
OPTIMIZATION OF GOOGLE CLASSROOM AS A DIGITALIZATION ALTERNATIVE TO IMPROVE ENGLISH LEARNING OUTCOMES

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Abstract

This study seeks to provide benefits and information about the optimization of using Google Classroom as an alternative to digitization in English distance learning as a solution to complete the online learning process. The methodology of quantitative descriptive analysis is the research approach employed. This research was conducted in one of the elementary schools in West Java with a total of 823 students, and by using a purposive sampling technique, 122 sixth-grade students in the 2023/2024 school year were selected. The sample of this study was students from the upper-grade level, where each subject taken from the population is chosen intentionally based on the class group selection. The data were collected by using observation, interview, and documentation. The data were analyzed and interpreted through qualitative. Results showed that optimizing the use of Google Classroom can be used to develop online learning with high results, 73.57%. Based on these data, it can be concluded that Google Classroom-based e-learning media can improve English results for elementary school students.

Keywords

Digitalization Alternative, English Learning, Outcome



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INTRODUCTION

Teaching and learning activities have been disrupted in Indonesia as a result of the COVID-19 epidemic since learning activities at schools and colleges have been canceled. According to point 11 of Circular No. 3 of 2020, if a high absence rate is regarded to be interfering with the learning process, it is important to assess whether learning activities should be temporarily suspended in conjunction with the Education Office. Following the issuance of SE No. 3 of 2020, several regions decided to conduct learning activities at home in order to control the spread of COVID-19, such as the Education Office in Surabaya, which responded to SE No. 3 of 2020 by issuing Notification Letter No. 420/5951/436.7.1/2020, which instructs students to study at their respective homes (holidays). Because learning activities in the classroom have been eliminated, instructors and lecturers are perplexed about selecting an efficient e-learning application to offer information that must be in compliance with the semester program activity plan. (Su'uga et al., 2020) Emphasize that the challenges of teaching in the 21st century are not easy, and the task of a teacher is not as simple as what happened in the past but increasingly complex. This is in line with (Haka et al., 2020) state that a teacher must have the initiative, creative ability, and ability in the field of technology to develop a learning media, especially to prepare for 21st-century learning. One of the challenges for teachers in the 21st century is being able to develop technology to support the learning process.

The change in the learning process from face-to-face to online learning is applied to all levels of education. This is done as a form of prevention so that COVID-19 does not form a new cluster, namely the school/campus cluster. This change in learning activities requires educators and students to quickly adapt and be skilled at using technology in the form of video conferencing. Through this technology, teachers/lecturers, and students experience a new atmosphere in the classroom learning process. The use of digital technology also facilitates communication in the learning process for distance education (Azhar & Iqbal, 2018). With digital tools, individuals can explore and express their creativity through graphic design, multimedia content production, and various other creative platforms (Tulinayo et al., 2018). In addition, by utilizing this technology, teaching and learning activities can still continue in the midst of the COVID-19 and Pasca pandemic. So that students can still gain knowledge from teachers/lecturers even though learning is carried out from their respective homes.

The use of online learning during a pandemic and post-pandemic is an example of innovation that may be used to condition the learning process in the hopes of stopping the COVID-19 epidemic from spreading. The notion of e-learning may be used to apply the learning process aggressively by employing current learning apps. Online learning applications that can be used to support the learning process include Google Classroom, Edmodo, Zoom Meet, and Google Meet. Google Classroom (GC) is an LMS that can be used to create online learning. This application can be accessed and used for free by everyone. This Google Classroom application is equipped with classroom features that can be made by teachers/educators and can be followed by all students/students. The features provided by the Google Classroom application are complete, including uploading materials, videos, assignments/practices, and even discussion forums (KUSUMA ASTUTI, 2019).

Other Google programs that can help with learning, such as Google Forms, Google Docs, Google Slides, Google Meet, Google Drive, and many more, can be connected with Google Classroom. Google Classroom may alternatively be described as a virtual classroom that makes it simpler for students to get, study, and comprehend content while also increasing their passion and incentive to do so (Akpan et al., 2016). This is in accordance with the findings of (Azhar & Iqbal, 2018), who assert that online learning may be created using Google Classroom to enhance learning objectives, methods, and motivation. Google Classroom may help pupils improve their discipline, which is one of the skills that can be improved. This is because there are tools in the Google Classroom program that may be used to set the time automatically (Iftakhar, 2016). Based on Anwar's findings, it is indicated that the benefits of Google Classroom allow parents to monitor students' progress, assigned tasks, and teacher feedback online (Liou, 2011). Teachers can adjust learning based on the individual needs of students more effectively (Wieselmann & Crotty, 2022).

According to (Iftakhar, 2016), Google Classroom is used to assist teachers in managing the learning process without the use of a sheet of paper by utilizing features such as assignments (assignments), grading (measurement), communication (communication), mobile application, archive course, privacy, and time-cost. As a result, using Google Classroom will be simpler with face-to-face interactions between professors and students via online classrooms, allowing students to learn, ask questions, share ideas, and give assignments remotely via smartphones. The efficacy and motivation in the distance learning process may be evaluated using these apps to identify the usage of learning support applications that are often used by teachers and receive positive feedback

from students. Based on the opinions of the researchers above, Google Classroom is an online learning platform that can be used on a smartphone or PC with various useful features to facilitate the learning process.

Several previous studies on this topic have been carried out by various researchers. First, a study titled "The Use of Google Classroom in the Learning Process" was carried out in 2019 by Ketut, Ida, I Nyoman, and I Wayan. The purpose of this study was to demonstrate a novel approach to learning through the use of Google Classroom as a virtual education tool. From how to enroll in a virtual class to what can be done with Google Classroom, there are a lot of learning possibilities that can be established or prepared for with this platform. The researcher stated that Google Classroom provides an all-in-one solution where all papers are managed automatically by the Google Drive folder for each teacher and student based on their experience using the program. Second, a research investigation on "The Effectiveness of Google Classroom as an Instructional Media" was carried out by Alim (2019). According to this article, Google Classroom works well as an instructional tool during the teaching process. Students can submit assignments and quizzes, converse and discuss, and exchange materials. With this medium as an online learning tool, they were satisfied. Third, a study titled "E-Classroom Interactional Competencies: Mediating and Assisting Language Learning During Synchronous Online Lessons" was carried out in 2021 by Benjamin, Yanna, and Steve. It was reported that the educators acknowledged the additional skills needed to actively examine their own backgrounds and practices as well as mediate and foster interaction during the educational process. Fourth, research on "Wearable Writing: Enriching Student Peer Review With Point-of-View Video Feedback Using Google Classroom" was carried out by Jason (2017). According to what was said, Google Classroom is a network platform that allows teachers and students to communicate, work together, share, and assess assignments, grades, class discussions, announcements, and assessments. Its goal is to support teachers in using the power of social media to differentiate instruction for every student. Google Classroom was able to implement a mixed learning method in the classroom because of awareness of the benefits associated with this learning style. The benefits of Google Classroom for teaching and learning writing in English classes were explored. The explanation of Google Classroom, the concept of mixed education using this platform, the application of this platform into actual teaching writing contexts and their results, and the present and future challenges of Google Classroom in ELT writing for EFL learners as well as teachers, are all covered in this argument. Fifth, Dhawan (2020) examined Online Education: A Hope During the COVID-19

Epidemic. This article examined the value of online education as well as the SWOC (Strengths, Weaknesses, Opportunities, and Challenges) examination of e-learning platforms during a crisis. The expansion of EdTech startups during pandemics and natural disasters was also discussed in this article, which also offers advice on how academic institutions should handle the difficulties posed by online learning.

However, according to various literature evaluations, Google Classroom isn't extensively used. Various elements, including technological, tactical, economic, and social ones, contribute to this. In reality, using Google Classroom can assist teachers in overcoming the limited number of English classes available in schools. (Maharani & Kartini, 2019) Claims that this topic has a favorable influence on the learning process.

Based on the description above, it is necessary to conduct research with the title: Optimization of Google Classroom as A Digitalization Alternative to Improve English Learning Outcomes. Because of that, this study seeks to provide benefits and information about the optimization of using Google Classroom as an alternative to digitization in English distance learning as a solution to complete the online learning process.

METHOD

The method used in this research is the quantitative descriptive analysis technique. Following data analysis, the information is utilized to construct a second quantitative phase. Using two groups—an experimental group and a control group—the researcher first carried out qualitative research using observation and questionnaires. After analyzing the data, the researcher strengthened the findings with quantitative research (test). Every group received distinct instruction; one utilized the Whatsapp (Wa) program for learning and media, while the other used the Google Classroom application. Each group took a second exam to determine the effects of using the Google Classroom application after getting a different treatment; this test is known as a posttest. This research was conducted in one of the elementary schools in West Java with a total of 823 students, and by using a purposive sampling technique, 122 sixth-grade students in the 2023/2024 school year were selected. The sample of this study was students from the upper-grade level, where each subject taken from the population is chosen intentionally based on the class group selection.

The data were collected by using observation, interview, and documentation. The data were analyzed and interpreted through qualitative. Data collection was done by distributing online questionnaires using Google Forms. The questionnaire consisted of 5 statements, and the respondents were 122 students. Fill in the value of each statement using an ordinal scale, namely (4) Strongly Agree, (3) Agree, (2) Moderately Agree, (1) Disagree, and (0) Strongly Disagree. The results of the questionnaires were collected and calculated and then grouped into intervals in Table 1.

Table 1. Criteria for Determining Questionnaire Results

No.	Interval	Category
1.	85-100	Very high
2.	70-84	high
3.	56-69	Medium
4.	45-55	Low
5.	0-44	Very low

If the final score is at least 70 or in the Medium category, the study's results are regarded as good. Furthermore, the percentage score of the questionnaire results may be calculated using the following method (Tiro, 2004):

$$P = \frac{f}{N} \times 100\%$$

Description:

P : percentage

F : frequency searched percentage

N : number of subjects

Three variables are used in this study: the subject, the independent variable 1 (using the Google Classroom program), and the dependent variable 1 (distance learning). The research hypothesis, Ha1, can be written as follows: There is an effect on the quality of learning by utilizing the Google Classroom application. This is based on the formulation of the problem and thinking framework. Ha0: Using Google Classroom has no impact whatsoever on the caliber of instruction. This study employed tests, questionnaires with closed-ended questions, and observation as data-gathering methods. The purpose of the observation was to look into the dependent variable, which was the sixth-grade students' use of Google Classroom to implement distant learning practices. It consists of certain elements, such as preparatory exercises. The major activities include explaining the topic, using media and learning tools, assessing the learning process, conditioning and testing students' prior knowledge, and delivering learning objectives. The closing actions comprise helping

students come to a conclusion. The questionnaire comes next. This survey was used to find out how well sixth graders were learning with the use of the Google Classroom program. Next comes an exam designed to gauge pupils' cognitive skills and subject matter mastery. This test's objective is to determine the student's level of comprehension of the provided information, with learning and assessment conducted using the Google Classroom software. Multiple choice questions with five possible responses (A, B, C, D, and E) make up the test instrument. Indicators from the taught subject on Network Service Technology are used to organize the test. Multiple-choice questions are scored, with 1 (one) representing the right answer and 0 (zero) representing the incorrect response.

FINDINGS AND DISCUSSION

Findings

The study's findings were evaluated as GOOD based on the responses to surveys from students who participated in Google Classroom learning. As shown in Table 3.1, the total number of completed questionnaires by the students is 73.61.

Table 2. Results of Questionnaire Calculations Using Google Classroom

No.	Statement	Score	Category
1.	Can Speed Up Work/Task Faster	77.05	High
2.	Can improve learning productivity	69.88	Medium
3.	Can improve learning effectiveness	70.29	High
4.	Can make it easier to complete learning tasks	76.23	High
5.	It can be used to support the learning process	74.39	High
TOTAL		73,57	High

Table 2 explains that there are 5 (five) aspects that can be measured in the implementation of online learning using LMS Google Classroom. From these five aspects, it is stated that the application of Google Classroom can be optimal in online/online learning. There are five aspects that can be optimized by applying Google Classroom, namely 1) Learners can more quickly complete all the jobs or assignments given by the educator; 2) the level of student learning productivity can be further increased; 3) The learning process can take place effectively and efficiently; 4) Tasks obtained by students can be completed easily and quickly; 5) The learning process can be done remotely and can be done anywhere (does not have to be in class).

Furthermore, the researcher aims to investigate how much students use the Google Classroom tool to respond to remote learning. An essential component in assessing the effectiveness and success of the learning process is student response. After the learning process was finished, students were given a media questionnaire, which researchers utilized to gather feedback from them

about the distance learning experience utilizing the Google Classroom program. With a score of 54.44%, the questionnaire results on student reactions to remote learning using the Google Classroom application were pretty acceptable; however, this indicates that some students are not aware of how to use Google Classroom for learning.

Testing hypotheses is done in order to determine whether a hypothesis has been made and to determine whether it is true or not. The theories are as follows:

Ha : The quality of learning is impacted by the use of the Google Classroom application.

Ho: The quality of learning is not impacted by the use of the Google Classroom application.

Discussion

Based on the findings of calculations made using SPSS version 23.0 with assistance from a basic linear regression test. The outcomes for Windows are as follows:

Table 3. Significance Test Results with F . Test ANOVA^b

Model		Sum Of Squares	Df	Mean Square	F	Sig.
1	Regression	3987.387	1	3987.387	1210.037	.000 ²
	Residu	797.229	24	33.218		
	Total	4784.615	25			

According to the preceding data, the utilization of Google Classroom has a simple linear regression value of 120,037 and a Sig. (2-tailed) value of 0.000. This 2-tailed Sig. Value is less than 0.05 (5%) percent. This indicates that while Ha is acceptable, Ho is denied. In summary, Google Classroom is utilized efficiently. The coefficient of determination (KD) value can then be used to determine the extent to which utilizing Google Classroom affects effectiveness.

Table 4. Coefficient of Determination Test Results (r) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.913 ²	.833	.826	5.76349

The coefficient of determination (KD) or R Square is 0.833 (83.3 %), as may be determined from the above table. This indicates that 83.3% of the effectiveness is attributed to the use of Google Classroom, with the remaining 0.17% being attributed to elements or variables not included in this study. Based on observational data of 84.54%, it can be concluded that the Google Classroom application is being used for remote learning, and the process is operating efficiently. The findings of the questionnaire, which reached 54.44%, show that students' responses to learning with Google Classroom are also fairly positive. Based on these findings, it can be said that the Google Classroom application facilitates optimal distance learning. According to the findings of the hypothesis test, the

use of Google Classroom has an efficacious simple linear regression value of 120.037, with a Sig. (2-tailed) value of 0.0000. in contrast to the 5% significance level of 0.05. In other words, Ho gets turned down, and Ha is approved. To sum up, Google Classroom is utilized well. Moreover, the test is reinforced by observing the coefficient of determination (RSquare) magnitude, which is 0.833. This indicates that the efficiency of distant learning is impacted by the use of the previous Google Classroom by 833%, with other factors having an impact on just 0.17% of the total. Concerning the abovementioned proof, it bolsters the claim that Google Classroom is used, which is executed with great efficacy.

Google Classroom Optimization as an Educational Tool

The advancement of digital technology necessitates that all areas of business, including the field of education, keep up with it. Learning, which used to be limited to school classrooms, is now being expanded through the creation of online virtual classrooms that can be accessed at any time and from any location. This is referred to as learning, and it is accomplished through the use of an LMS. The LMS itself will be used for learning management, which can be done through software or applications. One of the LMS applications that can be used to build online learning is Google Classroom. (Iskandar et al., 2020; Simanihuruk et al., 2019) Explain Google Classroom is an online learning LMS platform in which it can be shared and integrated with videos, images, files (doc, pdf, ppt), and other external resource URL integration can be used.

Google Classroom operations can be run through a computer or laptop device (www.classroom.google.com) or a smartphone by downloading the application on the Play Store. Features that can be used and optimized to build online learning include 1) Assignment room, which can create a separate space for assignments; 2) Measurement, giving value to students; 3) Communication used for discussion facilities; 4) Time-Cost, which can share learning activities briefly; 5) Archive course, all learning activities can be archived/stored properly; 6) Mobile Application, can be operated via smartphone; and 7) Privacy, enabling safe learning data.

The optimization is also perceived by the students. Based on another study, it is indicated that e-learning quality has a significant positive relationship with student satisfaction, and this relationship is not influenced by the threat of infection on campus during the COVID-19 pandemic (Kumar et al., 2021). Other studies also indicate results that the use of the flipped classroom has a significant impact on the use of cognitive self-regulated learning strategies by learners, suggesting that the flipped classroom approach fosters the development of students as independent learners.

Regarding the influence of the flipped classroom in enhancing higher-order thinking skills of EFL learners, it is concluded that the flipped classroom significantly affects learners' engagement in evaluation, analysis, and creation (Samadi et al., 2024).

Variations of Learning Using Google Classroom (GC)

Learning during the COVID-19 and Pasca pandemic can be done online using the E-Learning system. The application of an online learning system (E-Learning) requires an LMS that can be used to create virtual classes as a substitute for classrooms. The easiest way to create a virtual or online class can be done using LMS GC. This application can be used by educators to manage the online learning process well and easily. The features provided are very flexible and easy to use, such as various videos, materials, PowerPoint, learning modules, assignments, and even discussion rooms are provided.

Students can also easily download the material that has been given. In addition, educators can group their students according to their respective classes, like a class at school. Google Classroom is very effective and efficient if applied to online learning during the Covid-19 and Pasca pandemic, like today. This is done so that educators can still carry out education remotely so that the learning process can still be carried out. Like learning in school classes, educators can also conduct discussions by giving comments to each other according to the given topic. Discussions can be carried out according to the material that has been studied, even though they are not face-to-face with each other directly. Educators can also make announcements in real time because students will immediately get notifications on their respective cell phones.

Educators can offer assignments or tests that are clearly visible to all students, which is a feature that is no less vital. Educators may also oversee all students who have turned in their assignments. Students will be alerted on their cell phones if their assignments have been assessed. Educators can also use graded assignments to deliver specific feedback or messages to their pupils. As a result, enhancing LMS GC allows for successful and efficient online learning during the Covid-19 epidemic.

Learning Barriers Using Google Classroom

Although online learning with the LMS GC is reasonably simple and effective during the COVID-19 epidemic, it does not rule out the possibility of certain challenges. Even if the online learning system is superior to offline learning, offline learning will always be superior. This is not to say that learning can't be done online; nevertheless, an educator must be aware of the existing

learning environment. The following are some of the difficulties that make online learning less successful than offline learning.

First, the involvement of students in the learning process is not optimal. This can be seen through the participation of students when doing assignments and collecting assignments in the space provided by the teacher. Real facts show that during online learning, the habits of students are more dominant in other discussions rather than focusing on learning or the material provided. This is in line with the (Permata & Bhakti, 2020) statement that online learning tends to make students more passive. Reinforced by (Wibowo et al., 2021) explaining the passiveness of students in online learning is also caused by the implementation of learning without careful planning.

Second, online learning facilities are not adequate. Basically, in order to be able to do online learning, all students and educators must have devices that can be used to access the internet, such as laptops or smartphones. In addition to these devices, internet access is also needed, and not all have an internet network for online learning. One of the problems of students not being able to carry out online learning is that they live far from the reach of internet network providers (Jamaluddin, 2020). So, in order to carry out online learning smoothly, an adequate device and internet network are needed.

Third, not all educators or students can take advantage of technology. In fact, when faced with technology, not all educators or students can use it. So, no matter how good the LMS is chosen to create or design learning, it will not optimally be able to run as expected. At the same time, the main requirement for online learning is that educators or students must be able to operate a computer at least. In addition to mastering computers, educators must also be able to develop teaching materials that are in accordance with the concept of online learning so that educators can become good facilitators during learning. This is in line with the opinion of Sukimat et al. (2020), which states that an educator must be able to become a facilitator who can help students in the learning process.

CONCLUSION

The Google Classroom LMS may be used to create online learning during the COVID-19 epidemic. This platform is provided with a variety of features that are comprehensive and simple to use by all organizations. The results indicated that Google Classroom's online learning optimization was classed as high, at 73.57 %. This demonstrates that online learning with the Google Classroom

LMS is a good fit for the Covid-19 and Pasca pandemic. Google Classroom may be highly optimized since, in addition to being simple to use, it also comes with a comprehensive set of learning management functions. The features provided on the Google Classroom LMS are very flexible and can be integrated with several other platforms, such as Google Docs, Google Forms, Google Slides, Google Meet, and many others. In addition, by using the Google Classroom LMS, educators can create classrooms, assignment rooms, quizzes, share material, share videos, and even discuss each other.

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