Student’s Responses on Learning in the Early COVID-19 Pandemic

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Abstract: The coronavirus disease (COVID-19) pandemic forced many universities to apply online learning. The purpose of this study was to break down the online learning process in the early pandemic as well as effective and optimal online learning. The design of this research is descriptive qualitative research. The data were collected through observation, questionnaires, interviews, and documentation. Interestingly, this study found online learning using the WhatsApp Group to be the most effective in the early COVID-19 pandemic. WhatsApp is easy, simple, and does not require a large data quota package. Through WhatsApp accounts, learning took place optimally because students and lecturers could communicate and share PowerPoint files, Microsoft Word files, JPGs, Voice Notes, Videos, and other learning resource links. The study recommends that other researchers uncover the solution to obstacles experienced by students in online learning and the development of other media to implement effective online lectures.

INTRODUCTION
The spread of coronavirus disease (COVID-19) has affected all elements of the global citizens, including the Indonesian people and the academic community in it. COVID-19 has been stipulated as a world pandemic, referring to the WHO's decision as stated in Khatri et al. (2020), that the cases spread beyond Wuhan city and on 30th Jan 2020, World Health Organization (WHO) declared the 2019 novel coronavirus (2019-nCoV) outbreak as Public Health Emergency of International Concern (PHEIC). This outbreak has caused approximately 64,000 cases of COVID-19 in China so far, and with that number continuing to grow (Wang et al., 2020).

It requires massive action related to the learning model policy, and this pandemic is a massive challenge to education systems (Daniel, 2020). As carried out at Universitas Islam Negeri (Islamic State University) Maulana Malik Ibrahim Malang, previously personal instrumental shifted to the use of online media and distance lectures.

It is crucial to be formulated as an effort to achieve significant learning outcomes in the COVID-19 pandemic. The situation requires all citizens to take precautions so that the COVID-19 does not spread more widely. Following up on this emergency, the government gave instructions through university policymakers, instructing the transfer of lectures by utilizing the internet network.
It was thought as a solution to break COVID-19 pandemic chain, this is as UNESCO move to support countries in their efforts to mitigate the immediate impact of school closures, particularly for more vulnerable and disadvantaged communities, and to facilitate the continuity of education for all through remote learning (UNESCO, 2020).

In line with that matter, Pusvyta Sari (2015) stated that online learning is an alternative that can be applied in the era of technology and communication that is overgrowing now (Pusvyta Sari, 2015; Putrawangsa & Hasanah, 2018). Furthermore, the COVID-19 pandemic highlights the need to use online models and applications to achieve the learning goals (Schneider & Council, 2020; Verawardina et al., 2020). As a result, innovation in learning is necessary to maintain the development of world education (Verawardina et al., 2020). In line with Wahyudin & Susilana (2011), innovation in learning by online platforms is interpreted as an update or change caused by, among others, efforts to solve the problems faced by a person or group and to solve problems that arise and improve a particular situation or a specific process that occurs in the society.

The possible learning model, along with the state of the pandemic COVID-19, is learning through the network systems, such as e-learning prepared by universities via campus’ websites or using online applications (Sintema, 2020). It is an integrated instructional learning design based on a constructivist approach, which is carried out by utilizing online social networks, such as blogs, wikis, photo sharing, video sharing, instant messaging, and social networking sites accessible by students or teachers (Saekhow, 2015). (Suyanto, 2005) added that e-learning is primarily aimed to foster students to be independent at certain times and take responsibility for their learning. Besides, e-learning will allow students to play a more active role in their learning because it focuses on personalization, which includes the ability to adapt to the level of learners’ skills and collecting knowledge resources as mutual support (Suteja et al., 2011). Also, students’ adaptive attitude will provide space and flexibility in regulating themselves, which might lead to success and achievement in learning (Susanto, 2006).

So far, the study of e-learning tends to discuss learning models based on three perspectives. First, studies examining the issue of online learning as new learning media systems encourage the implementation of more effective learning. Online learning media is likely to realize more satisfying services to students (Putranti, 2013). Lister (2014) shared similar thoughts that online learning involves choosing components that help improve student learning and allow students to engage with the content. The research shows that there are four primary considerations in designing online learning: 1) learning structure, 2) content presentation, 3) collaboration and interaction, and 4) timely feedback.

Second, the study of online learning to provide convenience for learners in accessing learning material. The level of need for internet use encourages the development of learning materials that are developed based on subjects and leads to the creation of the final product in the form of e-material (Ibrahim & Febriani, 2018). A study conducted by L. Y. Li & Tsai, (2017), Taiwan, shows that in online learning, students tend to access learning material in the form of lecture slides, video lectures, joint assignments, and forum messages. Students with different goals, motivations, and preferences can exhibit different behaviors when accessing this material. These behavioral differences can further affect their learning performance. From these studies show that; first, students see learning material related to lectures in their classrooms (e.g., slide lectures and video lectures) longer and more frequently than...
other learning materials (e.g., joint assignments and sending messages). Second, although students spend much time looking at online learning materials, most do not use analytical tools.

Third, studies that pay attention to the issue that online learning is a complement that combines some of the best aspects of conventional learning (face-to-face) and online information and communication technology-based learning. Therefore, this learning model equips students with knowledge about how to provide practical and realistic opportunities, which is in line with the form of Blended Learning (Prayitno, 2015). Given the development of technology and communication, online learning trends are increasing day by day, by not leaving the discussion room face to face. Blended learning is a combination of online and offline learning that supports deep and meaningful learning without leaving the values of traditional higher education institutions (Abd. Syakur et al., 2020). It thus will potentially increase the effectiveness and efficiency of learning experiences (Garrison & Kanuka, 2004) with advanced technology (Graham, 2006; Ichsan et al., 2020).

From the three trends, it appears that online learning has been structured as a learning media combining conventional learning with information and communication technology. It becomes an urgent need in the course of the COVID-19 pandemic, which afflicts the archipelago. For this reason, it needs to be prepared as well as possible so that the expected learning outcomes can be achieved.

The purpose of this paper is to fill the gap of the existing studies that tend to place the development of online learning models as perfect matters and not held by many teachers. Moreover, this research, in contrast to the previous studies, emphasizes online learning as an effort that should be prepared in such a way, especially amid technological and communication developments with which generation Z or native digital generation seems to be familiar. Accordingly, two questions are formulated as follows; 1) how does the online learning process in the COVID-19 pandemic take place and what are the determinants of the implementation of online learning? and 2) how can the online learning model be more productive and more optimal be formulated?

This paper is based on the argument that online learning cannot only take place under the situation of the COVID-19 pandemic, but it is an alternative and innovative learning model that must be well prepared, from the system, technical and material aspects. The availability of various aspects of online learning will be able to show significant learning outcomes. Online learning will also be able to realize a learning approach based on self-regulated learning, as the times demand that every student be able to be independent and innovate in the learning process.

METHOD

The online learning is a policy set by the Chancellor of Islamic State University of Maulana Malik Ibrahim Malang (UIN Maulana Malik Ibrahim Malang), addressing efforts to prevent COVID-19. This online learning model is an effort to break the chain of COVID-19 by implementing social distancing and distance system lectures using the internet network.

This research is a qualitative descriptive study. The data used in this paper was obtained through observation, questionnaires distributed via Google forms, online interviews through social media, and documentation. Observations were made on the policy of lecturing activities that switched to online learning systems; questionnaires were distributed to determine students’ responses to learning systems that run online the impact of the spread of COVID-19.
interviews were conducted with informants selected based on constructive responses and opinions related to online learning systems.

The data obtained through questionnaires is done by distributing questionnaires in the Google form application and distributed through social media networks that contain questions that include the online learning conditions, media, applications used in online learning, and its effectiveness. The questionnaire was distributed randomly to students across departments, study programs, and across batches. From the distribution of questionnaires that came in, there were 225 respondents. The interviews were conducted to find out more in-depth information related to the ongoing online learning process. Informants were interviewed as many as 16 people. The questions consist of the issues surrounding the online learning model during the COVID-19 pandemic. At the same time, the study employs a documentation technique of policy products related to the online learning system amid the COVID-19 worldwide outbreak.

The data were analyzed through the processes of 1) data regrouping by their respective themes, 2) description carried out to find patterns and data trends, and 3) interpretations aimed at understanding the meaning of the informants' statements. The reduced data is then thematically displayed in the pictorial form and interview excerpts. In the final stage, data verification is carried out to give birth to a deep and comprehensive understanding of the data.

![Figure 1. Research Method](image)

**RESULT AND DISCUSSION**

Learning is alternative learning that is simultaneously carried out in anticipation of the COVID-19 pandemic. Online learning appears as an answer to situations and conditions that disallow the learning process to run in a regular business.

This assertion was taken as a step on a joint commitment that the lecture process that runs within one semester should not be chaotic or even stopped due to the COVID-19. The learning process in the even semester of the academic year 2019-2020 must continue to run with an approach in line with the health protocol policy.

The social distancing and physical distancing policy cannot force the process of teaching and learning to run face to face or meet each other in a lecture room. The effectiveness of this social distancing policy will be realized if the lecture process is carried out with a distance lecture system and, of course, using online platforms. Online learning is the only way that can be taken to support the success of social distancing and as a significant effort towards the success of the teaching and learning process at UIN Maulana Malik Ibrahim Malang in the global COVID-19 pandemic.

Some literature highlight the rapid development of information technology
and changes in social and political situations around the world brings new challenges to schools (Lubis, 2016) and also generally for all educational institutions at various levels, including Universities. Online learning has used various terminology. Commonly used terms include e-Learning, internet learning, distributed learning, networked learning, virtual learning, computer-assisted learning, web-based learning, and distance learning (Anderson, 2008). In the literature, many definitions reflect the diversity of practices and technologies related to online learning. For example, some researchers define online learning as educational material presented on a computer, and others define online instruction as an innovative approach to conveying instructions to a remote audience, using the Web as a medium (Anderson, 2008; Dağ & Geçer, 2009).

The online learning model run by the campus academic community of Islamic State University of Maulana Malik Ibrahim Malang is diverse. Although the campus itself has facilitated all lecturers and students an e-Learning application that can be accessed through the SIAKAD online university website, in practice, there is a diversity of models and applications used in online learning. The data of the online learning process at UIN Maulana Malik Ibrahim Malang show the use of various applications, such as WhatsApp Group (WA Group), e-Learning, Zoom Cloud Application, Google Classroom, Google Meeting, Edmodo, YouTube Live Streaming, Facebook Live Streaming, Instagram and HangsOut. All of these online learning media and applications are technologies that support teaching and learning through computers and web technology. These media allow communication between lecturers and students in conducting lectures, in addition to quoting Wani’s statement that such online learning can bridge the gap between a teacher and a student in two different geographical locations (Wani, 2013).

Over time, in its development, online learning not only involves the presentation and delivery of material using the Web but also involves students who use the Internet to access learning materials, interact with content, instructors, and other students (Jones & Sharma, 2020). Besides, it involves a learning process that must get support for students to acquire and build knowledge and grow from learning experiences (Anderson, 2008; Dağ & Geçer, 2009). In other words, it can be said that online learning can be defined as an approach to the learning and teaching process that utilizes the acquisition and use of knowledge in the context of education using the internet and communication technology in collaboration.

The online learning process that is run in the academic community of Islamic State University Maulana Malik Ibrahim Malang (UIN Maulana Malik Ibrahim Malang) is expected to be able to present learning as in the classroom, but through a network system (online). Irawan et al. (2015) emphasized that online learning can be used as an appropriate design in developing better learning methods, given the level of flexibility, scalability, and functionality that facilitates teaching and learning activities can be done anywhere and anytime (Irawan et al., 2015). In line with that, online learning methods have increasingly developed and set to shift conventional learning (face to face). In the industrial revolution 4.0 era, where IoT (Internet of Things) plays a vital role in all aspects, the world of education today must begin to follow these developments, which offer many benefits, including its distance and time constraint-free (Pangondian et al., 2019). Especially in the current pandemic, a meeting between lecturers and students is not possible. So online learning can be a breakthrough and a very appropriate policy to run at this time. Both lecturers
and students may flexibly customize the scheduled-lecture time and share agreements on some technical matters.

Among the use of online applications that are utilized in online learning has brought amazing results that are seen from a series of processes described by several respondents. That although it seems very urgent and sudden, along with the spread of the COVID-19, learning can take place well. Considering that lectures are still running in half the semester, so there is still halfway to go by every lecturer and student, so online learning is a solution in dealing with the current pandemic. Following the circular and decisions submitted massively both by ministries and leaders of higher education, swiftly and eagerly, the transfer of online learning is carried out simultaneously. Each lecturer, student, and IT team, who directly intersects with online learning control devices, gives a clear indication that online learning becomes a new trend. Chat topics in various social media networks buzzing around online learning issues become very challenging and very interesting. It relates to the work from home movement and study from home as an effort to succeed in social distancing. In many ways, Anderson (2008) revealed that learning and teaching online is somewhat similar to teaching and learning in other formal educational contexts. In essence, it must assess the needs of learners, negotiate or determine content, and organize and evaluate learning activities. The pervasive effect of online media, however, creates a unique environment for teaching and learning. The most exciting feature of this context is the capacity to change the time and place of educational interactions (Anderson, 2008). However, online learning raises other challenges related to the user-friendliness interface; the technology to support online instruction, support, and compensation needed for high-quality instructors, and the needs of online

students (Kim & Bonk, 2006). Nguyen (2015) asserted that many researchers and educators were interested in online learning to improve student learning outcomes, considering online learning to be more effective than traditional face-to-face format. Furthermore, online learning will be successful if it focuses on aspects of the presentation of learning content and learning tools, which are the most critical factors that affect student academic achievement (Dağ & Geçer, 2009).

The Factors that Determine Online Learning in the COVID-19 Pandemic

Educational institutions should support the government policies in dealing with circumstances and situations due to the COVID-19 pandemic, which leaves them no more choice but to take online application-based learning so that this global policy has led all educational institutions to implement learning with an online system, including the UIN Maulana Malik Ibrahim Malang campus. So the regulatory factor from the rector is the most important in realizing online learning. After experiencing significant development, the chancellor issued a circular letter for chancellor Number 1286 of 2020, regarding the Extension of the Sterilization Period of the campus in the Context of Anticipating Measures to Prevent the Spread of the COVID-19 in the campus environment academic year 2019-2020 is fully implemented in the network system (online).

There are many decision letters issued concerning online learning. Likewise, campus sterilization forces lecturers and students, like it or not, and they must do online lectures. Along with the online learning decision, the university community also tried to prepare the availability of Wi-Fi signals and internet data quota packages. Becoming indispensable in implementing online learning is preparing online tools and applications that can be easily accessed by lecturers and students.
Recalling, when the chancellor issued a sterile campus circular, all students returned to their homes and regions.

Based on the interview results, several respondents stated that the constraints in implementing online learning were the availability of wifi and data pulse quota packages for each student who was economically and financially limited or those in geographical locations with weak internet signals. Can be imagined if there are 8 (eight) courses and all with an online system, with different media and applications, then how many data quota packages are needed? The limitations of wifi and pulse data are other factors that must be considered in implementing online learning. In this case, the efforts of the campus IT team sought to find a breakthrough from sponsors from both the Vendors to offer 30 GB toll-free offers and services for this online learning activity. Students often complain about limited data packages, free facilities from vendors are also limited to official campus sites, even though many lecturers use other applications that are not accommodated by free facilities from the vendors

From the campus through Center for Information Technology and Data Base (PTIPD) continues to try to provide solutions to various obstacles related to this online lecture, one of which is PTIPD has succeeded in implementing efficient teleconference technology, accessible via laptop or smartphone, and the most convenient one is without having to have an account, just visit the page: https://vmeet.uin-malang.ac.id.

This technology is useful for learning activities, work coordination, or various other activities. Vmeet UIN Malang may also be used by the public, for instance, RT coordination, mosque officer meetings, and even family gatherings. Transaction data is encrypted and not stored on the campus's server, so user data remains safe. Vmeet is a breakthrough that was successfully launched by the PTIPD team in dealing with the current situation of the COVID-19 pandemic, as a proud and beneficial effort and initiative for residents of campus and the general public.

Literacy level and the student's ability to access online learning are the next factors that are very important in determining the online learning process. The ability of individuals to access online learning media is a significant factor in online learning's success. Studies conducted by researchers show that the majority of students in this era are not the generation who are stuttering technological sophistication. Students' ability to access technological and communication sophistication is a must and a vital need in their study trips. Thus, the enactment of online learning in all circumstances must be prepared to be obeyed and implemented. In other words, the use of information technology in tertiary institutions is closely related to the students' study process and can improve their learning quality. With the ease of internet access, students can quickly get information from online sites (Pibriana & Ricoida, 2017).

In line with this, Sohibun stated that interactive learning media was developed and could be accessed through many devices. However, it has not been widely used by lecturers and students, based on the results of a survey conducted only 14.3 % of the lecturers who use e-learning (Sohibun & Ade, 2017). However, instead, the use of social media among young people is so great, as confirmed by Irwandani that the development of internet users in Indonesia is very rapid. In the past five years, the number of internet users has increased by 43 %. By the end of 2015, internet users in Indonesia had reached 88.1 million. As many as 90 % of internet users are social media users. Based on statistical reports, there are around 92 % of social media
users aged between 13-39 years (Irwandani, 2016).

**Effective Online Learning in the early COVID-19 Pandemic**

The online learning model that runs during the COVID-19 pandemic does not merely equip students with knowledge alone, as they have been doing in face-to-face lectures in lecture rooms. However, online learning provides more experience will be the importance of the learning process that balances the development of the times and technology based on the ability of self-regulation, which is undoubtedly owned by every student. To this end, online learning is carried out by utilizing various online applications that can be easily accessed by students. The questionnaire data and student responses show that some applications used in online learning can be classified based on the use of applications and online learning media. The following are mentioned in sequence according to the highest percentage level of the effectiveness of online learning that runs, namely by using; WhatsApp Group, e-Learning, Zoom Application, Google Classroom, and the combination of two online applications and can be seen in the Table 1.

**Table 1. Effective Online Learning Models**

| No | Online Learning Models       | Percentage |
|----|------------------------------|------------|
| 1  | WA Group                     | 48.9       |
| 2  | WA Group & e-Learning        | 43.3       |
| 3  | Zoom                         | 14.9       |
| 4  | Google Classroom             | 4.3        |
| 5  | e-Learning                   | 23.4       |
| 6  | WA Group & Zoom              | 43.3       |

Based on Table 1, it can be seen that online learning using WA Group is very effective in the COVID-19 pandemic. The results of interviews and surveys show that WhatsApp (WA) is a familiar social media, which is undoubtedly used by all lecturers and students. Besides, it is effortless, straightforward, and there is no need for a large data quota package when activated. Through this WhatsApp account, it is easy to create groups as some of the lecturers have formed the WA Group for the courses they support. Enabling the WA Group in online learning is a very appropriate step in the global COVID-19 pandemic. Based on responses and reasons from respondents that online learning through WA Group, communication and interaction can run quickly and very lightly without any pauses due to the network being too long. Learning through WA Group can also run quickly and efficiently because through this WA account, both lecturers and students can deliver lecture material through sending PPT files, Microsoft Word files, PDF files, recording material in the form of Voice Notes, Videos, and YouTube videos or other online learning resources. Through this WA Group, feedback and review and evaluation of lecture material can also be conveyed, so there are no obstacles and obstacles for anyone to carry out the scientific discussion and sharing activities related to lecture material.

Online learning will also be more effective if it is carried out by utilizing the e-Learning system (SIKAD). In the online program of campus, an e-Learning program has been prepared. E-Learning is also one of the programs that support and strengthen online learning. Based on the acknowledgment conveyed by respondents that e-Learning UIN Maulana Malik Ibrahim Malang is easy to use because everything has been explained in the academic manuals. Also, learning with the e-Learning program is useful because it is equipped with a chat feature for group discussion that makes it easy for lecturers to communicate with students in terms of assignment collection and task. After all, there are already columns for assignment collection according to their courses and majors, which is accompanied by a column for comments and reviews of the work done.
What is more, for the use of e-Learning, UIN Maulana Malik Ibrahim has provided a free internet quota package to access it. Regarding the use of both online learning applications, survey results and interviews also confirm that online learning will be more effective if both applications (WA Group & e-Learning) can be functioned more optimally. WA Group for communication of the learning process and e-Learning as an application for the collection of assignments that must be uploaded by students.

In addition to the two online applications above, of course, the diversity of other online learning applications also participates in coloring the learning model, each of which has a different level of effectiveness. All of these can be alternative models of online learning connected with the global COVID-19 pandemic. Specifically, the zoom cloud meeting application, one of the applications that can be used when learning is to be held by prioritizing audiovisual. As recognized by respondents that learning by using the zoom application is like making a video call with a group. So by starting to spread the link, making agreements with all the participants in the lecture, learning with the zoom application can take place such as face-to-face meetings, presenting and delivering feedback, and review by speaking directly and can be witnessed and listened together like a teleconference. It is just that learning with this zoom application requires a more significant data quota package when compared to the WA Group or e-Learning applications that are usually supported by universities.

Based on the online learning model with the diversity of applications and media used, the essence has shown that online learning that has prepared content as a source of learning is certainly very supportive of independent learning and good habits for learning. With an online learning system, the most important role lies in the learner. The presence of an online learning system is expected to increase the intensity of independent learning (Suteja et al., 2011) forming constructive thought patterns among students (Reinhardt, 2019). It is in line with the theory of self-regulated learning, which emphasizes that independent learning is regulated as the ability of students to be independently and proactively involved in the process of motivating themselves and behaviors that increase the achievement of goals (Mandusic & Blaskovic, 2015; Zimmerman, 2011). Thus, one way to help achieve goals that lead to success in online-based independent learning studies can be developed pedagogical frameworks using online social media (V. Li, 2017), based on the level of interactivity made possible by social media tools. In this independent learning, there are levels including 1) personal information management, 2) social interaction and collaboration, and 3) aggregation and information management (Abidah et al., 2020; Dabbagh & Kitsantas, 2012; Reinhardt, 2019; Zimmerman et al., 1992). In addition to the affordability of social media, it has a feature that can be activated by the user “to activate the degree of interaction and sharing needed for learning” (Dabbagh & Kitsantas, 2012). Thus, the online learning model by utilizing existing facilities in the hands of all lecturers and students can lead to self-learning and can be quickly done by students (Suherdi, n.d.) which in the end, the shared ideals to realize success in the teaching and learning process can be achieved.

CONCLUSION

During the early COVID-19 pandemic in mid-March 2020, various applications were used by UIN Maulana Malik Ibrahim Malang’s academics in conducting online learning. Online learning using WhatsApp is beneficial for
learning in the current situation. That is because the WhatsApp application is a familiar social media, used by all lecturers and students, besides using WhatsApp, it is also easy, simple and does not require a large data quota package. Through a WhatsApp account, learning takes place more optimally because students can communicate and share PPT files, Microsoft Word files, JPG, Voice Notes, Video, and other learning resource link sharing.

Regulatory factors from the rector are the most critical factors in realizing online learning. The availability of wifi and data pulse quota packages is a determining factor for the continuity of online learning. However, in practice, it is also found that there is limited internet access for each student either due to geographical location that is difficult to reach internet signals or also financially for purchasing quota packages. The next most crucial factor in determining the online learning process is the level of literacy and the ability of students to access online learning.

This research was carried out in the initial phase of the COVID-19 outbreak. In the next phase, there was very rapid development. The study recommends that other researchers uncover the resolution of obstacles experienced by students when learning online when the COVID-19 emergency response period and the development of the use of other media in the implementation of online lectures that are better and more effective.

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