INTERNET OF THINGS IN EDUCATION : ZOOM VS GOOGLE MEET, WHICH ONE IS MORE EFFECTIVE FOR ONLINE LEARNING?

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Abstract

Since Covid-19 entered Indonesia in March, all activities outside the home such as teaching-learning activities and work have been carried out through online. Until now, teaching and learning activities are still carried out online through government-owned learning applications and other additional learning applications. With the learning application teachers and students can connect anywhere and anytime through online learning. However, providing material will not be enough if the teachers and students only rely on online learning application, chat or game-based learning applications. Teachers also need a media to provide material and explanations as well as interact directly through video conferencing application such as Zoom and Google Meet. This article will discuss which video conferencing applications that more effective for online learning during this pandemic era.

Key words: Zoom, Google Meet, Online learning

INTRODUCTION

What do you think about when teaching and learning activities must be done from home? Surely the first thought is whether this will work effectively or not? The learning and teaching process in this pandemic situation is very important and needs to be considered to regulate how effective learning is for teachers, lecturers, and students (Ahdan et al., 2021; Thornton & Houser, 2005; Tindakan et al., 2021). All subjects that had to be carried out in class/offline had to be done online especially for practical lessons (Ayu et al., 2021; Maskar et al., 2021; Novitasari et al., 2021). Of course, this would be very troublesome and could hinder the lesson, the process of changing this learning system did not immediately run smoothly and there are many challenges that must be faced by the teacher and the solutions must be provided (Oktaviani, 2021; Oktaviani et al., 2021; Puspita et al., 2021). "Moving smoothly from an environment of conventional education to distance and virtual learning could not happen overnight (Choirunnisa & Mandasari, 2021; N. R. Putri & Sari, 2021; Yusuf, 2021). This rapid transformation is linked to various obstacles and challenges at this point (Athaya et al., 2021; Ayu, 2020; Rohman et al., 2020). Changing the learning process from face-to-face or offline learning to online learning is very difficult because there are many obstacles faced by teachers, and teachers trying to find suitable strategies for teaching students through online learning (Qodriani & Wijana, 2021;

Yudiawan et al., 2021; Yulianti & Sulistyawati, 2021). "However, there is ambiguity and disagreement about what to teach, how to teach, the workload of teachers and students, the teaching environment, and the implications for education equity" (Kurniawan et al., 2019; Oktaviani & Mandasari, 2020; Septiyana & Aminatun, 2021).

To carry out an effective online teaching and learning process, several supporting applications such as video conferencing applications are a solution to this online learning problem (Fitri et al., 2021; L. A. Putri & Dewi, 2020; Utami et al., 2021). So that teachers can explain the material directly and can interact with students and be able to find out how far students understand on the subject matter (Aguss & Yuliandra, 2021; Lina & Permatasari, 2020; Sulistiani et al., 2021). Effective online instruction is dependent upon 1) well-designed course content, motivating interaction between the instructors and learners, well-prepared and fully supported instructors; 2) creation of a sense of an online learning community; and 3) rapid advancement of technology (Aminatun et al., 2021; Isnaini & Aminatun, 2021; N. Putri & Aminatun, 2021). Having online teaching with students is very hard because teachers need to organize and create online learning classes in the best way (Apriyanti et al., 2014; Pratiwi & Ayu, 2020; Simamora & Oktaviani, 2020). "Several techniques were used to deliver the distance program for a period of time (Aminatun, 2021; Mandasari, 2016; Nurmala Sari & Aminatun, 2021).

LITERATURE REVIEW

Teachers have used many strategies during online learning in this pandemic era by adjusting learning media to be more effective while online learning is still ongoing (Agustin & Ayu, 2021; Puspita & Amelia, 2020; Yuliansyah & Ayu, 2021). Therefore, this study aims to determine which video conferencing applications are more effective for use during teaching and learning activities in this pandemic era (Mandasari & Aminatun, 2019; Oktaviani & Desiarti, 2019; Riskiono et al., 2021). This study uses the perspective of several students, the researcher will reveal the student's perspective on which video conferencing is more effective for online learning (Hendrastuty et al., 2021; Saputra & Agus, 2021; Yudha & Mandasari, 2021). Other researchers can also use this research as a reference or insight to make new research or studies more extensive and significant (Adhinata et al., 2021; Putra et al., 2009; Wahyudin, 2017).

METHOD

This study aims to determine students' views on the effectiveness of video conference application : Zoom and Google Meet, as the supporting and additional media for effective online learning. The researcher will use qualitative data for research. The researcher used a questionnaire to collect the data. The researcher also ask other questions to get perspective from the students (Baker & Edwards, 2012; Kadarisman et al., 2017). Participants in this study came from the English Education Study Program batch 2018 of Faculty of Arts and Education at the Universitas Teknokrat Indonesia. Participants consisting of 27 students were selected for this study. They consist of male and female students in the fifth semester. They were selected as representatives of the English Language Study Program at Universitas Teknokrat Indonesia. Their opinion will be treated as non-expert opinion. Hence, they represent the views of society and students. Seven questions in the questionnaire will be distributed to participants to collect their opinion data. Seven questions consisting of two options, (1) Zoom; or (2) Google Meet. The questionnaire will be distributed in the chat application (Whatsapp). The researcher provides the participants with a link to the survey site and asks them to fill out a survey form. After the participants filled out the questionnaire, the researcher could immediately see the feedback from the participants. After collecting all responses from the survey location, the researcher will enter this data into the survey data. Why the researcher will do this study? The researcher will analyse the the effectiveness of video conference application : Zoom and Google Meet, as the supporting and additional media for effective online learning. Through an analysis, we can find out the effectiveness of these two video conference applications in creating better online learning.

RESULTS AND DISCUSSION

No	Question	Zoom	Google Meet
1.	Which do you think makes it easier for you to do Video Conference when online learning?	92,6%	7,4%
2.	In your opinion, which is a more complete feature of Video Conference between these two applications?	88,9%	11,1%
3.	Which application do you think is easier to use in terms of using the Video Conference feature?	85,2%	14,8%
4.	Which of these two applications do you use more often?	96,3%	3,7%
5.	Which one is more efficient in terms of internet data usage?	59,3%	40,7%

6.	Which makes it easier for you to "share screen / ppt" when you are presenting in Video Conference?	88,9%	11,1%
7.	Overall which Video Conference application do you like the most?	81,5%	18,5%

Based on the data obtained by the researcher, it can be said that most of the students who filled out the questionnaire chose Zoom as a video conference application that was effective to use to support online learning in terms of ease of use of applications, completeness of features and others.

Almost all participants or about 92.6% (25 people) who filled out the questionnaire choose Zoom video conference application as an easy-to-use application when learning in online learning because Zoom application has a display and features that can make it easier for users to conduct video conferences such as easy to share documents, pictures, and others.

About 88.9% or 24 participants chose the Zoom video conference application as a full-featured video conference application compared to Google Meet and other video conferencing applications. Zoom video conference application has automatic transcripts for recorded calls, and also can change the background as the user wants, Zoom has better email integration than other video conferencing applications then has a free package that can accommodate about 100 participants and 500 participants for the Zoom enterprise package. Then 85.2% or 23 participants agreed that Zoom video conference application has features that are easy to use such as if the participants want to share ppt or other documents they can immediately use the share screen button, then when they want to record the screen during the video conference they can immediately record it easily and there are many other features that make it easy to conduct video conferences when they conduct online learning.

Almost all participants in this study or about 96.3% (26 people) used Zoom more often than other video conferencing applications such as Google Meet and others. Due to the completeness of the features and the ease of use of the features in the application, it is very easy for users so that many people choose the Zoom application to be used for online learning and other activities. In terms of internet usage, 59.3% or 16 participants chose Zoom video conference application as a video conference application that does not use much internet data, when compared to other video conferencing applications Zoom clearly

has complete and adequate features even though some participants thought that Zoom spends more lots of internet data usage, but all will be paid off with the complete features available in the Zoom application. Then as many as 88.9% (24 participants) chose Zoom as a video-conferencing application that made it easier for them to share screen/ppt when they conduct presentations in online learning, as previously mentioned Zoom does have complete features and makes it easy for its users. 81.5% or around 22 participants chose Zoom as their preferred video conferencing application, as evidenced by its completeness of features, ease of use, and efficiency. No wonder many people choose Zoom to support their online learning activities.

CONCLUSION

By using a questionnaire as a research tool to collect student perception data about the effectiveness of the video conferencing they used during online learning in the midst of the Covid-19 pandemic. Most students choose Zoom video conference application as a video conference application which they think is effective for online learning activities, both in terms of ease of use of applications, complete features, efficiency, and so on. The opinions or perceptions of students who participated in filling out the questionnaire in this study were influenced by their own experiences and from other sources. With the results of this study, researchers hope that teachers and students can improve the quality of online learning through additional supporting applications such as Zoom in order to explain the material directly through video conferences so that online learning activities will be more effective in this pandemic. This research can also be used as a guide or reference for further research on the same topic or issue.

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