Online Learning as a Learning Solution in the Covid 19 Pandemic Era for Higher Education

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ABSTRACT

As way to deliver information to students, online learning media have a very important role.The implementation of social distancing requires solutions that minimize direct meetings in this Covid 19 pandemic era. Various online learning resources can be in the forms of documents, pictures, videos, and. *Google Classroom, Edmodo, Zenius, Zoom Meeting, Teams* and other media platforms are the learning media used as the information and communication technology to support online learning. This study used a Systematic Literature Review (SLR) to identify, evaluate, and interpret all related findings of any studies connected to certain research questions, topics, or phenomena that the researcher focused. The theories were from new media or online media as a product of technology-mediated communication with digital computers consisting of a combination of various elements. New media uses the internet, technology-based, has a flexible character and the potential to be interactive, and can function both personally and generally. This study revealed that using online media in learning is hoped to make the lecturers and students enjoyed and comfortable by the availability of various supporting facilities in the new way of learning provided by the online media.

Keywords: Online Learning, Covid 19 Pandemic, Higher Education, Systematic Literature Review.

1. INTRODUCTION

Covid 19 has been spreading largely, hitting more than 215 countries in the world, making it a demand for education to find safe learning solutions from the spread of the virus. The application of physical distancing in the new normal life is a demand for education usually brings together lecturers and learners in the offline learning and teeaching activities.

In the recent new normal era, education is forced to adapt quickly. The learning transition period must use the online method [1], [2]. Universities are trying to find solutions regarding how the learning activities carried out by teachers and students in the new normal era is able to continue, without ignoring the role of lecturers as teachers and students.

Based on *Kemendikbud*, universities have been prohibited from conducting offline learning and asked them to do the learning activities carried out by teachers and students through the Circular Letter from

Kemendikbud No. 1 of 2020. Educational institutions that previously conducted offline learning must now adapt the online learning model [3]. In fact, online learning is required in universities [4]. The learning objectives are able to be accomplished well in online learning if the lecturers are required to make the learning packaging as attractive as possible. Various learning resources, such as documents, pictures, videos, and audio in learning are used in online learning [5]–[7].

Online learning requires collaboration between lecturers and learners so that learning activities can run successfully. It is determined from various interacting components, including lecturers, students, material objectives, methods, and learning strategies [8], [9].

Due to the online learning during this pandemic era, the education sector has major changes [10], [11]. Educators must have competence to adapt to the environment that requires them to teach through online media [12]–[14]. The accessibility, connectivity, and flexibility of the internet network and the ability to build the learning interactions are really needed in online learning.

Adaptation in online teaching due to the covid 19 pandemic has provided new experiences for lecturers in teaching through various platforms such as *Google Classroom, Google Meet, Zoom Cloud*, and various other online learning applications [15]. *Kemendikbud* also presents learning programs through TVRI. However, television media is a one-way communication medium that has not been able to answer the quality of learning outcomes.

Online learning has been implemented in around 65 universities in Indonesia to anticipate the spread of covid 19. Lectures are held by preventing physical encounters between students-lecturers and students - students. By using the digital technology, the students and lecturers can carry out the teaching and learning process even though they are in the different location [16].

However, online learning contains strengths, challenges and obstacles [17], [18]. The obstacles are related to technological facilities, internet networks, the readiness of lecturers as educators and good learning content must be immediately resolved.

Obviously, smartphones or android phones, laptops, computers, tablets, and iPhones are needed to help implement indirect learning. Those functioned to access information when carrying out Work From Home (WFH) online. Currently, indirect (online) learning has become a demand [19].

Online learning is held not only because of the covid 19 pandemic, but also very much needed in the era of industrial revolution 4.0 [20], [21]. Many online media are able to be used to help the online learning acitivities: *Google Classroom, Edmodo, and Schoology services* [22], [23].

By using technology in learning, it is expected that the process of teaching and learning will have better improvement. Then, it becomes more effective, correct, and objective. The use of this technology will provide flexibility for schools to carry out various kinds of modeling in implementing learning activities [24], [25]. In response to this, an educator who acts as the main actor in education should not turn a blind eye. Today's educators must be smarter and smarter than their students in responding to increasingly rapid

technological developments. For this reason, educators can creatively apply online media in digital learning.

This study focused on online learning media as a solution in learning in this pandemic era for students to gain their learning interest. Online learning media consisting of a variety of platforms offer interesting learning methods based on their own functions especially in this pandemic era, so it can be utilized properly by lecturers as to create conducive learning atmosphere that is interesting and creative [26], [27].

This present study is hoped to give benefits to the community for the importance of online learning media as a new learning solution in this pandemic era. The media is not only an informal means of information and entertainment but can also be a formal learning tool in the academic field.

2. METHOD

This study used a Systematic Literature Review (SLR) or literature study, to identify, evaluate and interpret all related findings of any studies connected to certain research questions, topics, or phenomena that the researcher focused [28], [29]. It is a secondary study, which is very useful for synthesizing many relevant research findings so that the facts given to government become broader and stable.

Meanwhile, a qualitative approach in a systematic review was used to synthesize (summarize) the findings of the descriptive qualitative research. It is called Meta Synthesis. Meta synthesis refers to the technique of combining data to build new knowledge or explanations or a broader and more intensive level of comprehension [30]. This meta-synthesis method is method of integrating the results of a number of qualitative studies that are different but are related to each other.

3. RESULT AND DISCUSSION

Online learning media as learning media that has an urgent role in disseminating knowledge information through its various platforms, such as *Facebook, Instagram, Youtube, Zoom, Google meet, Google Classroom, Whatsapp* and a series of other platforms that have advantages in each function according to conditions and the needs of the users.

Through online learning college students were more enjoyed in delivering ideas and giving questions. They did not get the emotional stress from

their friend. The absence of lecturers also made them to be confident in delivering their thoughts [31], [32].

In addition, because of the indirect interaction including the unlimited space and time, the students felt more enjoyed in communication [33], [34]. However, it decreases the nervousness so the students feel confident to respond any learning activities and deliver their thoughts confidently. Furthermore, self-regulated learning can be fostered by using online learning.

Then, the learning independence can be improved by using the online applications [35]. In online learning activities at college students are required to do more, students are able to prioritize creating responsibility and independence in learning so that learning objectives can be achieved. It required them to simultaneously produce students' own learning, assess, manage, and support their learning motivation [36], [37].

Moreover, the students' interest can be improved by using online learning [38], [39]. However, it contains certain challenges. It is great effort for the educators to control directly the student activities during the process of learning when they are in the different location. Nevertheless, the learning process must continue during this pandemic era, and the golden generation does not miss out on knowledge in learning and continues to learn for the advancement of the next generation in the future if the policies of new normal and governments policies related to online learning are still applied. Thus, the lecturers must be able to equip their students with competent and complex education and skills. Hence, they are expected to have critical, constructive, traceable, and character thinking skills. Online learning can improve the understanding of college students at various school levels and various materials [40], [41].

Unfortunately, it is doubted that the students really listen. They frequently do not focus when online learning [42]. In addition, it gives several impacts on students: confusion, passiveness, less creativity and productivity; unuseful accumulation of information/concepts, stress, and low improvement of the students' language literacy skills [43].

It can give a suggestion for evaluating the online learning to be run well for the students without decreasing the education means itself. Therefore, it should be conducted shortly considering that it is difficult for the students to focus since it is running in more than one hour [44].

Some research findings also showed that it was difficult for some students to understand the online learning material. It is because the materials were usually given in the reading forms [45]. Students need a explanation given by the educators directly and clearly. Classes whose educators often come in and explain the materials directly gave a better learning than the classes whose lecturers seldom attend to class and did not explain the materials directly to the students [46].

Clearly, online learning also contains its own challenges. The primary challenge is internet network. For some students, it was difficult for them in the learning because they did access in their areas [47]. This made them difficult to collect assignments. Another challenge was the cost constraint. The students had to pay more to buy quota internet [48]. Moreover, learning to use video conferencing takes up a lot of internet quota. Clearly the data consumption for video conference using the Zoom application with 720P video quality for one hour is 540 MB of data [3], [4].

Prevention is conducted by preventing face-to-face interaction of people who are infected by the corona virus [49]. Controlling physical distance and contact to prevent the spreading of the virus is called social distancing.

Applying online media as a new learning tool can also function as a distance learning tool (PJJ). Online learning made college students more independent because it is student-center. They felt more confident to express ideas and their opinions. In the current condition, the government has tried to provide a platform that students can use to conduct the learning process [50].

Online learning can improve students motivation and make them learn independently [35]. However, there were shortcoming in students online learning that they were not directly controlled face to face the online learning. The weak signaling system internet and high financing and high cost of electricity also became the challenges. However, it is able to decrease spreading the corona virus in universities.

The online learning implementation ran smoothly, but it was felt that most lecturers and students were less than ideal compared to conventional face-to-face learning. Communication was not smooth, causing the material to be difficult to understand, especially practical courses. Student learning outcomes with online learning varied: unsatisfactory, moderate, good. The availability of internet quota, sometimes unstable network, and enhancements (devices and laptops) in online learning were the obstacles faced by students and lecturers.

Online learning is considered capable if it is applied in this pandemic era because it is related to health protocols. To carry out higher education learning activities, one must be able to choose a more varied learning model as an preference that can be utilized in the time to come so that learning will always be interesting so that the education goals generally are able to be reached and support student motivation in learning to improve learning outcomes during this pandemic [41]. Even though the covid 19 pandemic has ended, the method still can be used especially for students who are already working and have problems when they have to study face-to-face on campus.

4. CONCLUSION

One solution that can be applied as social distancing to prevent spreading the corona virus is online learning. Thus, learning can be carried out remotely or learning by students everywhere and every time, so it can avoid the crowds considered as one strategy to implement social distancing.

Supporting facilities and infrastructure are needed in adequate learning activities so that learning activities can continue to run optimally such as laptops, computers, smartphones and a stable internet network are required in online learning. For the college students who do not have a laptop or computer, they can use a smartphone. Online learning makes them more independent and confident to express their opinions and ideas because they do not have pressure and feel comfortable because they are free to choose the place where they want to do the online learning. Students and educators have entered a new periode to build inventiveness, whet student skills, and improve themselves by renovation our systems, perspectives, and paradigm of related with technology.

AUTHOR'S CONTRIBUTION

The contribution has been given equally by all authors for drafting and revising the paper for the better version.Thus, the final version for publication has also been approved.

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