Google Classroom as the Online Learning Platform During the Covid-19 Pandemic for the Management Business Student at SMK Negeri 1 Lumajang

K A'yun*, P Suharso², and S Kantun²

1 Student in Jember University IPS Education Degree, Jalan Kalimantan No. 37, Kampus Tegalboto, Jember, Jawa Timur, 68121, Indonesia
2 Lecturer at the Faculty of Teacher Training and Education, University of Jember, Jalan Kalimantan No. 37, Kampus Tegalboto, Jember, Jawa Timur, 68121, Indonesia

*bundavionasya@gmail.com

Abstract. Covid-19 has been recognized as a global epidemic by WHO, resulting in the learning process being carried out online. An effective learning platform is needed in its implementation. This research is intended to review the implementation of Google Classroom which was chosen as a distance learning tool during the Covid-19 pandemic. The research is conducted on Business and Management students at SMK Negeri Lumajang, Indonesia. This research is a descriptive-analytical study using a survey method. The sampling is using a random sampling method proportionally. The presentation of descriptive data is using percentage analysis techniques. The results of this study recommend that the use of Google Classroom as an online learning platform during the Covid-19 pandemic for Business and Management students at SMK Negeri 1 Lumajang can be continued.

1. Introduction

Covid-19 is a disease caused by coronavirus 2 (SARS-CoV-2) severe acute respiratory syndrome, and it has been recognized as a global epidemic in March 2020 by WHO [1]. The pandemic has an impact on all aspects including the education sector in Indonesia. At the beginning of the pandemic, the Indonesian Minister of Education and Culture issued a circular no. 4 of 2020 concerning the Implementation of Education Policies in an Emergency Period of the spread of coronavirus disease (covid-19) which states that the learning process is carried out from home with various provisions [2].

The Indonesian government through a task force to accelerate the handling of Covid-19 has established Green, Yellow, Orange and Red Zones in all regencies/cities in Indonesia. And related to it, a Joint Decree of the Minister of Education and Culture, Minister of Religion, Minister of Health, and Minister of Home Affairs of the Republic of Indonesia was issued regarding Guidelines for the implementation of learning in 2020/2021 the academic year 2020/2021 academic year during the 2019 coronavirus disease pandemic (Covid-19) [3]. Based on the government regulation, the educational units that are located in the green zone areas allowed to conduct educational activity or face-to-face learning as usual. Meanwhile, education units located in the yellow, orange, and red zones are prohibited to carry out face-to-face learning in the education units and continuing to learn from home.

The regulation applies to all levels of education including SMK Negeri 1 Lumajang. Based on the covid-19 distribution map, Lumajang district is in a zone that changes from red, orange, yellow and is not yet in the green zone [4]. So that the learning process at SMK Negeri 1 Lumajang is done online. The platform used is the Google Classroom learning management system (LMS). Google Classroom is a learning tool that can be used for distance learning. To simplify the teaching and learning process by adding students directly by sharing the code or link created by the teacher to share with students. Google Classroom also offers a facility to measure student progress that allows teachers to assess consistently and transparently with a rubric that is integrated into student work and it is able to look for possible plagiarism by activating the authenticity report feature [5]. Google classroom is like a virtual extension.
of brick and mortar classrooms. It starts with creating classes and adding students. Then it explores the features found in this application such as sending information, starting discussions, distributing and collecting tasks [6]. The use of Google classroom in teaching and learning data mining and related applications is intended to be used as a cognitive/ pedagogical tool [7].

Using Google Classroom will make learning more effective [8]. What's interesting is that the Google Classroom feature allows collaboration between teachers and students in virtual classes as well as communicating in forums and face-to-face connections if you activate Google Meet. In addition, Google Classroom is a free application designed to help students and teachers to communicate, collaborate, organize and make assignments that are paperless [9]. Moreover, the classroom use of Google is expected to improve quality and providing assistance in education [10]. Furthermore, Google Classroom also expected to be a good solution to activate classrooms even though schools have been closed to reduce the spread of covid-19 [11].

The research was conducted at SMK Negeri 1 Lumajang, which is a Vocational High School consists of 1918 students. The Engineering Technology department consists of 340 students, the Information and Communication Technology department consists of 348 students, and the Business and Management departments consist of 585 students. However, this research is devoted to the department in the field of Business and Management (Economics). This study is intended to review the application of Google Classroom, as one of the learning management systems (LMS) is chosen as a distance learning tool for learning Business and Management (Economics) students at SMK Negeri Lumajang during the Covid-19 pandemic.

A lot of research focuses on the application of Google Classroom has been conducted by the researchers i.e., Utomo, [12] showed that a combination strategy of tools consisting of Google Classroom as a distance learning application, WhatsApp group as broadcast messages, and Zoom as a video conference for distance learning media. The research was conducted by Okmawati, [11] which showed that Google Classroom is effectively used and it is one of the interesting ways for virtual classes. Research conducted by Henukh, [13] stated that Google Classroom as multimedia learning with an average validation result of 82.5% multimedia experts and 87% of expert material had a good impact on the learning process and student outcomes. As well research conducted by Rahmad, [14] stated that the Google Classroom provides convenience in learning for lecturers and students to manage lectures, especially in task management, so that student learning independence increased significantly.

2. Methods
This research is a descriptive-analytical study based on the facts are used to describe and analyze the research results. It is supported by data obtained by using survey methods which use questionnaires, interviews, and documents. Surveys are used to review and analyze data to make conclusions [15]. Data processing was carried out by descriptive analysis of the results of the questionnaire, which consisted of three stages i.e. description, reduction, and selection stage [16].

The research subjects were students of Business Management at SMK Negeri 1 Lumajang. There are consists of 221 students from 3 different grades i.e. X, XI, and XII grade, and also different classes i.e. the Accounting and Financial Institutions class, the Banking and Financial Institutions class, the Automation and Office Management class, and the last one is Online Business and Marketing class. In this research, the random sampling methods is used by considering the sampling-based on the balance of the number of each class group population, in order to obtain a representative sample.

The process of collecting questionnaire data was carried out using Google Form, by sharing the Google Form link with students. Then the analysis of the survey results was carried out by calculating the answer presentation. The presentation of descriptive data in this study uses percentage analysis techniques, with the presentation of data that changes the frequency to percent. The formula used:

\[
\text{Percentage (\%)} = \frac{F}{N} \times 100\%
\]

In this equation, F represents the frequency and N represents the research subject. The calculation was carried out for each question in the survey to obtain research results.
3. Results and Discussion

In this research, the survey results were divided into 5 parts i.e. learning access using Google Classroom, mastery of how to use Google Classroom, understanding for learning materials using Google Classroom, data usage in learning using Google Classroom, and interactive learning materials using Google Classroom. The results surveys are described as follows:

3.1. Survey results of access to learning using Google Classroom.

The results of a survey about access using Google Classroom during the Covid-19 pandemic were shown in Table 1 and Figure 1 below.

| Criteria                        | Frequency | Percentage |
|--------------------------------|-----------|------------|
| Using a cellphone               | 182       | 82%        |
| Using a laptop                  | 38        | 17%        |
| Using cellphone and laptop      | 1         | 1%         |
| Borrowed cellphone/laptop       | 0         | 0%         |
| Total                           | 221       | 100%       |

Source: Survey Data

![Figure 1. Access learning using Google Classroom](image)

Based on Table 1 and Figure 1, shows that 82% of the students of Business Management Negeri 1 Lumajang used a cellphone to access Google Classroom, and then followed by 17% used a laptop to access Google Classroom, and only 1% used cellphone and laptop. It was indicated that students of Business Management at SMK Negeri 1 Lumajang has no difficulty accessing Classroom during the covid-19 pandemic.

3.2. Survey result of mastery of how to use Google Classroom during Covid-19.

The results of a survey about mastery of how to use Google Classroom during the Covid-19 pandemic were shown in Table 2 and Figure 2 below.

| Criteria           | Frequency | Percentage |
|--------------------|-----------|------------|
| Excellent          | 39        | 17%        |
| Good               | 154       | 70%        |
| Fair               | 26        | 12%        |
| Poor               | 2         | 1%         |
| Total              | 221       | 100%       |

Source: Survey Data
Table 2 and Figure 2 illustrate that around 17% of Business Management students at SMK Negeri 1 Lumajang has an excellent skill to mastery of how to use Google Classroom, followed by 70% of students has a good skill, 12% student has the fair skill, and around 1% has the poor skill to mastery how to use Google Classroom. In order to increase the understanding or skill of the students to mastery of how to use Google Classroom, special guidance is needed for the students who have the poor skill to mastery how to use Google Classroom.

3.3. Survey result of subject matter understanding using Google Classroom.
The results of a survey about subject matter understanding using Google Classroom during the Covid-19 pandemic were shown in Table 3 and Figure 3 below.

| Criteria | Frequency | Percentage |
|----------|-----------|------------|
| Excellent | 30        | 13%        |
| Good     | 152       | 69%        |
| Fair     | 30        | 14%        |
| Poor     | 9         | 4%         |
| Total    | 221       | 100%       |

Table 3. Understanding the subject matter using Google Classroom

Figure 3. Understanding the subject matter using Google Classroom

Table 3 and Figure 3 have shown that by using Google Classroom, some business management students at SMK Negeri 1 Lumajang were able to understand the subject matter well. They were shown by the data 13% claim to be an excellent understanding, and 69% claim to have a good delivery of material using Google Classroom. 14% of students admitted that they have a fair understanding, while 4% of students admitted that they have a poor understanding of the subject matter using Google Classroom.
3.4. Survey result of the use of data in learning using Google Classroom.

The results of a survey about the data usage in learning using Google Classroom during the Covid-19 pandemic were shown in Table 4 and Figure 4 below.

Table 4. Data usage in learning using Google Classroom

| Criteria                | Frequency | Percentage |
|-------------------------|-----------|------------|
| Very expensive          | 26        | 12%        |
| Expensive               | 90        | 41%        |
| Cheap                   | 6         | 2%         |
| Just ordinary / normal  | 99        | 45%        |
| Total                   | 221       | 100%       |

Source: Survey Data

Figure 4. Data usage in learning using Google Classroom

Table 4 and Figure 4 show that the use of data in learning using Google Classroom is still considered expensive by business management students at SMK Negeri 1 Lumajang. This is shown by 12% of students who answered that data packages were very expensive, and 41% answered that data usage in learning using Google Classroom was expensive. However, 2% of students answered cheap, and 41% of students answered normally.

3.5. Survey result of interactive learning materials (meet, video & digital material)

The results of a survey about interactive learning materials (meet, video & digital material) using Google Classroom during the Covid-19 pandemic are shown in Table 5 and Figure 5 below.

Table 5. Interactive learning materials (meet, videos and digital materials)

| Criteria      | Frequency | Percentage |
|---------------|-----------|------------|
| Usually       | 25        | 11%        |
| Often         | 123       | 56%        |
| Seldom        | 59        | 27%        |
| Never         | 14        | 6%         |
| Total         | 221       | 100%       |

Source: Survey Data

Figure 5. Interactive learning materials (meet, videos and digital materials)
Table 5 and Figure 5 show that the learning material provided in the Google Classroom to business Management students at SMK Negeri 1 Lumajang were indicated that the learning material received by the student majority is interactive. It was shown by 25% of students who answered that they usually received an interactive learning material. Followed by 56% of students answered that they often received the interactive learning material. On the other hand, around 27% answered that they seldom received interactive material. Moreover, 6% of students admitted that they never received interactive material in the form of videos and digital materials.

Based on the above results we can realize that the Google Classroom application has an advantages for distance learning during the covid-19 pandemic i.e. using Google Classroom make learning more effective. It allows collaboration between teachers and students in virtual classes as well as communicating in forums and face-to-face connections via Google Meet, video, etc. Moreover, Google Classroom also help students and teachers to organize and make assignments that are paperless because it can be done by using the virtual features that are available at Google Classroom Application.

4. Conclusion
Based on the results of research and discussion, it can be concluded that Google Classroom was an online learning platform for business management (economics) students at SMK Negeri 1 Lumajang. During the Covid-19 pandemic, Google Classroom could be easily accessed by students even though most students did not use laptops, and still used cell phones in learning.

Most students also understood how to use Google Classroom in learning. It was because of the Google Classroom interface was easy and friendly to use. In addition, Business Management students at SMK Negeri 1 Lumajang were able to understand the subject matter well by using Google Classroom. It was because Google Classroom was integrated with interactive learning facilities such as meet, learning videos, and digital materials.

Based on the results, it can be seen that the use of Google Classroom is one of the best alternative choices for the educational process for Business Management students at SMK Negeri 1 Lumajang during the covid-19 pandemic. Moreover, recently there is support from the government by the data package subsidy every month for every student and teacher in Indonesia. So, there might be no obstacle anymore for the student to access and join the online learning sessions around the nation,

Finally, we recommend that the use of Google Classroom as an online learning platform during the Covid-19 pandemic can be continued for the Business Management students at SMK Negeri 1 Lumajang, because it allows collaboration between teachers and students in virtual classes as well as communicating in forums and face-to-face connections via Google Meet. Moreover, and it was believed that using Google Classroom make distance learning more effective

Acknowledgement
The authors would like to thank all parties who helped in the smooth running of this research especially Business Management students at SMK Negeri 1 Lumajang.

References
[1] Jie-Ming Qu, R.-C. C. Bin Cao, 2021, Covid-19 The Essentials of Prevention and Treatment. 1st ed. Elsevier. The First Ailiated Hospital, Zhejiang University School of Medicine. pp 1-64.
[2] Menteri Pendidikan dan Kebudayaan RI. 2020, “Surat Edaran Nomor 4 Tahun 2020 tentang Pelaksanaan Kebijakan Pendidikan dalam Masa Darurat Penyebaran Corona Virus Disease (COVID-19)”, Pub. L. No. Surat Edaran Nomor 4. Jakarta. Retrieved from https://jdih.kemdikbud.go.id/arsip/SE Menteri Nomor 4 Tahun 2020 cap.pdf
[3] Menteri Pendidikan dan Kebudayaan RI et al. 2020. “Keputusan Bersama Menteri Pendidikan Nasional, Menteri Kesehatan, Menteri Agama, dan Menteri Dalam Negeri Republik Indonesia,” NOMOR 01/KB/2020, 516, HK.03.01/MENKES/363/2020, 440-882 TAHUN 2020.
[4] Infocovid19.lumajang.go.id, “Peta Sebaran Covid19 Kabupaten Lumajang,” infocovid19.lumajangkab.go.id, https://infocovid19.lumajangkab.go.id/main/peta_sebaran.
[5] edu.google.com, “Google for Education,” edu.google.com, 2020. https://edu.google.com/products/classroom/?modal_active=None.
[6] Sudarsana, I Ketut., et al., 2019. “The use of Google classroom in the learning process,” *1st International Conference on Advance and Scientific Innovation (ICASI), IOP Conf. Series: Journal of Physics: Conf. Series* 1175 (2019) 012165, doi:10.1088/1742-6596/1175/1/012165. Pp. 1-6.

[7] Shaharanee, Izwan Nizal Mohd., et al., 2016. “The Application of Google Classroom as a Tool for Teaching and Learning,” *Journal of Telecommunication, Electronic and Computer Engineering*, ISSN: 2180-1843 e-ISSN: 2289-8131 Vol. 8 No. 10, pp. 5-8.

[8] Soni, S., et al., 2018. “Optimalisasi penggunaan google classroom, e-learning & blended learning sebagai media pembelajaran bagi guru dan siswa di smk negeri 1 bangkinang,” *Jurnal Pengabdian. UntukMu NegeRI*, vol. 2, no. 1, DOI: 10.37859/jpumri.v2i1.361, pp. 17–20.

[9] Bell, K. 2015. “Teacher’s guide to google’s classroom,” *Shake Up Learn. LLC*. pp. 1–45.

[10] Wijaya, Andri. 2016. “Analysis of Factors Affecting the Use of Google Classroom to Support Lectures,” *The 5th ICIBA 2016, International Conference on Information Technology and Engineering Application Palembang-Indonesia*, 19-20 February 2016, pp. 61-68.

[11] Okmawati, Mike. 2020. “The Use of Google Classroom during Pandemic,” *Journal of English Language Teaching*, Volume 9 no 2. DOI: https://doi.org/10.24036/jelt.v9i2.109293.

[12] Utomo, M. N. and Y. M. Sudaryanto, and K. Saddhono, 2020. “Tools and Strategy for Distance Learning to Respond COVID-19 Pandemic in Indonesia,” *Ingénierie des Systèmes d’Information Journal*, vol. 25, no. 3, pp. 383–390, doi: 10.18280/isi.250314.

[13] Henukh, A. and H. Rosdianto, and S. Oikawa, 2020. “Implementation of Google Classroom as Multimedia Learning,” *JIPF (Jurnal Ilmu Pendidikan Fisika)*, vol. 5, no. 1, p. 38, doi: 10.26737/jipf.v5i1.1539.

[14] Rahmad, R. M. Adria Wirda, and N. Berutu, W. 2009. Lumbantoruan, and M. Sintong, “Google classroom implementation in Indonesian higher education,” *Journal of Physics: Conference Series*, Volume 1175, 1st International Conference on Advance and Scientific Innovation 23–24 April 2018, Medan, Indonesia., vol. 1175, no. 1, doi: 10.1088/1742-6596/1175/1/012153.

[15] Manaf, Lubis Zulkarnain A. H. A. dkk. 2019. *Panduan Pelaksanaan Penelitian Sosial, 1*. Yogyakarta: Andi.

[16] Imron. 2019.” Analisa Pengaruh Kualitas Produk Terhadap Kepuasan Konsumen Menggunakan Metode Kuantitatif Pada CV. Meubele Berkah Tangerang”. *IJSE – Indonesian Journal on Software Engineering.*, Vol.5, No. 1, Juni 2019, 19-28, pp. 19-28.