to-face which of course has been arranged as best as possible. Materials given in class that is essential certainly require a lot of time so that in its implementation is not maximal. Therefore, educators provide additional tasks through the Whatsapp application. With the assignment process carried out through the messaging application certainly provides many benefits. Through the online messaging application, educators can always give various assignments to their students. In addition, students can easily ask about subjects that are difficult for them to understand. This is a new habit that occurs during the current pandemic.

## **DISCUSSION**

In the current pandemic era, advances in information and communication technology are widely discussed. One of them is from the education sector. The learning process that initially took place face-to-face now relies entirely on its implementation on technological and communication advances. Various forms of digital-based education platforms are now widely presented by many providers. For example, Zoom and Google Classroom are both platforms that are widely used in the current era of the Covid-19 pandemic. In the process, the use of zoom meetings and Google Classroom are two digital-based education platforms that connect students directly with teachers through virtual

interactions. So that the learning process in the pandemic era can take place to the maximum and also be a solution in overcoming the obstacles that arise in the current pandemic covid-19.

Various problems arise along with the covid-19 pandemic. The problem that is also present in learning at SMPN Satu Atap Lontar during the pandemic is an obstacle in the continuity of the online learning process. Online learning that relies entirely on infrastructure in the field of technology is considered by some students as a new problem. This is because it is difficult for them to provide the necessary infrastructure. The provision of communication tools that support the online learning process is considered a new issue in line with the covid-19 pandemic that until now has not ended. In addition to the communication tools that must be available in supporting the online learning process, students at SMPN Satu Atap Lontar also complain about the internet network. The internet network in SMPN Satu Atap Lontar is considered unprepared to support online learning. Slow internet network makes it difficult to access various digital education platforms which in this case are Zoom Meeting and Google Classroom.

In addition to the problem of supporting media and internet networks that become problems in the continuity of online learning, economic factors are also a special note in learning in the current pandemic era. This is because the economic level of students at SMPN Satu Atap Lontar is classified as lower middle class. The parents of the students rely mostly on their income from seafood. Therefore, the procurement of online learning support tools is considered by

most of them as a new problem that arises along with the weakening selling power of seafood in the pandemic covid-19. In addition to some of the obstacles mentioned above, the ineffectiveness in the use of learning media Zoom Meeting and Google Classroom in SMP Satu Atap Lontar is also caused by the incomprehension of the development of technology in the current 4.0 era. The students at SMPN Satu Atap Lontar are mostly still lacking in technology or gptek in the field of information technology (IT), making it difficult for them to operate both online learning platforms.

Apart from carrying out the learning process online, SMPN Satu Atap Lontar also carried out a combination learning process. The combination learning in question is a learning that is also conducted face-to-face and online learning. Face-to-face learning during the current pandemic has certainly had strict procedures, especially in terms of preventing the spread of the Covid-19 virus.

## **CONCLUSION**

Learning in the current pandemic era is a learning process that takes place remotely (PJJ) which also utilizes various learning applications such as Zoom Meeting and Google Classroom. The use of these online learning applications certainly brings various benefits in the implementation of learning in the current pandemic era. With the implementation of learning using the Zoom Meeting and Google Classroom applications, students still get learning materials from their educators. Various obstacles often arise when this pandemic does not end. The

learning process that requires online work is now a new issue for most students with low economic backgrounds.

Combination learning is considered suitable if applied in the current pandemic era, especially for schools where the majority of students are in one area or still within the scope of the school and have limitations in internet access. As happened in SMPN Satu Atap which geographically has a location far from the urban center so that in accessing the internet is often hampered by an unsupportive network. With this kind of learning pattern, it is expected that most students who get obstacles to the online learning process will get the right so that learning can be carried out evenly using both Zoom Meeting and Google Classroom applications and face-to-face learning.

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