

**THE ROLE OF DIGITAL TECHNOLOGIES IN ONLINE LEARNING: A STUDY
ON THE STUDENTS' PERCEPTIONS**

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ABSTRACT

This research aims to find out the role of digital technologies in online learning based on the students' perceptions. The qualitative descriptive method is applied in this research. The researchers implied semi-structured interview to collect the data with 10 English Education Department students of Maros Muslim University as the participants. The interviews are done by individually and recorded through audio recording. The findings of this research show two different perceptions from students. The first, students who think that online learning using digital technology is very helpful to assist them in understanding the material well because they can directly look for on the internet and they can repeat the materials many times in learning platform. The second, students who argue that utilizing digital technology in online learning is not effective since the direct interaction is absence. They feel difficult to communicate with the teachers in virtual way when the teaching and learning process is run so that they cannot comprehend the material well. Likewise, some students are bothered with the unstable internet network that makes them are difficult to attend the online learning smoothly. Therefore, all of these perceptions can lead to the positives and negatives of the usage of digital technologies in online learning.

Keywords: Digital technologies, online learning, students' perceptions

INTRODUCTION

The use of digital technology has developed over time as technology has also been used in teaching and learning process. It cannot be denied technologies plays significant role in education, it brings lot of advantages for teachers and students as well. Digital technologies itself covers all types of technological equipment such as computer, CD player, handphone, play station and many more, it also included their application and the internet where all those things depend on. Digital technologies refers to electronic tools, systems, devices and resources that generate, store or process data (Kanoksilapatham, 2022).

One of the most important forces of language change in the modern era is digital technologies. With its incredible entry as an educational technologies over the last decade, the tradition of English Language teaching has significantly transformed (Abbasova & Mammadova, 2019). This is proven by the rapidly increasing usage of technologies in various sectors, including education. Certainly, technological advancements benefit both

teachers and students. There is much information connected to the lessons that students need can be accessed via the internet as well as numerous materials teachers can obtain. Furthermore, digital technology has changed the way of people communicate, learn and work in recent years. This modern era required teachers to teach using computer with various application in it. In spite of that, the use of technology indeed be loved by students because nowadays mostly they access information through their mobile phone or laptop with the use of internet they can search anything based on their preferences. The integration of technologies into education even allows students with an engaging learning experience, assisting them to maintain more interest in the subject without being distracted (Haleem et al., 2022)

Study on the use of digital technologies in teaching and learning is not new. Numerous researchers have done this issue. Ardena & Fatimah (2021) on the research about teachers' perception on the use of technologies-based media found out that to become an effective English teacher they have to have competence in the field of media-based technologies, teachers are interested and concern about the use of technologies, mastering and understanding as well about the use of technologies-based media. Another research from Abbasova & Mammadova (2019) who have researched about the role of digital technologies in English language teaching. They revealed that younger teachers have more competence in using digital technologies and have various idea to use technologies in teaching English rather that old teachers. The research about technologies in distance learning was investigates as well by Kodri (2020) who stated that during the Covid-19 pandemic, digital technologies plays an important role when implementing online learning, including facilitating the implementation of online learning, making distance learning more effective, making it easier to find and process information, facilitating the interaction and work of teachers and learners, and guiding technologies users to be more beneficial and maintain social ethics when using technologies in online learning.

Because of pandemic era happened recently, the ability of using digital technologies become imperative for both teachers and students. Teaching and learning process changed into online way in 2 years lately involving various forms of digital technologies such as internet, social media and LMS applications (Hidayat et al., 2022). Specifically, in Maros Muslim University that became location of this research, the teaching and learning process during pandemic has shifted to Google Classroom and Google Meet. Google Classroom itself is a free hybrid learning tool created by Google for educational institutions. The use of Google Classroom for Maros Muslim University because there is still no LMS (Learning Management System) made by university so that all of the process of teaching and learning between teachers

and students were posted in Google Classroom. Likewise, Google Meet is used for teachers and students to do virtual meetings regularly.

Unfortunately, the fact that teachers and students must do teaching and learning process through online, it was inflicted by some perceptions for students because it was automatically required technological assistance including smartphones or laptops as well as the internet that will be used to meet in virtual worlds. However, this research conducted in Maros Region which some students lived in rural area so that various reasons arose between students who like to do online class and there were also those who did not. Therefore, this study would like to investigate the perceptions from students about the role of digital technologies in online teaching. Looking at all of the reasons listed above, this study has particular concerns that will be explored through descriptive qualitative research. The questions as follow:

- a. What are the students' perceptions of digital technologies in online learning?
- b. What are the positives and negatives of using digital technologies in online learning?

METHODOLOGY

Descriptive qualitative research was applied in this study to find out the students' perceptions of using digital technologies in online learning. The participants of this study were the students of Maros Muslim University in semester six. This criterion was chosen mainly because the students had online classes for two years when they started their first semester in 2020, during the first pandemic in Indonesia. Therefore, there were 10 students as participants and named as S1-S10 in this research. The main source of data in this research is the results of interview. This study collected data through semi-structured interviews which were conducted individually and used Indonesian Language for allowing them to express themselves more freely. The semi-structured interviews were recorded by audio recording, then the recorded data were transcribed into English and the researchers explored the results related about digital technologies in online learning. Then, data analysis of this research was applied qualitative data analysis by Miles & Huberman (2014). Which consisted of four procedures; they are data collection, data condensation, data display and conclusion drawing/verification.

RESULTS/FINDINGS

The findings of this research presented two main points related to the students' perceptions of using digital technologies in online learning. The first was those who like to do online learning by using digital technologies such as mobile phones and laptops. The second was those who did not like to do online learning because of some reasons. Moreover, the

question related positives and negatives of using digital technologies in online learning indicated that most of students thought there are some positives and negatives that affect the use of digital technologies especially for online learning where all the tools must be used technologies.

1. Students' Perceptions of Digital Technologies in Online Learning

Digital technology has certainly known in various area included big cities and regions, however, there are still some tiny or rural areas where the internet network is difficult to access. As the location of this research is in the region and some of students come from rural area, it makes some different perceptions about how digital technologies applied in their live. Therefore, there are two different perceptions about the use of digital technologies in online learning. First, the students who agree that digital technology is highly useful in assisting them in online learning particularly when the students want to search for the materials that has been taught in online class.

“Digital technology is very helpful because we can directly discover the material in the internet when we cannot understand well the teacher’s explanation” (S2)

“Digital technology makes easier in finding the material or task and also the use of digital book is very helpful because we don’t need to be tired of carrying heavy printed books” (S9)

“My opinion about the use of digital technologies in online learning is very beneficial and of course provides various sites & applications that are very useful and advantageous so as to facilitate the online learning process and digital technologies is also a means to find/obtain various information other than physical books, newspapers, etc” (S10)

Based on the students’ statements above in their interview, they pointed out that digital technology is highly valuable for them to understand the material when they feel difficult to comprehend the teacher’s explanation during online learning. Some of students mentioned digital technologies, such as digital books, allow them to read books anywhere. They also can collect many digital books in one gadget, as opposed to printed books, which are heavy and difficult to bring around. Furthermore, other perceptions come from students who think that the use of digital technologies like mobile phones and laptops lead them to learn in practical and effective way. As the students stated in their interview:

“The use of digital technologies in online learning is very useful since we can learn anywhere and anytime” (S1)

“Online learning with technologies is an effective way where we can do at home or campus” (S8)

They argued that using their mobile phone and laptop was practice and effective in online learning. They found it very helpful because they can learn anywhere and anytime. Another beneficial of using digital technologies in online learning is the students did not have to spend money for transportation to go to campus. Digital technologies have minimized the cost of transportation (Shaibu et al., 2018). However, the opposite perceptions come from the other students who did not like to do online learning because they thought that the teaching and learning process were not effective when it did not do in face to face in the classroom. Additionally, their mobile phones and laptop become slow response and heat up faster. The network issue and internet quota also were the main problems why they did not like online learning.

“It is not quite effective because sometimes I have network issues, especially when I need to find a stable connection at home” (S4)

“It is not effective due to my network problem. Moreover, it spends lots of quota internet to do online learning” (S5)

“It is not very effective since online learning need stable network so that the explanation from lecturer goes well” (S7)

According to some students, employing digital technologies in online learning is ineffective. The teaching and learning process should be in the class so that the students be able to ask whenever they can not understand about the material being taught. Besides, utilizing digital technologies, such as mobile phones and laptops become more frequent, makes the battery low quickly and heat up which can lead to get damaged faster.

“My mobile phone becomes slow and hot because it is used all day to study online and when the battery is low, I have to charge it while using it which is not good for using gadgets” (S2)

Moreover, some students who live in rural area such as near mountains are difficult to find internet network and they need to do extra effort in attending online learning.

“I need to go out of house to seek for internet network, sometimes under the house or far away from my house so the network can be stable” (S2)

“During online learning, I should go to the kitchen or outside house in order to have good internet network so the explanation from lecturer is clear” (S4)

By looking at the students' statements above, it is very reasonable why they argued that digital technologies in online learning is not an effective way to do for long term particularly for those who live in rural area where the internet network is still unstable.

2. Positives and Negatives of Digital Technologies in Online Learning

Regarding the second research question about the positives and negatives of utilizing digital technologies in online learning, the findings revealed that the majority of students assumed there must be positives and negatives side in using digital technologies in online learning. The students emphasized that using digital technologies is absolutely useful for them since mobile phones is one of the items that are needed and the usage as well become part of their daily life. Online learning through mobile phones or laptops makes them easy to learn at any location they want. In addition, the students have more knowledge about various learning platform in virtual world included the features such as Google Classroom, Google Meet and Zoom Cloud Meeting.

"I can know more about internet features such as Google Classroom and Google Meet where we can share the materials and do the presentation in it" (S4)

"Getting to know more about the use of technological features on the internet like Google Meet and Google Classroom" (S7)

"From I don't know anything to know a lot about digital technologies because we are required to use it for instance Google Class, Google Meet and Zoom so it is very knowledgeable" (S9)

"There are various features in the application that can be used such as recording so when the teacher explains the students can listen again through the results of the record" (S10)

It can be seen from all statements above that most of students feel so beneficial in using digital technologies in their online learning. Another positive side in having the usage of digital technologies in online learning that when the students do not understand the teacher's explanation, they can directly look for the materials on the internet and, of course, the materials provided by the teacher in the learning platform which they can repeat many times to gain a better understanding.

"The advantages of using technologies in online learning is the materials, we can repeat more without limitation because direct learning cannot be repeated" (S1)

"We can obtain more complete and structured information with broader insights, for instance, what we are look for we can get it right away" (S3)

Conversely, on the negative side, the students were undoubtedly hampered by network. The fact that some students lived in rural area where the internet is hard to find that become the most problems that they have to faced it. If the network is unstable, it ruined the understanding of students in receiving materials from teachers. Therefore, the students got confused and unenthusiastic because the teacher's explanation are often interrupted. The internet quota also has been the burdens for students since some students have low budget to buy quota and they have to do online class for whole day, it means they need extra quota to do that. As students stated below:

“Online learning required a lot of quotas and stable network, if not so the explanation from lecturer is not very clear” (S1)

“internet quota is very wasteful if we have to do online learning in one day for 3 subjects, it spends more than 1GB only for 1 day” (S7)

“The lecturer's explanation is unclear because of bad network, sending assignment is obstructed since I live near mountains so the internet network is bad” (S9)

Similarly, related to the lecturer's explanation that is unclear, the students pointed out as well that it is highly different from online and offline learning, however, the face-to-face learning is certainly more efficient than meet in virtual world by using digital technologies.

“If I want to choose between online and offline, of course that would be offline because sometimes I didn't understand what lecturer say” (S6)

“Digital technology is very helpful. However, it is quite effective in the learning process since teacher and students are not meeting directly so that students are not accepting materials well” (S10)

DISCUSSION

This research explored the students' perceptions on how the role of digital technologies in online learning. Various opinion arises from students in applying digital technologies in their online learning since pandemic until now. It is also investigated the positives and negatives of using digital technologies in online learning based on the students' point of view. Some students stated that digital technologies are effective to use in online learning yet some students had arguments that using digital technologies is not efficient especially in online learning. Those opinions can be directed to positive and negative sides of utilizing digital technologies in online learning for students.

The findings of this research presented two perceptions, the students who agree and disagree on the implementation of digital technologies in online learning. Numerous students

think that digital technologies are highly advantageous during online learning since the students can easily repeat the material given by teachers if they could not understand the teacher's explanation. Yeboah, et.al (2020) found out that digital technologies in the form of LMS provided by university give the students opportunities to have more access to the courses, which helped them to achieve better educational performances. Besides, the efficiency of digital technologies such as mobile phones and laptops become their excellences in doing online learning practically. Xhaferi & Xhaferi (2020) examined on their research that students get benefit greatly from online classes because they can take them anywhere when they have internet access and can do two activities at once. Similarly, the findings of this research also showed that students are greatly helped by doing online learning with their mobile phones since it is very easy to bring anywhere.

On the contrary, several students argued that digital technologies are not effective when applying in online learning. They assumed that the teaching and learning process should be done directly face-to-face in the class so that there is interaction for both students and teachers. Students specifically raised concerns about the quality of human interaction when there is no face-to-face contact if ICT is employed in an educational context (Agrusti et al., 2008, p. 63). Online interactions lose the nonverbal indicators that are present in interactions with one another, which may limit the amount of communication that occurs (Appana, 2008). Based on the results of this research, the absence of direct interaction caused some problems, for instance there is no feedback from students lead to a bored atmosphere in the class and students become uninterested with the material, also students unwilling to interrupt the lecturer's explanation can caused misunderstand to the material given. Hermida (2020) investigated many students asserted that online learning was a stressful experience and they had negative attitude about it. Therefore, it would be great if the use of digital technology in online learning is more prepared well for both students and teachers to achieve the pleasant experience in online learning.

Furthermore, some students are upset with the use of an internet network that sometimes getting bad or become unstable in their location. The fact that some students live in rural area which are near mountain, it affects the online learning process to achieve the goals that have been set by teachers before. Moreover, as online learning required self-directed learners so that the readiness of students is important yet if the students still bothered with the connection when doing online learning, it would be very disturbing for them so it is logical for students to assume that online learning with digital technologies are ineffective. As Appana (2008) stated that online students face the added strain of coping with any technical delays or

difficulties that may arise. Therefore, the use of digital technology also must be accompanied by proper technological infrastructures in various regions especially rural areas.

CONCLUSION

The results of this research revealed that students' perceptions are divided into two that some of them do not mind if the learning process is done through online by using digital technology because they think that it is very helpful and beneficial for them. On the other hand, some students who object to do online learning argued that it is not effective to learn without meeting face-to-face in the class in order to get direct feedback for both teachers and students so that teaching and learning process can be done perfectly.

At last, utilizing digital technologies in online learning have positives and negatives perceptions towards students. The positives sides are digital technologies is highly helpful for students get to know more about technology particularly about the features of learning platforms such as Google Classroom, Goole Meet and Zoom Cloud Meeting. Besides, they can get easily access the material being explained by teachers in all subjects from the platform used by the university. Moreover, digital technology such as mobile phones and laptops with the use of internet are being practical in doing online learning anywhere. However, the negatives sides of using digital technology in online learning is about the absence of direct interaction between teachers and students in the learning process, as well as the internet network that sometimes get bad and unstable when doing online learning. Therefore, it is important to compared more between face-to-face learning and online learning to see the superiority of each and to get more knowledge about the students and teachers' perspective of online and offline learning with the use of digital technology to support their teaching in the class. In addition, the research about the barriers of using digital technologies for students and teachers could be investigated as well.

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