



THE ANALYSIS OF THE EFFECTIVENESS OF ONLINE LEARNING MEDIA FOR THE STUDENTS DURING THE COVID-19 PANDEMIC

Maria Theresia Priyastuti*, Suhadi, Maria Karolina Selano

Bachelor of Nursing Study Program, STIKES St. Elisabeth Semarang, Jln. Kawi no. 11 Semarang, Jawa Tengah
50232, Indonesia

[*mariapriyastuti03@gmail.com](mailto:mariapriyastuti03@gmail.com)

ABSTRACT

This study discusses the analysis of the effectiveness of online learning media for the students during the covid-19 pandemic. This research is to know the effectiveness of online media for the students during the covid 19 pandemic. The method used is quantitative descriptive research with a total sampling of students of Stikes St. Elisabeth Semarang during the online learning process by giving questionnaires related to online learning media during the covid-19 period. The results obtained that most of the students at Stikes St. Elisabeth often uses Google Meet (GM) learning media and likes online learning through Google Meet (GM). The most frequently used feature of GM is the presentation form. The conclusion is that GM is an effective and efficient learning media during the covid-19 pandemic.

Keywords: effectiveness; media; online learning

INTRODUCTION

In the current new normal period of the COVID-19 pandemic, the Indonesian government is still implementing the health protocol, namely 3M to prevent the spread of Covid-19 by wearing masks, washing hands, keeping a distance and avoiding crowds. Although the Covid-19 vaccine has been given to most Indonesians, the government's recommendation to implement health protocols is still being carried out and complied with. Even in the world of education, universities are still implementing distance learning or online learning using information technology. Information technology can have an impact on the learning process that becomes increasingly more effective. Effectiveness is a measure to determine how the target has been achieved. The higher the effectiveness achieved, the greater the target a person has achieved. Handoko (1997) explains that effectiveness is the ability to choose the right goals or equipment to achieve the goals set.

To see the level of learning effectiveness, it is necessary to have appropriate and varied instructional media components and components of learning methods that are adapted to the learning material so that the suitability of the two components is needed to achieve learning objectives. The effectiveness of this information technology development can be seen from online learning media based on computer networks that are designed and developed to provide the information and knowledge needed for students (Priyadi, 2017). Online learning with the internet network has become an interactive communication medium that is very effective during this pandemic. Communication in learning cannot take place optimally if there is no supportive learning media.

Learning media is a tool/means used by lecturers to convey information, knowledge and messages to students so that material knowledge and learning skills can be presented, conveyed, and well presented and students are able to understand the learning provided by the lecturer.

Learning media also serves to support activities attitudes, knowledge, and skills, are referred to as learning media (Perbadi, 2017).

One of the learning media used during the pandemic is digital media. Digital media is a combination of electronic text, graphics, moving images, and sound, into a structured digital environment that can make people interact with data (Arindiono & Ramadhani, 2013). Heinich et al. (in Pribadi, 2017) also classifies various media in learning, namely print media, exhibition media, audio media, moving image media, multimedia, and web/internet-based media. Of the various learning media offered, internet-based media is one of the most suitable media used in the online learning process. The use of media has a purpose, namely (1) obtaining information and knowledge, (2) supporting learning activities, and (3) providing a means of persuasion and motivation. According to Pribadi (2017) in the learning process, the benefits of learning media are as (1) the delivery of message content and knowledge becomes standard, (2) the learning process becomes clearer, interesting, and interactive, (3) time and energy efficiency to obtain information, knowledge and skills, (4) improving the quality of learning, and (5) improving learning materials.

In online learning, lecturers must be able to choose the best media with advantages, namely: (1) easy to operate by students, (2) triggering interaction between lecturers and students, and (3) stimulating interest in learning further teaching materials. Good learning media indicators consist of: (1) attracting students' attention, (2) there are variations in the media used, (3) media placement is easily visible to students, (4) media according to the needs of teaching materials, (5) methods and teaching strategies vary, (6) there is an evaluation at the end of the lesson, (7) saves time and energy, (8) the use of media facilitates understanding and ability to capture material, (9) stimulates student activity, (10) delivers material that is not boring, (11) student verbalism disappears, (12) competency standards and learning indicators are known to students (Arnesti & Hamid, 2015). Therefore, learning media is very important for students in understanding a material. Students will not be able to understand the material provided without learning media. The success rate of a learning is largely determined by the media used by the lecturer (Astini, 2020; Mastur, Afifulloh, & Dina, 2020).

Online learning is the use of computers or other electronic media through the internet to connect interactions between teachers and students (Sudarsana et al., 2020). The online learning process is able to facilitate students independently without being accompanied by a lecturer. Online learning is carried out by individuals or groups using the internet and electronic devices in learning activities. Every lecturer who has prepared learning materials can immediately be ready to transfer conventional learning (face to face) to online learning and students continue to learn, not to miss learning materials even though they are in the WFH emergency period due to the spread of the Covid-19 outbreak.

The delivery of interactive online materials can make it easier for lecturers and students to interact with each other using mobile phones, laptops, and computers connected to the internet network as learning media. Gikas & Grant (Firman & Rahman, 2020) stated "Online learning in its implementation requires the support of mobile devices such as smartphones, tablets and laptops to access information anywhere and anytime." Pohan (2020) states that the benefits of online learning are building very efficient communication between lecturers and students, interacting and discussing between students, facilitating interaction between students, lecturers, and parents, as well as being the right means to give exams or quizzes, material in the form of pictures and videos to students. Students can easily download these teaching materials or materials and lecturers can easily create questions without any time limit.

The ease of access to internet technology has been used by lecturers and students to facilitate the learning process. Access to internet technology is also able to improve the quality of education. Korucu & Alkan (Firman & Rahman, 2020) stated that mobile technology with internet network contributes greatly to the achievement of distance learning goals in education. The development of internet technology has provided changes in learning (Keengwe & Georgina, 2012). Currently, students can study anywhere and anytime using the existing electronic-learning system facilities. E-learning technology systems with internet networks can be used to help find references and sources of information in the learning process (Wekke & Hamid, 2013). The development of internet-based technology system applications is not only easy to use but also easier to use from day to day (Andrian & Fauzi, 2019).

With the advancement of technology, learning media is prioritized to use technology properly and correctly online. Various online learning media applications have been designed to simplify and expedite the learning process during a pandemic such as using Whatsapp, Zoom, Google classroom, Google meet, or others. Through online learning media, lecturers are also required to be more creative in providing learning materials, namely by making learning videos in the form of tutorials uploaded on Youtube, using Google Classroom, WhatsApp Group and video conferencing applications such as Zoom, Google Meet, Skype, Hangouts and Webex. (Wahyudi, 2020).

This change in the form of online learning has a significant impact on universities, lecturers, students and parents. All elements of education must adapt using online learning media technology to maximize teaching and learning activities. Online learning is learning that utilizes the internet network. With distance learning / online both students and lecturers have the flexibility of time in its implementation. In conditions of online learning, the role of the lecturer is needed to be able to provide learning services and carry out the learning process optimally without reducing student saturation by using online media. Online media in the learning process is a solution to support the recommendation to study from home and obey the recommendations of health protocols in breaking the Covid-19 chain.

Learning media is a very vital activity in online learning so that an analysis of the effectiveness of the media is needed to find out which media can produce optimal output. Many factors that affect online learning media can be implemented optimally. In addition to lecturers must have the readiness to master skills using online learning media, lecturers must also be good at choosing the right online/online applications to give to students. These factors can be obstacles or shortcomings during online learning with internet-based media such as easy to lose focus, monotonous learning with the same media, discussion forums that are less than optimal, and technical obstacles such as IT skills, internet access, need for gadgets, etc. . (Agung & Wibowo, 2020). Based on the problems above, this study will discuss the analysis of the effectiveness of online learning media for students during the Covid-19 pandemic. The aim is to find out which types and features of online media are most effectively used for students during the learning process during the pandemic.

METHOD

Descriptive quantitative research method is used in this study. The population in the study were students of the Nursing S1 Study Program from level 1 to level 4 of the 2020/2021 academic year even semester and students of the D3 Nursing Study Program from levels 1 – 3 and students of the Nutrition S1 Study Program level 1 in the St. Elisabeth Semarang. The

population selected is the students of Stikes St. Elisabeth Semarang who took part in online learning during the Covid-19 pandemic. The total population of students who participated was 261 people. The data sample in this study used total sampling. Data were collected by researchers by distributing questionnaires to these students.

The location of this research was in the S1 Nursing Study Program, S1 Nutrition and D3 Nursing Study Programs St. Elisabeth Semarang with a research implementation time of approximately 6 months, from September March to August 2021. Questionnaire collection activities were carried out online from 11-18 May 2021. The instrument used in this study was a questionnaire sheet analyzing the effectiveness of online learning media for students consisting of multiple choice questions and answers to questions.

The data collection method used a student satisfaction questionnaire on the online learning process during the Covid-19 pandemic to 261 students, which was carried out through the stages of planning, preparation, processing and presenting survey results by filling out questionnaires by students. This questionnaire is distributed using an email application. Then the data analysis from the results of the questionnaire was processed to determine the effectiveness of online learning media for students during the pandemic. In addition, the literature method is also used to search for literature or references from books, journals, the internet and other media that are relevant to the theme of this research.

Data analysis was carried out by quantitative methods. The method of presenting the results of data analysis used is a formal method and an informal method because the results of data analysis are presented formally and informally by using signs or symbols and an explanation of ordinary words that are easy to understand to describe and identify matters relating to research problems and objectives.

RESULTS AND DISCUSSION

This study examines the effectiveness of online learning media for students during the Covid-19 Pandemic at STIKes St. Elisabeth Semarang in 2021. Online learning is a policy from the government to anticipate the transmission of the Covid-19 virus and has been implemented at STIKes St. Elisabeth Semarang. This learning method also has an impact on students who are given online learning. Respondents in this study were students of STIKes St. Elisabeth Semarang.

STIKes St. Elisabeth for the 2020/2021 academic year was 261 students consisting of 41 male students and 220 female students. The number of students involved and collecting answers to the questionnaire in the research "Analysis of the Effectiveness of Online Learning Media for Students during the Covid-19 Pandemic" at STIKes St. Elisabeth Semarang in 2021 as many as 261 respondents or 72.29%. Online learning is one of the solutions in implementing social distancing so that there is no close direct interaction between lecturers and students. The questions used in this study were six questions with the results of the respondents' answers being obtained, which are shown in the following table:

Table 1.
The preferred learning media for students in online learning during the Covid 19 pandemic
(n= 261)

| Online Learning Media | f | % |
|-----------------------|----|-------|
| WhatsApp Group (WAG) | 77 | 29,50 |
| Google Clasroom (GC) | 62 | 23,75 |
| Zoom Meeting (ZM) | 30 | 11,50 |
| Google Meeting (GM) | 92 | 35,25 |

Table 1. shows that the respondents who chose Google Meeting (GM) the most as the preferred learning media in online learning during the Covid 19 pandemic were 92 respondents (35.25%), while the respondents who chose the least Zoom Meeting (ZM) as the media. The preferred learning in online learning during the Covid 19 pandemic was 30 respondents (11.50%).

Table 2.

Effective and efficient learning media in online learning during the Covid 19 pandemic (n=261)

| Online Learning Media | f | % |
|-----------------------|-----|------|
| WhatsApp Group (WAG) | 48 | 18,4 |
| Google Clasroom (GC) | 31 | 11,9 |
| Zoom Meeting (ZM) | 15 | 5,7 |
| Google Meeting (GM) | 167 | 64,0 |

Table 2. shows that the respondents who most chose Google Meeting (GM) as an effective and efficient learning media in online learning during the Covid 19 pandemic were 167 respondents (64.0%), while the respondents who chose Zoom Meeting (ZM) the least were as an effective and efficient learning media in online learning during the Covid 19 pandemic, totaling 15 respondents (5.7%).

Table 3.

Learning media often used by lecturers in online learning during the Covid 19 pandemic (n=261)

| Online Learning Media | f | % |
|-----------------------|-----|-------|
| WhatsApp Group (WAG) | 50 | 19,14 |
| Google Clasroom (GC) | 34 | 13,02 |
| Zoom Meeting (ZM) | 2 | 0,8 |
| Google Meeting (GM) | 175 | 67.04 |

Table 3. shows that the respondents who most chose Google Meeting (GM) as a learning media that were often used by lecturers in online learning during the Covid 19 pandemic were 175 respondents (67.04%), while the respondents who chose Zoom Meeting (ZM) the least) as an effective and efficient learning media in online learning during the pandemic, totaling 2 respondents (0.8 %).

Table 4.

Media features based on online learning media during the Covid 19 pandemic (n=261)

| Online Learning Media | Featured options | f | % |
|-----------------------|--|----|-------|
| WhatsApp Group (WAG) | Chat, Foto dan Vidio | 77 | 29,50 |
| Google Clasroom (GC) | Assignment submission via Google Drive | 62 | 23,75 |
| Zoom Meeting (ZM) | Camera / video | 30 | 11,49 |
| Google Meeting (GM) | Presentation | 92 | 35,26 |

Table 4. can be explained that each of the learning media has specifications as its own advantages. Based on the results of the study, it can be seen that most of the respondents as many as 92 respondents (35.26%) prefer the presentation feature of online learning media with Google

Meeting (GM). Meanwhile, the few who chose the video/camera feature from online learning media with Zoom Meeting (ZM) during the Covid 19 pandemic were 30 respondents (11.49%).

There are four media used in online learning during the pandemic at Stikes St. Elisabeth Semarang. The media are WhatsApp Group (WAG), Google Classroom (GC) and Zoom Meeting (ZM) and Google Meeting (GM). The results showed that google meet was the most effective online learning media compared to WhatsApp Group, Google Classroom, and Zoom Meeting learning media. Learning media that are in accordance with the situation and condition of students including the content of the material and the state of the student's environment can create the achievement of the effectiveness of student learning (Prisuna, 2021). The Google Meet used is in accordance with the situation and characteristics of the Stikes St. Elisabeth to achieve learning effectiveness. This can be seen from the results of data analysis which stated that most of the respondents as much as 35.25% chose the Google Meet media as the most preferred media, 67.04% the media most frequently used by lecturers and 64% the most effective and efficient media in teaching. online learning during the covid-19 pandemic.

Sawitri (2019) revealed that Google Meet has become an application that is more preferred by users and can be displayed on web applications, Android and iOS applications. Google Meet is a medium through video conferencing which is preferred by students of Stikes St. Elisabeth Semarang because students feel comfortable with the GM application. GM is more accessible, used by students and facilitates online learning. Nalurita (2021) explains that Google Meet is an application with various advantages that can make it easier for users. With GM, students can easily adapt to digital technology. Students can immediately join the learning meeting just by clicking on the link provided by the lecturer. Both lecturers and students can easily access the GM application for free without downloading it via a web browser, android and iOS by logging in using email (Arsyad & Tobing, 2021).

GM is also the most frequently used by lecturers of Stikes St. Elisabeth Semarang because GM makes it easy to convey material messages and the meaning of the message can be well received by students. Students are able to understand the learning material delivered by the lecturer well through the GM application (Maulia, et al., 2021). Lecturers can control student attendance and learning activities by activating video cameras, audio/voice calls, slide share screens for students so that lecturers can monitor or control the online learning process. In addition, the discussion process, question and answer can be done better, lecturers can provide responses to discussions or assignments directly in the GM application (Putra, et al., 2020). Even the completion and collection of tasks is faster, compared to using ZM learning media. WAG and GC. GM is also believed to be able to overcome the lecture process directly through virtual activities during practical or practical activities, because during the interaction of practical activities it can be conveyed well and students are considered to be able to use them well (Rustaman, 2020).

The advantage of Google Meeting is that it is an application or media that is more effective, economical because it saves costs and quotas, is light and doesn't take up too much memory and has interesting features. In addition, GM does not spend a lot of internet data and there are no restrictions on space, time and participants so that lecturers and students are not burdened. In online learning, there are emoderating facilities so that lecturers and students can communicate easily through internet facilities on a regular basis regardless of time without being limited by time, distance, or place (Suhery, 2020; Dewi, 2020). Google Meet provides interactive video conference media between lecturers and students to communicate, interact and meet face to face during the online learning process through their respective laptop or smartphone screens with an internet connection (Hamdani, 2020). An internet connection is the most important thing in

creating online learning because learning must be accessed using interaction, and without an internet connection, learning interactions between lecturers and students cannot be created. With the advantages of GM in online learning, GM is the most effective medium for students of Stikes St. Elisabeth Semarang.

There are many features provided by Google Meet in supporting distance learning, including the display of Google Meet which is clear and easy to understand or user friendly and free so that it can be used by anyone without a time limit and without a limit on the number of participants. From the results of the analysis, it is known that most of the respondents as much as 35.25% prefer online learning media through Google Meet with the presentation feature display. Google meet with the presentation feature is considered an effective and efficient feature to use in learning and helps respondents present or present material when attending lectures or online learning. The presentation feature in the Google Meet application has proven to be effective and efficient in using the application as an e-learning medium during nursing lectures at Stikes St. Elisabeth. Google Meet also has several features such as a light and fast interface and efficient management so that it can attract the attention of users. In addition, the delivery of information on online learning media features needs to be conveyed clearly by the lecturer so that students understand the advantages and disadvantages of various online learning media features that will be used during the Covid 19 pandemic.

CONCLUSION

Based on the results of the research above, the authors can conclude that: 1) GM is the media most frequently used by lecturers, the media most favored by students and the most effective media used during the covid-19 pandemic because it is easily accessible, understood and interactive. 2) The most preferred GM features are presentations for class presentations, WA features in the form of chat, photos, videos for communicating, and GC for collecting assignments. When online learning takes place using GM media, both lecturers and students need to pay attention to the adequacy of the internet quota so that it is not constrained by the signal network. In addition, lecturers are expected to be on time when learning using GM, create a link 30 minutes before starting so that students can prepare for all entry and lecturers do not wait for students which can reduce the duration of learning time

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