Zoom Utilization as an Online Learning Media during the COVID-19 Pandemic

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Abstract: This research aims to analyze teachers' digital literacy in the learning process at public elementary schools in Bengkulu, Indonesia. The focus is on teachers' use of technological devices, especially their proficiency in operating, designing learning media, and utilizing digital media as a learning tool. This study employed qualitative research approach with descriptive type. The subjects were determined based on purposive with education background as the inclusive criteria. The data was collected using interview techniques where researchers were the primary instrument. The obtained data was analyzed through tabulation, coding, and conclusion withdrawal. Results showed that teachers firstly used technological devices as a learning tool due to the Covid-19 pandemic. They learnt to operate various device to transfer learning materials through visual, audio, and audiovisual methods. Teachers generally used smartphones and laptops, in which they are able to operate from the beginning to the end, including apps operation. Among the apps were Power Point, Canva, and Kinemaster with Zoom, Google Meets, Google Classroom, and WhatsApp as teaching platforms.

Keywords: digital literacy, teacher skills, technological devices

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INTRODUCTION

The increasingly widespread impact of the coronavirus has forced countries in the world to make strategies (González et al., 2020; Alshawabkeh et al., 2021) namely social restrictions (Khanna & Kareem, 2021). This is done to minimize the spread of the virus caused by crowds from one person to another. The strategy carried out is a mature and effective strategy (Adnan, 2020; Hickman & Silva, 2018; Schumacher et al., 2016), so that it can reduce the steps of the spread of the coronavirus.

The strategy issued by the government, namely social restrictions, can make the economy continue to run even though it is less satisfying than usual. In addition to having an impact on the economy (Adedoyin & Soykan, 2020), the influence of the coronavirus also has an impact on the social (Shen et al., 2017), cultural environment (Zainal et al., 2020), and most importantly (Szymkowiak et al., 2021), has an impact on education (Liu & Ilyas, 2020). Education must continue to run even amid the corona pandemic, especially for universities (Aguilera-Hermida, 2020). Therefore, the government imposes social restrictions on universities to carry out the lecture process in accordance with university policies.

The government policy has been given to universities in carrying out lectures in the midst of this pandemic with some kind of regulations (Laili & Nashir, 2020) so that lectures continue but the spread of the corona virus can be prevented. The step taken by the university is to conduct an online learning. Online learning is open and distributed learning environment pedagogic tools, internet (Tantri, 2018), technology-based networks, to facilitate learning and build knowledge through action and interaction (Dabbagh, 2005). In other words, it is a lecture method in which the learning process uses the help of online media such as applications and websites. Online learning or distance learning itself aims to meet educational standards by utilizing Information Technology by using computers or gadgets that are interconnected between students and teachers as well as between students and lecturers so that through the use of technology the teaching and learning process can still be carried out properly. The use of information technology is expected to be able to overcome the teaching (Argheni, 2020) and learning process so that the teaching and learning process can continue to run. In maximizing the teaching learning process, online learning can also be used although it is conducted without face to face meeting (Febrianto et al., 2020).

Currently, there is one application used in the online-based lecture process, especially at the Faculty of Social and Political Sciences, University of Lampung, namely the Zoom application. The Zoom application is

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an interactive video application created to be able to interact (Suduc et al., 2012), chat, and collaborate online on mobile. This application is widely used as a medium of long-distance communication, so lectures choose to use this application. There are several significant advantages in the process of using the Zoom application, such as easy access, can be downloaded for free (Hansch et al., 2015), and most importantly use language that is easy to understand. With application criteria that make it easy for users like this, students become enthusiastic to always use the Zoom application.

Looking at the fact above, it seems that Zoom can help the process of online learning (Dhawan, 2020; Sandars et al., 2020). Unfortunately, some studies have been done about the utilization of Zoom in the classroom which said that Zoom application is not very effective in the classroom. Research conducted by (Haqien & Rahman, 2020), the results showed that the use of the Zoom Meeting application was not very effective for university students in Jakarta and Depok. It is considered less effective because what often happens is problems with the network or internet connection for students who do not use wifi which will have an impact on the quality of the learning they receive. However, the advantages of using Zoom Meetings are considered practical and efficient for students, because by using Zoom Meetings (Rasmitadila, 2020), communication between students and lecturers is easier than communicating in writing or via chat.

Reffering to the explanation above, the researchers are interested and consider it necessary to conduct research on how the utilization of Zoom application as a means of media in online lectures can help the process of teaching and learning in pandemic era especially for students of Communication Sciences Department, University of Lampung

METHODS

This research is qualitative descriptive research (Laili & Nashir, 2020), the aim of descriptive research is to make a systematic, factual, and accurate description of the facts and characteristics of certain populations. The source of the data is gathered from 5 informants who are student of the Department of Communication Science, Unversity of Lampung. Observation and interview were done to obtain the information from the informants. After that, the gathered data were analyzed qualitatively. There are three steps in performing qualitative data analysis, namely the data reduction stage, data display, and conclusion or verification.

The data obtained from the field is quite large. For this reason, it is necessary to immediately conduct data analysis through data reduction. Data reduction is a critical thinking process that requires high intelligence, flexibility, and depth of insight (Laili & Nashir, 2020). The steps taken are to sharpen the analysis, classify or categorize into each problem through brief descriptions, directing, discarding unnecessary, and organize data so that it can be retrieved and verified. Data which are reduced include all data regarding the problem study.

After the data is reduced, the next analysis step is data presentation. Presentation of data is a set of structured information that provides the possibility of drawing conclusions and taking action. The presentation of data can be done in this study by describing the findings narratively. It made the researcher easier to understand what is happening. In this step, the researcher tries to gather the relevant data so that the information obtained can be concluded and has a certain meaning for answer research problems.

RESULT AND DISCUSSION

In the results of this interview, the researcher combined several student opinions from 5 informants who answered 5 questions. Here are the results of the interview:

Ouestion 1

Have you ever used the Zoom application as an online-based learning media?

Informant 2 (MFP)

"Yes, have I ever used the Zoom application, and it is often"

Informant 5 (RSDN)

"Yes, I have used the Zoom application. I think Zoom is one of the methods that can be used for online learning and which is currently the best for online learning."

Based on the results of interviews obtained regarding the first question regarding the assumptions of students regarding whether or not they have used the Zoom application as a learning medium, all informants have used the Zoom application as a learning medium. Regarding this, it is explained from the answers above by the informants. A more detailed explanation about the question is the answer given by informant 5 which explains the importance of using online-based learning media in the midst of the COVID outbreak where the use of the Zoom application is still one of the many and efficient applications to be used as online-based learning media.

Question 2

How long have you been using the Zoom application as a learning media? Informant Response 1 (SRD)

"I used the Zoom app about 3 months ago when there were a lot of webinars to fill my spare time and also lectures"

Informant 3 (DMS)

"The use of the Zoom application starts from starting online lectures, you know. The pandemic started, Sis."

Informant 4 (RA)

"So the last 6 or 7 months during this pandemic because online classes mostly use Zoom"

Regarding to the results of interviews related to the problem of student assumptions, how long and since when did the informants use the Zoom application as a learning mdia have been answered. By looking at the response above, the use of the Zoom application as a learning medium has been used since lectures were carried out online due to the COVID-19 pandemic, this statement is explained in detail and directed to the title and purpose of the research by informant 4. Therefore, the researcher concludes that during a pandemic the use of The Zoom application is increasingly in demand as an online-based learning media, especially in the Department of Communication Science, University of Lampung.

Ouestion 3

What are the obstacles experienced when you use the Zoom application as an online-based learning medium?

Response

Informant 1 (SRD)

"Sometimes there are obstacles when the connection is not good and the sound sometimes disappears, actually the factor is the connection, Sis because if the connection is good, it runs smoothly using Zoom"

Informant 4 (RA)

"Obstacles, if the obstacles are usually only from the data quota, right, because if we use Zoom, it requires quite a lot of data, so if we want to use Zoom, we have to prepare a bit more quota, and it's also a connection, right, if we use the Zoom application like this, the connection has to be stable, so the problem is that if we're not in a big city, sometimes it's difficult to log in like that or the speaker's voice is intermittent so it's not optimal because of the network."

Informant 5 (RSDN)

"Yes, there are some obstacles that are experienced when using Zoom, firstly when you haven't upgraded to premium because the participants are limited and the time given is only 40 minutes, that's the first obstacle, so you have to upgrade to premium first so you can enjoy Zoom in totality and the price of premium is also quite expensive if for example you want to upgrade to these three, the signal problem is sometimes the signal in some places does not support it so there is often interference".

From the results of the interviews above, it can be concluded by the researchers that every application or learning media has their own weaknesses in the process of its use, including the Zoom application which is in great demand today. These weaknesses include the need of stable connection to be able to communicate well in the Zoom application. The Zoom should be upgraded to the premium one so that it can cover the mount of students and the length of the lecture. The last is the smart phone. To get comfort from an application, the better the smart phone is required.

Question 4

Have you ever used other applications besides Zoom as an online-based learning media? Informant Response 1 (SRD)

"I usually use Google classroom, WA, Line, and sometimes also use Google Meet for learning media Informant 4 (RA)

"Yes, apart from Zoom, there is also Google Meet and you can also use WhatsApp Groups such as FGDs and want to send material in the form of documents, and yesterday I also had time to study through the Unila virtual class and also another Google classroom"

Informant 5 (RSDN)

"Whatever is used when there is a Google Meeting with WhatsApp, WhatsApp Video, then Line can also work, continue to use IG Live and continue to use YouTube Live, that's all."

The explanation above is the result of responses from 5 informants regarding the problem of whether there are other applications that are used as learning media besides the Zoom application. The results of the interview above revealed that the use of the Zoom application is an alternative that is issued by the campus to be used as an online-based learning media, besides being easy to use, the Zoom application can also be accessed easily. Therefore, in addition to the Zoom application, there are several applications that are used as online-based learning media such as Google Classroom, Google Meet, Whatsapp Video, etc. So the researchers concluded that the Zoom application is one of the recommended applications to be used as an

online-based learning media.

Question 5

What advice can you give for the Zoom to be used as an online-based learning media?

Informant 3 (DMS)

"For the most part, it's because this application is too heavy, bro. Try something like a lighter version like Zoom lite, it's similar to Facebook lite"

Informant 5 (RSDN)

"For Zoom itself, it's good for the screen, the house. Now there are also very good ones, but indeed the limitations for those who can't afford premium are a bit difficult and the premium price is also quite expensive. The only problem is that the premium price is quite expensive. What's the matter, the facilities provided are also lacking, like for example, only 40 minutes and only given once for free per 1 email"

The explanation above is the result of interview responses from 5 informants related to suggestions that can be given for the Zoom application as a learning medium that is in great demand today, especially in online-based lectures at the Department of Communication Science, University of Lampung. By looking at the previous explanation, the researcher also concludes that the Zoom application can be an alternative learning media to fill online-based learning during a pandemic. In addition, researchers also provide suggestions that there is a need for improvements to the Zoom application to make it look better in the form of views, logins, skins, or facilities from the application that must be equipped again. In addition, the size of the application is one of the main factors that must be improved to make it lighter, because the larger the size of the application produced, the greater the capacity of the smartphone used.

Reffering to the results of the research described above, researchers can discuss the issue of "Utilizing the Zoom Application as a Learning Media in Online-Based Lectures During the COVID-19 Pandemic" by using new media theory. The theory used by this researcher is in accordance with the topic of the research. The questions that have been prepared are submitted to informants who have been prepared by the researchers.

Media can be used to support the learning process (Sugiantari, 2020). The success or failure of the learning process is largely determined by the media used. Media is anything that can be used to deliver messages from sender to receiver so that it can stimulate students' thoughts, feelings, concerns and interests in such a way that the learning process occurs. According to (Yasin et al., 2021), online learning is an open and distributed learning system using pedagogical tools (educational aids), which is made possible through the internet and network-based technology to facilitate the formation of learning processes and knowledge through meaningful action and interaction.

Online learning media is media equipped with controllers that can be operated by the user (user), so that the user (user) can control and access what the user needs, for example downloading sources for tenses material in English lessons. The advantage of using this kind of media is that learning is independent (Kasman, 2021) and has high interactivity, is able to increase memory levels, provides more learning experiences, with text, audio, video and animation, all of which are used to convey information, and also provides convenience in conveying, updating content (Ismawati & Prasetyo, 2021). Students also can send emails to other students, send comments on discussion forums, use chat rooms, to video conference links to communicate directly.

The Zoom application is one of the most popular applications used as a learning medium at University of Lampung, especially in the Department of Communication, Faculty of Social and Political Sciences. The use of the Zoom application is expected to be an alternative media during the COVID-19 pandemic, because the application is easy to access, looks simple and can be used very easily. Based on the explanation of the theory above, it is necessary to take steps to be able to maintain education so that it continues to run during the pandemic even though the lectures are online.

The explanation of the results of this study explains that there is a significant relationship with the new media theory put forward by (Zainal & Prakoso, 2019) which states that "new media are different electronic technology devices with different uses. This new electronic media includes several technological systems such as: transmission systems (via cable or satellite), miniaturization systems, information storage and retrieval systems, image display systems (using a flexible combination of text and graphics), and control systems (by computers)."

In this study, the research object is the Zoom application, which is a new media created as an alternative to online learning media in the midst of the COVID-19 pandemic. This statement was adjusted to one of the informants' responses, namely (SRD) which stated that "Zoom can be an alternative to being a learning medium during a pandemic like this and also a medium for organizing meetings, participating in webinars and so on".

A person's opinion on something is a reference to be able to communicate well with other people. The results of this view can be used as a reference as an evaluation material in discussing an existing problem. As

a student, there is a need for critical delivery of something in the campus environment to see developments and as a benchmark for problems.

The results of this study describe the problem of student in using the Zoom application as an online-based learning media. Based on the results of this study, the researchers concluded that the Zoom application can be used as an alternative online-based learning media during the COVID-19 pandemic.

The advantages of using the Zoom application as an online-based learning medium are considered practical and efficient for students, because by using the Zoom application, communication between students and lecturers is easier than communicating in writing or via chat. However, based on the results of the research, it can be said also that the use of the Zoom application is considered less effective in online-based learning since there are some problems occured during the process teaching and learning. First is internet connection. Most of the students do not use wifi in their home. It causes the internet connection is not good. It is also in line with (Wasehudin, 2021) research that found Zoom Meeting is not quite effective because it is constrained by bad network that causes intermittent voice. The students can not hear the lecturer clearly. It will have an impact on the quality of the learning they receive (Haqien & Rahman, 2020). Second, to be used as a media for teaching, Zoom account should be upgraded to the premium one, so that it can cover all of the students and also the duration of the lectures.

CONCLUSION

By looking at the results of the research and discussion above, conclusions can be drawn regarding the use of the Zoom application as an online learning media during the COVID-19 pandemic: 1) The use of online-based learning media using the Zoom application was only carried out during this time of social restrictions which required students to study online-based. Lectures conducted with Zoom are considered less effective because the internet connection often unstable. It causes the students can not hear and understand the lecture clearly. 2) Although the Zoom application is considered less effective, on the other hand this application is considered more efficient and practical for students. The enthusiasm of students to use applications as practically as possible during a pandemic is one of the impetus to continue studying in the world of education even in the midst of the COVID-19 pandemic. For this reason, the Zoom application can be an alternative media to teach an online learning class. 3) Therefore, students and lecturers must understand each other in distance learning during this COVID-19 pandemic. We must accept the phenomenon of the COVID-19 pandemic. Because, with this phenomenon, it is an encouraging step for every university in utilizing technology-based learning and is also a step towards the industrial revolution 4.0.

REFERENCES

- Adedoyin, O., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, 1–13. https://doi.org/10.1080/10494820.2020.1813180.
- Adnan, M. (2020). Online learning amid the COVID-19 pandemic: Students perspectives. *Journal of Pedagogical Sociology and Psychology*, 1(2), 45–51. https://doi.org/10.33902/JPSP.2020261309.
- Aguilera-Hermida, A. P. (2020). College students' use and acceptance of emergency online learning due to COVID-19. International Journal of Educational Research Open, 1, 100011.
- Alshawabkeh, A., Woolsey, M., & Kharbat, F. (2021). Using online information technology for deaf students during COVID-19: A closer look from experience. *Heliyon*, 7(5), e06915. https://doi.org/10.1016/j.heliyon.2021.e06915.
- Argheni, B. (2020). Impact of Online Lectures During the Covid-19 Pandemic on Indonesian Students. PLACENTUM Scientific Journal of Health and Its Applications 8 (2).
- Dabbagh, N. a.-R. (2005). Online learning: Concept, strategies, and application. Ney Jersey: Pearson education, Inc.
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of educational technology systems*, 49(1), 5-22.
- Febrianto, P., Mas'udah, S., & Megasari, L. (2020). Implementation of online learning during the Covid-19 Pandemic on Madura Island ,Indonesia. *International Journal of Learning, Teaching and Educational Research*, 19(8), 233–254.
- González, A., Fernández, M., & Pino-Yancovic, M. (2020). Teaching in the pandemic: reconceptualizing Chilean educators' professionalism now and for the future. *Journal of Professional Capital and Community*, 5(3–4), https://doi.org/10.1108/JPCC-06-2020-0043.

- Hansch, A., Hillers, L., McConachie, K., & Newman, C. (2015). Video and Online Learning: Critical Reflections and Findings from the Field. SSRN *Electronic Journal*, https://doi.org/10.2139/ssrn.2577882.
- Haqien, D., & Rahman, A. (2020). Pemanfaatan Zoom meeting untuk proses pembelajaran pada masa pandemi Covid-19. SAP (Susunan Artikel Pendidikan), 5(1).
- Hickman, C. R., & Silva, M. A. (2018). Creating excellence: Managing corporate culture, strategy, and change in the new age. Routledge.
- Ismawati, D., & Prasetyo, I. (2020). Efektivitas pembelajaran menggunakan video zoom cloud meeting pada anak usia dini era pandemi covid-19. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(1), 665.
- Kasman, K. H. (2021). The Effect Of Zoom App Towards Students' Interest In Learning On Online Learning. Dinasti International Journal of Education Management And Social Science, 2(3), 404-408. https://doi.org/10.31933/dijemss.v2i3.752.
- Khanna, R., & Kareem, D. (2021). Creating inclusive spaces in virtual classroom sessions during the COVID pandemic: An exploratory study of primary class teachers in India. *International Journal of Educational Research Open*, 2–2, https://doi.org/10.1016/j.ijedro.2021.100038.
- Laili, R. N., & Nashir, M. (2021, January). The use of Zoom meeting for distance learning in teaching English to nursing students during Covid-19 pandemic. In *UICELL Conference Proceeding* (pp. 235-244).
- Liu, A., & Ilyas, I. (2020). Student perceptions in implementing online learning based on zoom cloud meeting students of the university of physics education study program. *Optics: Journal of Physics Education*, 4(2), 85-90.
- Rasmitadila, e. (2020). The Perceptions of Primary School Teachers of Online Learning during the COVID-19 Pandemic Period: A Case Study in Indonesia. *Journal of Ethnic and Cultural Studies*. 7(2), 90-109.
- Sandars, J., Correia, R., Dankbaar, M., de Jong, P., Goh, P. S., Hege, I., ... & Pusic, M. (2020). Twelve tips for rapidly migrating to online learning during the COVID-19 pandemic. *MedEdPublish*, 9(1), 3068.
- Schumacher, A., Erol, S., & Sihn, W. (2016). A maturity model for assessing Industry 4.0 readiness and maturity of manufacturing enterprises. *Procedia Cirp*, 52, 161-166.
- Shen, C., Kou, C., & Ly, P. (2017). Analysis of social media influencers and trends on online and mobile learning. *International Review of Research in Open and Distance Learning*, 18(1), 1–224, 1–224. https://doi.org/10.19173/irrodl.v18i1.2640.
- Suduc, A., Bîzoi, M., Gorghiu, G., & Gorghiu, L. (2012). Digital Images, Video and Web Conferences in Education: A Case Study. *Procedia Social and Behavioral Sciences*, 46, 4102–4106.
- Sugiantari, N. L. (2020). The Utilization Of Google Classroom And Zoom Meeting As Distance Learning Media In Covid-19 Pandemic. *Cetta: Jurnal Ilmu Pendidikan*, 3(3n).
- Szymkowiak, A., Melović, B., Dabić, M., & Jeganathan. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of young people. *Technology in Society, 65*, 101565.
- Tantri, N. R. (2018). Kehadiran Sosial Dalam Pembelajaran Daring Berdasarkan Sudut Pandang Pembelajar Pendidikan Terbuka Dan Jarak Jauh. Jurnal Pendidik Terbuka Dan Jarak Jauh, 19(1), 19-30.
- Wasehudin, W. A. (2021). The Utilization Of Educational Technology Based On Zoom Meeting And Google Classroom In The Pandemic Era. *Conciencia*, 21(1), 49-56.
- Yasin, Y., Husain, R., & Isa, A. (2021). The Effectiveness Of Using Zoom Cloud Meeting Media In Increasing Students' Motivation And Learning Outcomes On The Concept Of The Concepts OF The 4th Class Of Ips Learning History In Elementary School Novateur. *International Journal Of Innovations In Engineering Research And Technology* [IJIERT] 8(2).
- Zainal, A. G., Ashaf, A. F., Sulistyarini, D., & Suciska, W. (2020). The Level of Teenage Confidence in Hoax News Exposure on Social Media. Russian Journal of Agricultural and Socio-Economic Sciences, 8(104), 172-181.
- Zainal, A. G., & Prakoso, G. H. (2019). The Influence of Emotional Intelligence and Motivation toward Agricultural Extension Worker's Performance at Agricultural Office of Tanggamus District. *Jurnal Penyuluhan, September* 2018 Vol. 14 No. 2, 15(1), 34-42.