

Live broadcast impact in teaching and learning process during Covid-19 pandemic

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Abstract

This study aims to find out the types of live broadcast media used in the teaching and learning process and explore the constraints experienced by students regarding the learning process during the Covid-19 pandemic. This study applied a qualitative study type. The participants in this study were students of the Indonesian Language and Literature department in the Faculty of Languages and Literature, Universitas Negeri Makassar, Indonesia, in 2019-2020. This study found that the learning media used in the teaching and learning process for a regular meeting during the Covid-19 pandemic as live broadcast application were Zoom, Google Meet, and Streamyard. However, students also experienced that some lecturers only used live broadcast for online examination regarding evaluating the students' assignment progress submitted to Google Classroom. Students also reported that lecturers use live broadcast applications to teach and other applications, such as Google Classroom and LMS. This study also found out the constraints experienced by students regarding the learning process during the Covid-19 pandemic. This study revealed that the students experienced some constraints in the learning process during the Covid-19 pandemic, such as a large amount of data or quotas in use, the inadequate time provided by media of live broadcast, which is up to about forty minutes. Also, unsupportive signals always make weak audio sounds and sometimes close the application, making it difficult for students to comprehend the materials. Therefore, this study recommends that the lecturers maximize the teaching and learning process to anticipate time, place, and internet data packages as students' constraints by recording the live broadcast in the form of YouTube live streaming.

Keywords:

Live broadcast application; Covid-19; online learning.

1 INTRODUCTION

The spread of Covid-19 made the Ministry of Education and Culture issue a circular so that students can learn from home by implementing virtual learning which is carried out with various online platform resources in carrying out the teaching and learning process. The teachers try hard so that virtual learning can run according to their habits at school in achieving learning goals. This has caused much cold mental stress, worsening emotionality, and even greater fear of the Covid-19 pandemic. In this pandemic situation, students become afraid and have a psychological impact on Covid-19 transmission (Ahorsu *et al.*, 2020). This fear has influenced extensive learning concepts, such as fear of failure, fear of missing lessons, fear of not going to class, and even fear of taking risks (Alt & Boniel-Nissim, 2018). Based on this fear, technology is increasingly sought after, starting from buying household necessities, furniture, and even learning. The Covid-19 pandemic has caused universities and schools to implement a distance learning system.

Distance education is learning that is done online, which is not done in the classroom. However, before the Covid-19 pandemic, distance learning was more about understanding learning carried out for those who access geographically distant learning. Currently, the literature on distance learning shows that there is no consistent definition in providing meaning. When computer media becomes a means of education, this definition is also identified with distance learning, whether using print media or electronic media (Moore *et al.*, 1990). Deliveries are carried out in an instructional manner that is carried out physically with differences in the learner and students' place and provides time instructions Dede (1996) explains by providing definition limits, namely by providing a comparison of traditional learning methods by explaining. This definition is distance education using experiential media in generating learning opportunities (Dede, 1996). The definition looks different when the technology becomes available.

With technology, it is increasingly evident that learning will focus without the limitations of distance, time, and place (Guilar & Loring, 2008; Halliday, 2000). The term then develops in online learning, learning technology, virtual learning, e-learning, learning management systems, and others (Conrad, 2006). Thus, there are many similarities in intent but have different definitions because it is found that there are different forms of learning that occur. The selection of effective learning media will control the student learning environment and suppress students' high fear against Covid-19. Therefore, this study investigates the importance of selecting effective and appropriate technology to meet learning targets at home and overcome students' fears of spreading the virus during the Covid-19 pandemic.

Technological developments have made long-distance easier (McBrien *et al.*, 2009). Many terms refer to distance learning; nowadays, distance learning has transformed it. In the past, distance learning was effortless, but distance learning has become easier to do with technology development. Currently, distance learning technology capabilities can be carried out anytime and anywhere using the internet network and mediated by laptops and Androids or with any tools (Cojocariu *et al.*, 2014). Online learning or learning using the internet makes the learning process more student-centered. Students can make various innovations and produce a more creative learning experience according to their imagination only with the teacher's instructions using internet access. The online learning environment will make students more independent in

learning and interact with teachers or other students by using internet services called virtual reality or what is more familiar during this pandemic called the live broadcast application without meeting in real terms feels real.

Virtual reality can be done by doing synchronous learning, which means that teachers and students can meet directly and interact with each other in online learning. However, synchronous learning like this is not structured like a system in a learning forum. Likewise, a system in a well-structured forum cannot do direct learning because instant feedback and direct responses are challenging to do instantly in one class (Littlefield, 2018). Synchronous online learning can provide a lot of social interactions (McBrien *et al.*, 2009). The live broadcast application is one of the most widely used online social interaction platforms during the Covid-19 pandemic. The live broadcast application can hold video conferences with many people, even up to hundreds of participants. Therefore, all students can meet directly with the teacher or with other students. Live broadcast applications can also hold discussions in a real class to remain alive and continues as usual. Live broadcast media also supports the cellphone, and the learning process can be recorded. Besides, direct feedback from teachers can maximize the direct assessment.

The global Covid-19 world is currently quarantining the world; all countries have become lonely and lethargic in education, schools, universities, and course educational institutions. The only way for the continuity of education in all countries is by doing online learning. The coronavirus has forced the world of education to master technology today. This virus opens our eyes to the positive side of online learning. With online learning, we can learn anytime and anywhere; this is under the Minister of Education and Culture's wishes regarding "Free Campus, Free Learning" (Siregar *et al.*, 2020). According to their students, all education fields are busy finding the right way of teaching in applying the right online pedagogical approach. Many schools and colleges have implemented all their operations or educational interests in digital form because there is an urgent need to be done online in the Covid-19 situation. The occurrence of this learning shift changes all learning methods that were previously carried out in the class with full warmth, shouting at each other, chasing, jumping around, and so on; now, learners must think hard about changing all methods into an online pedagogical approach, and this must be a new habit. Indeed, this is a challenging thing, so currently, our primary goal is not the quality of education but how schools or colleges can massively adopt learning (Carey, 2020).

Rejection of online learning during the Covid-19 pandemic will not significantly impact academics around the world. This short time will not provide quality online learning results because each teacher's readiness is not optimal. So that the reputation or accreditation of the school or campus academic world seems to be at stake. Therefore, institutions or schools must improve online learning by maintaining the quality of education during this crisis. The adaptation of face-to-face learning to online learning is the only best solution currently. Schools or colleges will not be able to compile an online curriculum suddenly without careful planning. The biggest challenge in online learning is the distance, so there is a need for innovation by schools or institutions to deal with the Covid-19 pandemic (Liguori & Winkler, 2020). Many applications have been provided for the smooth running of online learning. This learning media can be used as an alternative to online learning as a substitute for face-to-face learning. Online learning media can be used optimally to generate student interest.

Starting in December 2019, Wuhan city, Hubei, China pandemic Covid-19 (organization, 2020b). pneumonia virus caused by a pathogen causes one individual to be infected and have acute respiratory syndrome Coronavirus 2 or in another term called SARS-CoV-2. On March 3, 2020, it finally spread, and in about 80,151 cases, the Chinese people have been infected with this virus (Zeri & Naroo, 2020). Globally, the spread of Covid-19 has been confirmed to have infected approximately 10,566 people in 72 countries (Organization, 2020a). Wuhan's rules are also in place in various countries, including the impact of the travel ban on various countries initially implemented in early February 2020 to restrain the virus's spread from being infected at a higher level.

The purpose of this study is to provide an excellent educational understanding of appropriate technology that supports the teaching and learning process during the pandemic Covid-19. This is done to measure users' knowledge and desire to accept the use of technology (Liu *et al.*, 2020; Tsai *et al.*, 2020). The psychological fear experienced by teachers and students during the Covid-19 pandemic is a threat. Therefore, live broadcast applications are considered learning applications used in the teaching and learning process. The learning process using a live broadcast application is the most widely used application, starting from teaching to conducting seminars in universities. However, the use of live broadcast turned out to be very expensive in using data or internet quotas to become a complaint about students and students. Teachers and lecturers must carry out their obligations from home to demand full mastery of technology even though other jobs such as guiding are less than optimal. Based on the above phenomena, the authors proposed two research questions as follows:

- What kind of live broadcast media used in the teaching and learning process during the Covid-19 pandemic?
- What constraints experienced by students regarding the learning process during the Covid-19 pandemic?

2 METHOD

In this study, the qualitative study was applied by observing the object's condition naturally using an online interview task. The interview task is subject to remote data collection (Chatha & Bretz, 2020). The participants in this study were students of the Indonesian Language and Literature Department who took online lectures using a live broadcast application. The data collection technique was done using online interviews with social media, which were carried out continuously until the data provided is saturated. The study instruments built were subject to find out the types of live broadcast media used in the teaching and learning process and the constraints experienced by students regarding the learning process during the Covid-19 pandemic. The data analysis technique was done based on the technique popularized by Miles, Huberman, and Saldana (2013) that qualitative analysis is started by reducing the data, followed by presenting the data and finally drawing conclusions.

3 RESULTS AND DISCUSSION

In this study, five participants were interviewed to report their experience on learning process during the pandemic Covid-19. This section describes the results of the interview based on two interview questions. The results of the interview are presented as follows:

3.1 What kind of live broadcast media used in the teaching and learning process during the Covid-19 pandemic?

This interview question was set to explore the learning strategies experienced by students during the Covid-19 pandemic.

- Student 1:

“My lecturer used Zoom as a live broadcast application to explain the materials and assign tasks. My lecturer used Google Classroom to upload written assignments. Lecturer uses live broadcast applications to provide oral and written exams during mid-test or final exams.”

- Student 2:

“My lecturer used Google Meet as live broadcast every week and Google Classroom for mid-test and final exam in the form of multiple-choice.”

- Student 3:

“My lecturers used Streamyard as a live broadcast application for a regular meeting and LMS for written assignments.”

- Student 4:

“My lecturers used Zoom as a live broadcast application for online meeting every week and mid-test or final test in the form interview.”

- Student 5:

“My lecturers used Zoom as the live broadcast application only for evaluating the first six meetings and the last meeting for oral evaluation regarding all the materials assigned in Google Classroom.”

Based on the data above, it can be concluded that most lecturers used the live broadcast application for regular meetings. However, students also experienced that some lecturers only used live broadcast for online examination regarding evaluating the students' assignment progress submitted to Google Classroom. Chang and Fang (2020) found that online test examination is implemented in the Covid-19 pandemic. Students can get real-time feedback from teachers (Suh et al. (2020). Chang and Fang (2020) revealed that during the Covid-19 pandemic, teachers have been using online live broadcasts to support the teaching and learning process. Students also reported that lecturers use live broadcast applications to teach and other applications, such as Google Classroom and LMS.

3.2 What constraints experienced by students regarding the learning process during the Covid-19 pandemic?

This interview question is designed to obtain information from students regarding the constraints experienced by students and lecturers using the live broadcast application as learning media during the Covid-19 pandemic.

- Student 1:

“The use of the live broadcast application is excellent because we can immediately get information from the lecturer, but the low internet connection in my village makes me difficult to access.”

- Student 2:

“The use of a live broadcast application does not work properly in my house due to low internet connection. We still need Google Classroom or LMS to submit written assignments.”

- Student 3:

“Live broadcast application requires a large amount of internet data quotas makes me difficult to join the lecture.”

- Student 4:

“The live broadcast application, such as Zoom basic version that most lectures only the live broadcast up to forty minutes, so we restart login to rejoin the lecture.”

- Student 5:

“Low internet connection makes unclear audio sound and sometimes close the application so that it is difficult to comprehend the materials.”

Based on the data above, it can be concluded that the live broadcast application is used and liked by students but many obstacles, so that most students are reluctant to use the live broadcast application. This is indicated by statements such as expensive quotas, less supportive signals, difficulty collecting tasks, and the material described is not completed because the sufficient time provided by live broadcast is only up to forty minutes. Therefore, lecturers must maximize the teaching and learning process to anticipate time, place, and internet data packages as students' constraints (Nugroho *et al.*, 2020).

4 CONCLUSION

Based on the data above, it can be concluded that most lecturers used the live broadcast application for regular meetings. This study found that the learning media used in the teaching and learning process for regular meetings during the Covid-19 pandemic as live broadcast application were Zoom, Google Meet, and Streamyard. However, students also experienced that some lecturers only used live broadcast for online examination regarding evaluating the students' assignment progress submitted to Google Classroom. Students also reported that lecturers use live broadcast applications to teach and other

applications, such as Google Classroom and LMS. This study also found out the constraints experienced by students regarding the learning process during the Covid-19 pandemic. This study revealed that the students experienced some constraints in the learning process during the Covid-19 pandemic, such as a large amount of data or quotas in use, the inadequate time provided by media of live broadcast, which is up to about forty minutes. Also, low internet connection always makes unclear audio sound and sometimes close the application, and students were unable to comprehend the materials. Therefore, this study recommends that the lecturers maximize the teaching and learning process to anticipate time, place, and internet data packages as students' constraints by recording the live broadcast in the form of YouTube live streaming.

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