



Utilization of Zoom Application as An Online Learning Media During the Covid-19 Pandemic at Politeknik Penerbangan Indonesia Curug

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Article Info	Abstract
Article History Received: 2022-12-12 Revised: 2023-01-17 Published: 2023-02-02 Keywords: <i>Utilization; Zoom Application; Online Learning; Media During; Covid-19.</i>	The spread of covid-19 in Indonesia requires all Cadets on campus under the Ministry of Transportation in Indonesia to be conducted online. Politeknik Penerbangan Indonesia Curug is one of the schools under the Ministry of Transportation that applies in the Covid-19 epidemic to online learning through the Zoom application. Zoom.us provides a version of Zoom Education as a form of CSR provided to schools affected by the Covid-19 Pandemic. Online learning's effectiveness is very important, so cadets understand the lessons during the Teaching and Learning Activities (KBM). This study aims to understand how effective online learning is conducted at Politeknik Penerbangan Indonesia Curug using the Zoom application. This research uses a qualitative research method and data collection techniques by conducting interview techniques. This research resulted in online learning conducted with a zoom application at Politeknik Penerbangan Indonesia Curug. Online learning got an excellent response from cadets because it offered greater flexibility in their studies. Online learning makes cadets more independent but also encourages cadets more active when learning. In addition, acceptance and the understanding delivered by lecturers can be felt by the Cadets at Politeknik Penerbangan Indonesia Curug. But this online learning system also has weaknesses: limited cadets quota, which causes not all cadets to go online by activating the video so that lecturers cannot see all activities carried out by cadets.
Artikel Info	Abstrak
Sejarah Artikel Diterima: 2022-12-12 Direvisi: 2023-01-17 Dipublikasi: 2023-02-02 Kata kunci: <i>Pemanfaatan; Aplikasi Zoom; Pembelajaran online; Media Selama; Covid19.</i>	Penyebaran covid-19 di Indonesia mengharuskan seluruh Taruna di lingkungan kampus di bawah Kementerian Perhubungan di Indonesia dilakukan secara daring. Curug Politeknik Penerbangan Indonesia merupakan salah satu sekolah di bawah Kementerian Perhubungan yang menerapkan di masa wabah Covid-19 pembelajaran daring melalui aplikasi Zoom. Zoom.us menyediakan versi Zoom Edukasi sebagai bentuk CSR yang diberikan kepada sekolah-sekolah yang terdampak oleh Pandemi Covid-19. Efektifitas pembelajaran daring sangat penting agar taruna memahami pelajaran pada saat Kegiatan Belajar Mengajar (KBM). Penelitian ini bertujuan untuk mengetahui seberapa efektif pembelajaran online yang dilakukan di Politeknik Penerbangan Indonesia Curug menggunakan aplikasi Zoom. Penelitian ini menggunakan metode penelitian kualitatif dan teknik pengumpulan data dengan melakukan teknik wawancara. Penelitian ini menghasilkan pembelajaran online yang dilakukan dengan aplikasi zoom di Politeknik Penerbangan Indonesia Curug. Pembelajaran online mendapat respon yang sangat baik dari taruna karena menawarkan fleksibilitas yang lebih besar dalam studi mereka. Pembelajaran daring menjadikan taruna lebih mandiri tetapi juga mendorong taruna untuk lebih aktif saat belajar. Selain itu, penerimaan dan pemahaman yang disampaikan para dosen dapat dirasakan oleh Taruna Politeknik Penerbangan Indonesia Curug. Namun sistem pembelajaran daring ini juga memiliki kelemahan yaitu keterbatasan kuota taruna yang menyebabkan tidak semua taruna bisa daring dengan mengaktifkan video sehingga dosen tidak bisa melihat semua kegiatan yang dilakukan taruna.

I. INTRODUCTION

The announcement by President Joko Widodo of the first instance of covid-19 in Indonesia in March 2020 has had a tremendous impact (Monica & Fitriawati, 2020), particularly in the

field of Education (Baloch, Baloch, Zheng, & Pei, 2020; Buana, 2020; Djalante et al., 2020; Setiati & Azwar, 2020; Susilo et al., 2020). The appointment of Nadiem Makarim as Minister of Cultural Education in October 2019, which initially

reaped many pros and cons in the world of Education, began to be trusted because of this pandemic (Bhwana, 2019; Kadi, Wati, & Sari, 2020). In the world of education that was initially conducted offline in March 2020 (Hastomo, Karno, Kalbuana, Meiriki, & Sutarno, 2021) was changed into an online form; this is supported by the issue of several policies from the Ministry of Education and Culture in accordance with the Circular Letter (Covid-19) allowing educational institutions to impose online learning as per Education Ministry Circular Letter No. 2 of 2020 and No. 3 of 2020. Cadets are expected to communicate with lecturers at any time via online or distant learning (Putrawangsa & Hasanah, 2018 Firman & Rahayu, 2020).

The impact of Covid-19 was also felt by the Ministry of Transportation, Minister of Transportation Budi Karya Sumadi, and several ministry staff was also declared positively affected by Covid-19 (Budi Karya Sumadi, 2020). It also affects the School under the Ministry of Transportation. The Head of Transportation Human Resources Development Agency on March 17, 2020, issued a Circular Letter number: SE.01/NPSDMP-2020 concerning The Follow-up of Covid-19 Spread Prevention, then all Cadets in BPSDM transportation conducted Distance Learning (PJJ) in their homes. Cadets are required to attend lectures in lieu of face-to-face lectures conducted before the Covid-19 epidemic. Through this PJJ system, every cadet still gets an education whose quality is more or less the same as face-to-face education (Abdusshomad et al., 2022; Arnas et al., 2021; Hendra et al., 2021; Kalbuana, Kurnianto, Abdusshomad, & Indra Cahyadi, 2022; Prasetyo, Rohman, Solihin, Sundoro & Kalbuana, 2021; Rohman, Pemurhardjo, Solihin, Sundoro, & Abdusshomad, 2022; Sihono, Fatkhulloh, Saputro, Herwanto, & Kalbuana, 2021; Sihono, Fatkulloh, et al., 2021). This PJJ can be followed by Cadets from home. The learning objective may therefore be properly achieved even though the government has not allowed the conditions of face-to-face learning to prevent the spread of Covid-19 (Daniel, 2020; Suni Astini, 2020; Abidah, Hidaayatullaah, Simamora, Fehabutar, & Mutakinati, 2020; Herliandry, Nurhasanah, Suban, & Heru, 2020; Monica & Fitriawati, 2020).

The mass nature of the PJJ system in distributing quality education that is standardized by utilizing ICT, standardization of learning outcomes, learning process, teaching materials, learning assistance, and evaluation of learning,

making quality education can be obtained by various circles across space and time. Therefore, the PJJ program should be planned to produce qualified graduates in accordance with educational standards. Distance-based jurisprudential education (PJJ) is a learning mode where teachers and cadets are separated. With e-learning, distance and time are no longer barriers between educators and their cadets. Educators and students are no longer confined to a single dimension of space and time, and learning can proceed regardless of these factors (Anugrahana, 2020; Yanti, Solihin, Saptono, Kalbuana, & Yohana, 2020; Mishra, Gupta, & Shree, 2020; Putri, 2011).

Online learning is a very new thing, especially in schools under the Ministry of Transportation, it is because so far cadets' Education has always been carried out offline, and cadets are dramatized. Cadets usually in class are repatriated from their respective campuses and carry out education from their homes. Online lectures can be carried out at a predetermined time and anywhere that is carried out between lecturers and cadets. The selection for internet-based technological learning media must be carefully studied since inappropriate choices can have a negative impact on learning gains. Where a teacher must comprehend the concepts and aspects that can influence the efficacy of digital technology for learning (Ahmad Busthomy MZ, MZ, & Hamid, 2020; Nichols, 2003; Harasim, 2012; Aisyah & Kalbuana, 2012; Almaiah, Al-Khasawneh, & Althunibat, 2020). Videoconferencing is one of the remote learning methods that cadets can use. Learning via video conference can replace traditional (face-to-face) learning in the classroom with virtual face-to-face activities using internet-connected tools. Zoom Meeting is one of the alternative applications in the midst of the coronavirus disease 2019 (Covid-19) outbreak in e-learning. Zoom Meeting is a learning medium using video. Because it is free, anyone can use it for forty minutes at a time; however, if you pay for an account, you can use it indefinitely. The Zoom Meeting program allows us to speak with anyone via video. Consequently, it is suited for use in online education. This is supported by research by (Putrawangsa & Hasanah, 2018; Saputra et al., 2020; Ismawati & Prasetyo, 2020) that video conference learning is interactive, effective, can support distance learning and make it simpler for cadets to assimilate learning materials supplied by teachers because it is much more real-time.

The goal in this study is to determine the efficiency of Zoom-based online learning for cadets during the Covid-19 epidemic. There's a good chance the study's findings may motivate university educators looking to implement virtual education during the Covid-19 epidemic.

II. METHOD

This study employs a qualitative research methodology. Qualitative research is an examination of the condition of natural things employing researchers as the principal instrument and emphasizing the significance of generalization based on the post-positivist philosophy (Sugiyono, 2014). Research in the field of qualitative methodology aims to discover what is going on behind the action, rather than focusing solely on the results of an activity (Kalbuana, Kusiayah, et al., 2022; Kalbuana, Taqi, Uzliawati, & Ramdhani, 2022). The qualitative descriptive method is the method of research used. The population of this study is Cadets at Politeknik Penerbangan Indonesia Curug who are actively attending courses, while samples from this study as many as 100 people who are willing to fill out questionnaires through the google form application. The object of research is the results of learning. After filling out the google form and conducting evaluation, various data and information are obtained, then the researchers perform data analysis. By categorizing, characterizing, synthesizing, and arranging patterns, as well as selecting those that need further research and decision-making, data analytics organizes and collects data from sources like interviews, field reports, and documentation (Sugiyono, 2014).

The analysis of research data was conducted using (Miles, 1994; Monica & Fitriawati, 2020) analysis model in general. The quality data analysis is carried out in three ways: data reduction, conclusion drawing, and data presentation. Data decrease is the selection of raw data from written field records with a particular focus on simplification, abstraction, and transformation. Data presentation is an activity where a series of information is produced, enabling conclusions to be withdrawn and actions to be taken. The withdrawal of conclusions is where researchers continue to conclude. Where used to obtain the effectiveness of online learning conducted by Politeknik Penerbangan Indonesia Curug Cadets during the Covid-19 epidemic. "Online education" is the term used in this research to describe learning through the Zoom app (Zhang, Chen, Ng,

& Koltun, 2019; Archibald, Ambagtsheer, Casey, & Lawless, 2019; Haqien & Rahman, 2020).

III. RESULT AND DISCUSSION

This research shows that learning carried out online using the Zoom application at the Indonesian Aviation Polytechnic Curug during the pandemic can be said to be effective, but several issues occur when online learning is in use (Haqien & Rahman, 2020; Zhang et al., 2019; Suni Astini, 2020; Monica & Fitriawati, 2020). Zoom usage is one option for distance learning for professors and cadets at Politeknik Penerbangan Indonesia Curug, as the Zoom program can be accessed via mobile phones and desktop computers, and its use is fairly simple. The steps for using Zoom are taught as follows during instruction:

1. Lecturers already have a zoom account and sign in with an account that has been owned



Figure1. Zoom initial view

2. Lecturers make a schedule in advance or can also choose a new meeting if KBM will be done soon

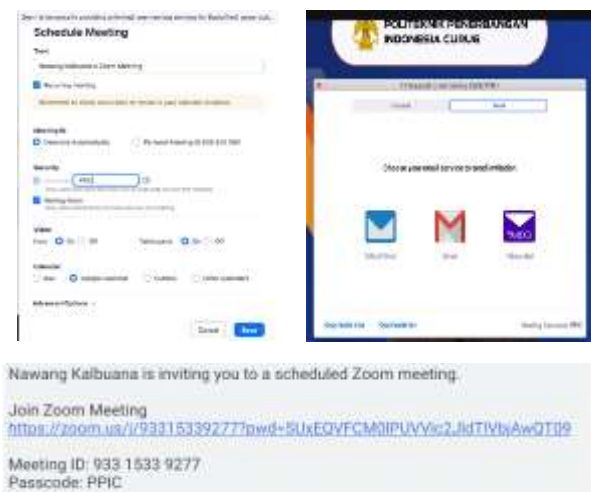


Figure 2. Schedule Meeting creation view and copy invite link

3. Copy Invitation and Send Invite Zoom code can be sent via Whatsapp application or via email to be given to Cadets, so that cadets can directly join by using the Join Zoom Meeting

link or by entering the Meeting ID and Password



Figure 3. Cadet Zoom View to follow KBM

4. When the cadet has entered the ID, the KBM process can already be carried out through the Zoom Meeting application



Figure 4. KBM Process with Zoom

Learning through Zoom makes learning more effective. Because the source thinks Zoom provides different features from other applications. One of the frequently used features is meeting scheduling and document sharing for presentation slides. In addition, there are chat features that can be utilized during learning. In a Covid 19 pandemic, zoom is the ideal solution. Understanding, Acceptance, and Effectiveness are used to summarize the following research findings. Understanding is the capacity of students to comprehend or grasp a subject matter in a learning environment. Understanding not only knows but also wants students who learn to be able to utilize or apply what they already understand. Research data showed that as many as 239 respondents showed that (1) as many as 9.6% (23 Cadets) admitted difficulty understanding when learning online, (2) as many as 20.15% (48 Cadets) answered quite understand when learning, and 70.3% (168 Cadets) who are the answer can mostly understand learning. The results showed that as many as 3.8% (9 Cadets) were unclear when conducting online learning. Meanwhile, 86.6% (207 Cadets) claimed to be quite clear, and 9.6% (23 Cadets) stated clearly. The research data also showed that 25.9% (62 Cadets) disagreed, and the remaining 74.1% (177 Cadets) agreed that online learning imposed in Politeknik Penerbangan Indonesia Curug made Cadets more flexible when conducting lectures.

The cadet's argument is that in the learning process, the lecturer's voice can often disappear depending on the signal and the strength of the sound. The results indicated that Cadets are able to receive instruction pretty clearly. Moreover, the successful implementation of online learning at Politeknik Penerbangan Indonesia Curug enables Cadets to be more adaptable when delivering lessons. This is in line with (Firman & Rahayu, 2020; Ismawati & Prasetyo, 2020; Putrawangsa & Hasanah, 2018; Saputra et al., 2020; Monica & Fitriawati, 2020) online lecture forums where cadets feel more at ease asking questions and sharing their ideas. They aren't subjected to the same kind of peer pressure that they would in a traditional/face-to-face classroom setting. Additionally, the absence of instructors prevents students from feeling embarrassed when expressing their thoughts. The research results also show that online distance education for Cadets presents its unique obstacles. The difficulty pertains to the accessibility of internet services. Cadets claim to have more data quota. Furthermore, personal mobile data connections are used by the majority of cadets to access it. On the other hand, Cadets only use WIFI in a limited fraction of cases. Using the Zoom app has several advantages. First, Zoom is freely downloadable and supports up to 100 people. The Arrange tool allows you to schedule lessons. Thirdly, it can capture and store videos as learning progresses. Zoom Cloud Meeting is compatible with Windows, iOS, and Android devices with customizable Virtual Backgrounds (Almaiah et al., 2020; Ismawati & Prasetyo, 2020; Daniel, 2020; Haqien & Rahman, 2020; Monica & Fitriawati, 2020).

From these descriptions, it's clear that the Zoom program created in response to the current covid-19 pandemic has benefited online learning at Politeknik Penerbangan Indonesia Curug. Flexibility and implementation make it easier for Cadets to participate in online or remote learning activities. Making learning using the Zoom app gets excellent feedback from Cadets. The many features make it easier to be a plus to facilitate online learning.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

This study concluded that Cadets respond favorably to online learning due to its adaptability. Cadets become more self-sufficient and engaged in their studies when they use online learning. There are only a few factors to

keep in mind, one of which is the Cadets' access to more expensive internet data packages for online education. Due to Zoom's extensive assistance features, online learning during the covid-19 epidemic is made more successful.

B. Suggestion

Discussion regarding this research is still very limited and requires a lot of input. Suggestions for future authors are to study more deeply and comprehensively about Utilization of Zoom Application as An Online Learning Media During the Covid-19 Pandemic at Politeknik Penerbangan Indonesia Curug.

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