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Learning in Networks During the Covid-19 Pandemic

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Abstrak

Pada masa Pandemi Novel Corona Virus Disease 2019 (Covid-19) beberapa model pembelajaran dalam jaringan (Daring) diterapkan pada dunia pendidikan. Penelitian ini bertujuan untuk mengetahui 1) respon mahasiswa dalam kemudahan akses perpaduan media belajar WAG dan Aplikasi Zoom 2) pemahaman materi dalam pembelajaran dengan menggunakan perpaduan media belajar WAG dan Aplikasi Zoom, 3) keefektifan perpaduan media belajar WAG dan Aplikasi Zoom dalam pembelajaran daring. Metode yang digunakan adalah metode penelitian deskriptif kualitatif melalui teknik survey. Instrumen penelitian berupa angket dan wawancara yang diberikan kepada mahasiswa Program Studi Pendidikan Guru Sekolah Dasar (PGSD) sebanyak 375 orang. Hasil penelitian menunjukkan bahwa sebanyak 71,14% mahasiswa setuju dalam kemudahan akses perpaduan media belajar WAG dan Aplikasi Zoom, sebanyak 71,25% mahasiswa setuju dalam pemahaman materi dalam pembelajaran dengan menggunakan perpaduan media belajar WAG dan Aplikasi Zoom, sebanyak 72% mahasiswa setuju perpaduan media belajar WAG dan Aplikasi Zoom dalam pembelajaran daring efektif. Dapat disimpulkan bahwa perpaduan WAG dan aplikasi zoom dalam pembelajaran daring diterima mahasiswa dengan baik, hal ini dilihat tanggapan mahasiswa melalui instrumen yang disampaikan dan dinyatakan setuju.

Kata kunci: Pembelajaran Daring, PGSD, Covid-19.

Abstract

In the period of Pandemic Novel Corona Virus Disease 2019 (Covid-19) several online learning models are applied to the educational world. This study aims to determine 1) student responses easy to access integration of WAG learning media and Zoom Application 2) understanding of material in learning using a combination of WAG learning media and Zoom Application, 3) the effectiveness of the combination of WAG learning media and Zoom Application in online learning. The method used in this study is a descriptive qualitative research method through survey techniques. The research instrument used was in the form of questionnaires and online interviews given to 375 Elementary School Teacher Education Study Program students (PGSD). The results of the study showed that as many as 71,14% of students agreed in the ease of access to the combination of WAG learning media and Zoom Application, as many as 71,25% of students agreed in understanding the material in learning by using a combination of WAG learning media and Zoom Application, as many as 72% of students agreed on the integration WAG learning media and Zoom Application in effective online learning. It can be concluded that the combination of WAG and zoom applications in online learning was received by students, this was seen by students' responses through the instruments that were delivered and agreed.

Keywords: Online Learning, PGSD, Covid-19.

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INTRODUCTION

A new pneumonia outbreak appeared in Wuhan City of Hubei Province in China since the end of December 2019. This outbreak was called coronavirus 2019 (COVID-19) caused by coronavirus or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus attacks the respiratory system. This virus spread quickly to other regions in China and to several countries in the world. The Republic of Indonesia is no exception. According to WHO (WHO, 2020) On 30 January 2020, there were 7,736 confirmed cases of COVID-19 in China, and 86 other cases were reported from various countries such as Taiwan, Thailand, Vietnam, Malaysia, Nepal, Sri Lanka, Cambodia, Japan, Singapore, Saudi Arabia, South Korea, the Philippines, India, Australia, Canada, Finland, France and Germany. On March 11, 2020 the World Health Organization (WHO) declared this event a global pandemic (Cucinotta & Vanelli, 2020) In order to reduce and break the chain of the spreading of the virus, some countries apply lock down or closure mechanism of an area.

Responding to Covid-19, Minister of Education and Culture (Mendikbud) Nadim Anwar Makarim published a circular letter. The Circular Letter Number 36962/MPK.A/HK/2020 on online learning and working from home in order to prevent the spread of Covid-19 (Kementerian Pendidikan dan Kebudayaan Republik Indonesia, 2020). In connection with the Minister of Education and Culture Circular Letter, the Directorate General of Higher Education of the Ministry of Education and Culture (Dirjen Dikti) issued a letter Number: 302/E.E2/KR/2020 on the Learning Period of Program Implementation aimed at the Leaders of State/Private Universities and all Heads of Institutional Higher Education Services from Region I to Region XIV on the learning period of organizing educational programs (Jenderal & Tinggi, 2020). One of the Director General's circular letters was conveyed and it stated on the period of study for students which should have terminated in the even semester of 2019/2020, could be extended for 1 more semester, and the arrangements were submitted to the leadership of the respective university in accordance with local conditions and situations. In addition, the Provincial Government of the Special Capital Region of Jakarta issued Governor Regulation (Pergub) No. 33 of 2020 on the implementation of Large-Scale Social Restrictions (PSBB) (Gubernur DKI Jakarta, 2020), in handling Covid-19 which aims to cut the Covid-19 chain, where Jakarta is an epicenter from this COVID-19 problem. In this condition, STKIP Kusuma Negara is located in East Jakarta. Thus, through the circular letter and Governor Regulation abovementioned, the Chairperson of STKIP Kusuma Negara, issued Circular Letter Number 116/STKIP-KN/IV/2020 dated April 9, 2020, on the follow-up to Covid-19 prevention, namely learning activities are conducted online in the even semester of 2019/2020.

Online learning according to (Bilfaqih & Qomarudin, 2015) is a an online program of organizing learning classes in order to reach massive and broad target group. Through computer network, learning can be held on a massive scale with unlimited number of participants. Characteristics of online learning is among other each course can provide some materials to be delivered in the form of video recordings or slideshows, or the learning process can be conducted in real-time, face-to-face and online. Online lectures are either online learning methods or done via the internet network, this was conveyed by (Ningsih, 2020). Lecturers and students or students and students are also able to connect and communicate interactively during the learning that is facilitated by computer, internet or smartphone. During Covid-19 period most of the higher institutions implemented online learning.

The advantage of doing online learning is to increase the level of interaction between students and lecturers, learning can be done anywhere and anytime (time and place flexibility), reach out to students) in a broad scope (potential to reach a global audience), and facilitate the improvement and storage of material learning (easy updating of content as well as archivable capabilities) this was conveyed by Siahaan, 2002 (Waryanto, 2006). This learning model utilizes technology especially in helping lecturers and students in

managing learning activities (Basori, 2017). With this information technology can play a role as a medium that provides between students and lecturers, learning resources and a means to efficiently evaluate learning (Sriwihajriyah, Ruskan, & Ibrahim, 2012).

The survey about the implementation of online learning has not ever been carried out yet. This is because the implementation began in the middle of March to mid-May 2020. Online Learning is done and implemented in the undergraduate (S1) level of Primary School Teacher Education Study Program (Prodi PGSD). In the implementation of online learning, various applications are applied for the implementation of the learning process such as Zoom application, google meet, and other online media platforms such as google classroom, whatsapp group, and others. Thus from a number of online learning processes implemented, the author decided that it is necessary to conduct or carry out a survey.

One of many well known applications that is widely used for online learning process in PGSD Study Program is Zoom cloud meet application or commonly called Zoom. Zoom was firstly applied on 16 March 2020. At that moment, learning using such application has not been widespread yet. But considering the learning conditions that must be done from home or through online platform, this application was new to most PGSD students. Thus, Zoom is an application that can support virtual communication needs. The learning through Zoom can be carried out wherever and whenever the students like with an unlimited number of people. Zoom can be used without having to meet physically or face to face. This application is for videoconferencing, which can be installed on a PC (Personal Computer) through the addition of a camera or webcam facility, a Laptop with a webcam, or an Android Smartphone.

The use of Zoom in an online learning starts from installing it by downloading the application from <https://zoom.us/download>, followed by registration, simply enter the email address of new user on the main page of zoom.us website, and the user will get an email notification for the account activation, and then the user only need to follow the next steps. If using a PC or through a Laptop, after going through the account registration stages, the user will get a direction from PopUp window with a link to download the .exe file. Thus, please install it. If using an Android Smartphone, the application can be downloaded from the PlayStore with the keyword "Zoom.Us" and the user can do the installation. If the initial stages have been carried out, Zoom application can be used for learning.

Zoom helps the learning process. If you are going to do the learning process through a collaborative video conference, you can invite your students by sending invitation link or you can also inform the "ID Meeting" to the students: 1) Download Zoom application on a smartphone or PC or Laptop <https://zoom.us/download>, 2) Registration in accordance with the instructions for using Zoom, 3) Open Zoom application, then join meeting, 3) Next the screen will appear as the figure hereinbelow and enter the Meeting ID and write the full name in the Name field, 3) You can also directly click the link shared by the lecturer via Whatsapp or others, and then click join, 4) Login with audio and video. In the process of learning through Zoom, use modest clothes

One of the social media that is often used is WhatsApp (WA). WhatsApp seems to be widely used and transform into a new daily demand, especially in communicating with people in Indonesia. In addition to the ease of access during its use, WA has various functions, such as sending private messages, group chats, sharing photos, playing videos, doing video calls, sending locations, recording sounds, media, links and documents in the form of pdf, microsoft words, excels, and power points.

Smartphones transform into one of the basic needs of students. According to (Farozin, Yudha, Herzamzam, & Sicad, 2019), Smartphone is a cellular phone that has high level capabilities, occasionally with functionalities similar to that of computer. With the sophistication or ability of the smartphone, it can be easily utilized in all activities. Zoom is easy to be downloaded from smartphones through play store, installed.

Smartphones' usage can also be maximized so they are able to facilitate and accelerate communication and learning. At the university level, lecturers usually use WA Group (WAG) feature to communicate, both with fellow lecturers or between lecturers and students. Lecturers in communicating with students often use sharing feature to share many documents such as assignments, quizzes, journals, reference source books, information on academic activities, and others.

The creation of WAG for students' learning classes is needed if it is perceived from the angle of benefits. In learning activities there must be participation and collaboration between lecturer and students or between fellow students. The benefits of using the WAG application in learning according to (Jumiatmoko, 2016) are 1) able to provide collaborative learning facilities, 2) is a free application that is easy to use. 3) can be used to share comments, writings, pictures, videos, sounds and documents. 4) the ease of disseminating information and publicizing some works in groups. 5) information and knowledge can easily be created and disseminated through various features on WAG. Besides, the use of WAG can also motivate students in learning. According to (Yudha, 2018) motivation is a major driving force in influencing someone to achieve the desired goals. Therefore, the role of motivation that grows from students, is the initial milestone in achieving the desired goal to pursue.

Barriers and learning solutions that dare to be discussed, studied and researched. (Rusdiana & Nugroho, 2017) stated that the support of higher education institutions and lecturers is an important aspect that supports a bold increase in learning. (Harjanto & Sumunar, 2018) state that this bold learning is a process of transforming conventional education into digital form so that it has challenges and opportunities. Thus, through a bold learning process that has been carried out before, it is necessary to conduct research on bold learning, therefore in this study the use of a bold learning system through zoom and WA group is conveyed. This research was conducted with the aim to find out the following: 1) students' responses in using the easy access of the combination of WAG and Zoom Application in learning; 2) understanding of learning material by using the combination of WAG and Zoom Application; 3) the effectiveness of the combination of WAG and Zoom Application in online learning. The formulation of the problem in this study is how smooth is the online learning conducted by the students of PGSD study program of STKIP Kusuma Negara during Covid-19 pandemic?. So it is hoped that the results of this study will provide an overview of the online learning process in the midst of the during Covid-19 pandemic and be used as information, especially in colleges that produce primary school teacher candidates in determining the implementation of online learning.

METHOD

In this study, the research method used was descriptive qualitative research through survey techniques. According to (Ahyar et al., 2020), Qualitative research develops as a research method in the context of problems concerning social, cultural, and human behavior phenomena. So that every researcher must first know the "what" who will be researched and "what" is the problem. In addition, Herdani also added that survey research is a research that aims to (1) find detailed factual information that determines existing symptoms; (2) identify problems or to get justification of the situation and ongoing activities; (3) to find out the things done by the people who are the research targets in solving problems

The research was done by collecting research subjects so that the results of the research become more representative, namely PGSD Study Program students who are in semester 2 of 110 students, semester 4 of 117 students, and semester 6 of 148 students, with a total number of students of 375.

The research instruments used were questionnaires and interviews. The digging of data was carried out online through Google form. Questionnaires were distributed to students who used WAG and Zoom

application in their classes. As for there are several courses, namely the Development and Guidance of Students, the Education of National Character, Education and Learning, Indonesian Language Education for Elementary Schools, Learning Media in Elementary Schools, Science Education for Elementary Schools, Classrooms' Action Research. In the questionnaire, the questions were provided with two answer options: Agree and Disagree. The indicators of the questionnaire consisted of three indicators, namely: 1) student responses to the ease of access to the integration of WAG and Zoom Application 2) understanding of material in learning by using a combination of WAG and Zoom Application, 3) the effectiveness of the integration of WAG and Zoom Application in online learning. Complete statements of each questionnaire indicator are presented in Table 1 below.

Table 1 Draft of Questionnaire on Students' responses to online learning

No	Question	Indicator
1	Discussions using the combination of WAG and Zoom Application are easier to implement and the explanations from lecturer are easier to understand	1
2	I can access, understand, and operate WAG media and zoom application	1
3	The combination of WAG and Zoom Application makes it possible to complete tasks faster	1
4	The combination of WAG and Zoom Application attracts the attention of students in learning	1
5	Students get faster feedback when learning using WAG and Zoom Application	1
6	WAG and Zoom Application increases productivity in learning	1
7	Students love to use WAG and Zoom Application as a learning tool	1
8	WAG and Zoom application features are very clear and can be used to give better understanding on the learning material provided by lecturers in real time	2
9	The combination of WAG and Zoom Application makes it easy to conclude the lesson	2
10	Through WAGs and Zoom Application the acquisition of information, materials, and the collection of tasks becomes easier and more flexible	2
11	WAG and Zoom Application can be recorded and reviewed again after the lecture is over, so students are able to interpret or reformulate the lecturer's explanation.	2
12	The use of WAG media and Zoom application can help students in accessing material and information on a series of learning processes from lecturers and discussions	3
13	The combination of WAG and Zoom application saves more internet quota	3
14	By using WAG and Zoom it is easier to divide time between lectures and other activities, because learning is finished on time	3
15	Lecturer can actively provide responses during discussions, and provide motivation when learning using a combination of WAG and Zoom Application.	3
16	Through WAG and Zoom Application, the Quality of Learning	3

	provided by lecturer is more measurable in terms of conformity with the semester learning plan (RPS) and learning objectives.	
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RESULT AND DISCUSSION

The data that has been obtained from the implementation, then analyzed and carried out a description. The results of the analysis are explained in the section below.

Students' responses to learning by using a combination of WAG and Zoom Application include 16 questions that are tailored to the indicators. The discussion of research findings is as follows:

Students' responses to easy access to the combination of WAG and Zoom Applications as learning media.

Table 1. The mean of the score of the students' responses in the aspect of the ease of access to the integration of WAG and Zoom Application as learning media.

Question	Agree (%)	Disagree (%)
Discussions using the combination of WAG and Zoom Application are easier to implement and explanations are easy to understand	70	30
I can access, understand, and operate WAG media and zoom application	70	30
The combination of WAG and Zoom Application makes it possible to complete tasks faster	69	31
The combination of WAG and Zoom Application attracts the attention of students in learning	72	28
Students get faster feedback when learning using WAG and Zoom Application	74	26
WAG and Zoom Application increase productivity in learning	70	30
Students love to use WAG and Zoom Application as a learning tool	73	27
Mean	71.14	28.86

In this first aspect, the survey showed that the mean of students who answer with agree was 71.14% and 28.85% of them was disagree. This shows the combination of WAG and Zoom Application as learning media got positive responses from students, seen from explanations that they are easy to understand, give ease of access, give better understanding, and students can operate and complete their assignments faster, they attract students' attention in learning, increase students' productivity in learning, give pleasure in using WAG and Zoom Application as a learning tool. Besides that, from the interviews conducted with most students, through the combination of WAG and Zoom Application, students are able to get feedback in the learning process faster. According to the students, based on their enjoyment in learning, they were more active in communicating with lecturers and lecturers themselves can be faster in giving learning feedback and are able to accommodate all the discussions that are rolling.

Understanding of material in learning by using the combination of WAG and Zoom Application as a learning media.

Table 2. The mean of the score of the aspects of understanding the material in learning by using the combination of WAG and Zoom Application as a learning media

Question	Agree (%)	Disagree (%)
WAG and Zoom application features are very clear and can be used to understand learning material provided by lecturers in real time	69	31
The combination of WAG and Zoom Application makes it easy to conclude the lesson	71	29
Through WAG and Zoom Application, the acquisition of information, materials, and the collection of tasks becomes easier and more flexible	72	28
WAG and Zoom Application can be recorded and reviewed again after the lecture is over, so students are able to interpret or reformulate the lecturer's explanation.	73	27
Mean	71,25	28,75

In the second aspect, the survey showed that the mean of students who answer agree was 71.25% and 28.75% of them was disagree. This showed that the understanding of the material provided by lecturer in real time, making it easier to conclude learning. Gathering tasks also becomes easier and more flexible. In addition, in terms of interviews, most students get more understanding on the material by recording the explanation of the material by the lecturer and the students, therefore, are able to review the lesson at another time, with the hope that students are able to interpret or reformulate the lecturer's explanations. Another student also conveyed that the integration with other applications is also expected, this should be done in the light that students can be more motivated in completing and absorbing the material delivered by the lecturer as well as become more technologically savvy in integrating and implementing online learning.

Effectiveness of the combination of WAG and Zoom Application as an online learning media

Table 3. The mean of the score of the aspect of the effectiveness of the combination of WAG and Zoom Application as an online learning media

Question	Agree (%)	Disagree (%)
The use of WAG and zoom application can help access material and information on a series of learning processes from lecturer and discussions	75	25
Using the combination of WAG and zoom application saves more internet quota	60	40
By using WAG and Zoom it is easier to divide time between lectures and other activities, because learning is finished on time	76	24
Lecturer can actively provide responses during discussions, and provide motivation when learning using the combination of WAG and Zoom Application.	74	26
Through WAG and Zoom Applications, the Quality of Learning provided by the lecturer is more measurable in terms	75	25

of conformity with the semester learning plan (RPS) and learning objectives.		
Mean	72	28

In the third aspect, the survey showed that mean of the students who provided agree answer was 72% and the ones with disagree answer was 28%. This can be seen from the access to material and information on the series of learning processes from the lecturer, the lecturer can actively provide responses during discussions, and provide motivation when learning, the Quality of Learning provided by the lecturer is more measurable in terms of compliance with semester learning plans (RPS) and learning objectives. Also added during the interview process, most students said that it was easier to divide the time between lectures and other activities, because learning was completed on time. But related to the quota, the students conveyed that they spent quite large amount of money to buy internet quota. The discussion above is fully illustrated in Figure 8 below:

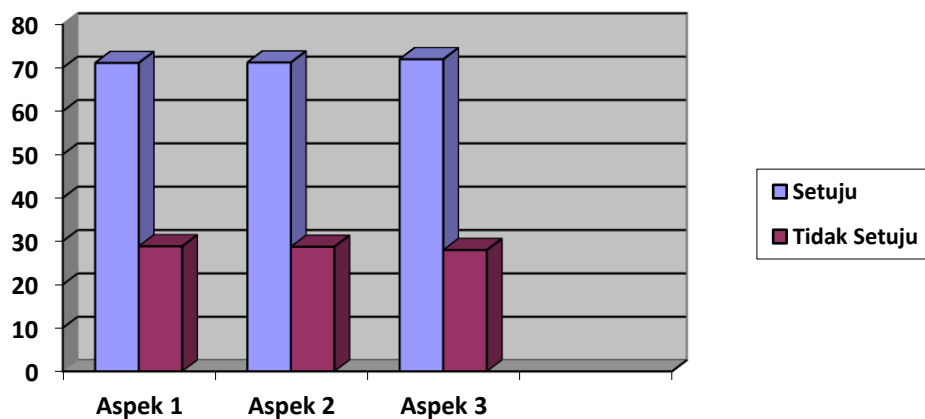


Figure 8. Students' Responses to Online Learning

Note: Aspek = Aspect, Setuju = Agree, Tidak Setuju = Disagree

In accordance with Figure 1 above, The use of online learning will be very effective if it fulfills the essential components of learning, namely discursive, adaptive, interactive and reflective (Oktavian & Aldya, 2020), Besides in doing online learning, one of the advantages of which is increasing levels of interaction between fellow students and lecturers, learning can be done anywhere and anytime (time and place flexibility), the learning activities can reach a wider scope of students (students) (it is more potential to reach a global audience), and the applications facilitate the improvement and storage of learning materials (*easy updating of content as well as archivable capabilities*) this was conveyed by Siahaan (Waryanto, 2006).

Most of the practitioners for learning favor technology users in their teaching, whether it's a simple form of online learning. In a study conducted by (King et al., 2017). In terms of content in online learning, there are several parts used, such as e-mail to communicate with students, online scoring platforms, online testing, and mind mapping, which students like ; due to the use of flexible and fast response times, as well as clear and attractive visual support. However, it is different in the research that has been carried out at this time, the combination of WAG and Zoom, making the communication carried out easier to use, will reinforce what was conveyed by the lecturer when the Zoom meeting was held. In addition, currently the use of gadgets is very familiar among students.

A study conducted by (Neo, Park, Lee, Soh, & Oh, 2015), on students in Malaysia who like interactive learning in the form of online. Actually, in the research that has been carried out, it is in line with this opinion.

As students agree with learning carried out online combining WAG and Zoom. From this integration, it would be very good to do considering the era of revolution 4.0 is an era where technology implementation must really be done, even though in current implementation because of the Covid 19 pandemic.

The research topic of online learning has been conducted by several researchers. This is as done by (Darmalaksana, Hambali, Masrur, & Muhlas, 2020), regarding the analysis of online learning during the WFH Pandemic Covid-19 period as a challenge for 21st century digital leaders; and reviewed 21 reflections on online learning during the Covid19 emergency. Based on the results of this study, a study on the application of online learning blends for prospective teachers has never been carried out. Therefore, this research is carried out, able to be an answer for lecturers and prospective elementary school teacher students.

The online learning system for most students can facilitate the learning process during the Covid-19 pandemic. Through the combination of WAG and Zoom Meet, it becomes an online learning solution. Most of the students stated that this combination could make the learning process easier. However, some students stated that they disagreed with the application of online learning which seemed not to make the learning process easier. This is because online learning is new and unfamiliar. In this study, lecturers were able to integrate online learning using WAG and Zoom meet, besides STKIP Kusuma Negara provided quota assistance to students through submissions to the Ministry of Education and Culture. The internet quota can be used properly for the online learning process. This is supported by (Rusdiana & Nugroho, 2017) in their research which states that the support of universities and lecturers is an important aspect that supports the success of online learning.

CONCLUSION

Student responses in the aspect of the ease of access to the integration of WAG and Zoom Application as an online learning media showed the mean of the students providing agree answer of 71.14% and the ones who were disagree of 28.85. The understanding of the material in learning by using the combination of WAG and Zoom Application as an online learning media revealed the mean of the students answered agree of 71.25% and the ones who answered disagree of 28.75%. While the effectiveness of the combination of WAG and Zoom Application as a media for online learning, the mean of the students answered agree was 72% and the 28% of whom was disagree. These results indicated that the combination of WAG and Zoom Application as an online learning media was well received by the students of PGSD study program of STKIP Kusuma Negara. This research can give an impression for lecturers as instructional designers so that they can see and perform analysis the accuracy of the online learning process. The results of this research can be used as a reference for the development of online learning with a combination of other learning media, such as the Google classroom and the learning management system owned by universities.

REFERENCES

- Ahyar, H., Maret, U. S., Andriani, H., Sukmana, D. J., Mada, U. G., Hardani, S.Pd., M. S., ... Istiqomah, R. (2020). *Buku Metode Penelitian Kualitatif & Kuantitatif*.
- Basori, B. (2017). Efektifitas Komunikasi Pembelajaran Online Dengan Menggunakan Media E-Learning Pada Perkuliahan Body Otomotif. *Jurnal Ilmiah Pendidikan Teknik Dan Kejuruan*, 7(2).
<https://doi.org/10.20961/jiptek.v7i2.12722>
- Bilfaqih, Y., & Qomarudin, M. N. (2015). Esensi Pengembangan Pembelajaran Daring. *Deepublish*, 1(1), 131. Retrieved from <http://digilib.esaunggul.ac.id/public/UEU-Journal-3642-ari-pambudi.pdf%0Ahttp://ejournal.unikama.ac.id/index.php/jst/article/view/842%0Ahttp://ilmukomputer.or>

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- Cucinotta, D., & Vanelli, M. (2020). WHO declares COVID-19 a pandemic. *Acta Biomedica*, 91(1), 157–160. <https://doi.org/10.23750/abm.v91i1.9397>
- Darmalaksana, W., Hambali, R. Y. A., Masrur, A., & Muhlas. (2020). Analisis Pembelajaran Online Masa WFH Pandemic Covid-19 sebagai Tantangan Pemimpin Digital Abad 21. *Karya Tulis Ilmiah (KTI) Masa Work From Home (WFH) Covid-19 UIN Sunan Gunung Djati Bandung Tahun 2020*, 1(1), 1–12.
- Farozin, M., Yudha, C. B., Herzamzam, D. A., & Sicad, M. (2019). The Educational Games Application Using Smartphone in Learning Mathematics for Elementary School Students. *International Journal of Advanced Science and Technology*, 122, 1–14. <https://doi.org/10.33832/ijast.2019.122.01>
- Gubernur DKI Jakarta. (2020). *Peraturan Gubernur DKI Jakarta NO. 33 Tahun 2020 tentang Pelaksanaan PSBB Jilid I tgl 10-23 April 2020*. 13. Retrieved from <https://covid19.hukumonline.com/2020/09/11/peraturan-gubernur-dki-jakarta-nomor-88-tahun-2020/>
- Harjanto, T., & Sumunar, D. S. E. W. (2018). Tantangan Dan Peluang Pembelajaran Dalam Jaringan : Studi Kasus Implementas Elok (E-Learning: Open For Knowledge Sharing) Pada Mahasiswa Profesi Ners. *Jurnal Keperawatan Respati Yogyakarta*, 5(0), 24–28. Retrieved from <http://nursingjurnal.respati.ac.id/index.php/JKRY/article/view/282>
- Jenderal, D., & Tinggi, P. (2020). *Surat Edaran tentang Masa Belajar Penyelenggaraan Program Pendidikan*. 10270.
- Jumiatmoko, M. (2016). Whatsapp Messenger Dalam Tinjauan Manfaat Dan Adab. *Wahana Akademika: Jurnal Studi Islam Dan Sosial*, 3(1), 51. <https://doi.org/10.21580/wa.v3i1.872>
- Kementerian Pendidikan dan Kebudayaan Republik Indonesia. (2020). Surat Edaran Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 35952/MPK.A/HK/2020. *Mendikbud RI*, 1–2. Retrieved from <https://www.kemdikbud.go.id>
- King, L., Jorgensen, M., Lussier, A., Fichten, C., Havel, A., Amsel, R., ... Asuncion, J. (2017). Student and Professor Perspectives on Exemplary Practices in the Use of Information and Communication Technologies (ICTs) and E-Learning in Colleges. In *Online Submission* (Vol. 14).
- Neo, M., Park, H., Lee, M. J., Soh, J. Y., & Oh, J. Y. (2015). Technology acceptance of healthcare e-learning modules: A study of Korean and malaysian students' perceptions. *Turkish Online Journal of Educational Technology*, 14(2), 181–194.
- Ningsih, S. (2020). Persepsi Mahasiswa Terhadap Pembelajaran Daring Pada Masa Pandemi Covid-19. *JINOTEP (Jurnal Inovasi Dan Teknologi Pembelajaran): Kajian Dan Riset Dalam Teknologi Pembelajaran*, 7(2), 124–132. <https://doi.org/10.17977/um031v7i22020p124>
- Oktavian, R., & Aldya, R. F. (2020). Efektivitas Pembelajaran Daring Terintegrasi di Era Pendidikan 4.0. *Didaktis: Jurnal Pendidikan Dan Ilmu Pengetahuan*, 20(2), 129–135. <https://doi.org/10.30651/didaktis.v20i2.4763>
- Rusdiana, E., & Nugroho, A. (2017). Respon pada Pembelajaran Daring bagi Mahasiswa Mata Kuliah Pengantar Hukum Indonesia. *Integralistik*, 19(2), 148–152. Retrieved from <https://journal.unnes.ac.id/nju/index.php/integralistik/article/view/21834/>
- Sriwihajriyah, N. ; Ruskan, E. L. ; & Ibrahim, A. (2012). Sistem Pembelajaran Dengan E-Learning Untuk Persiapan Ujian Nasional Pada SMA Pusri Palembang. *Jurnal Sistem Informasi (JSI)*, 4(1), 450–467. Retrieved from <http://ejournal.unsri.ac.id/index.php/jsi/index>
- Waryanto, N. H. (2006). Online Learning Sebagai Salah Satu Inovasi Pembelajaran. *Pythagoras*, Vol. 2, pp. 10–23. Retrieved from [http://staff.uny.ac.id/sites/default/files/132304807/Online Learning sebagai Salah Satu Inovasi Pembelajaran.pdf](http://staff.uny.ac.id/sites/default/files/132304807/Online%20Learning%20sebagai%20Salah%20Satu%20Inovasi%20Pembelajaran.pdf)
- WHO. (2020). Coronavirus Disease 2019 (COVID-19) World Health Situation Report - 1. *WHO Indonesia Situation Report, 2019*(March), 1–6.

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DOI : <https://doi.org/10.31004/basicedu.v5i2.869>

Yudha, C. B. (2018). Peningkatan Motivasi Belajar Mahasiswa pada Mata Kuliah Konsep Dasar Matematika Melalui Pendekatan Contextual Teaching and Learning. *JPD: Jurnal Pendidikan Dasar*, 12–27.