

The Effectiveness of Google Classroom on Hybrid Learning in Junior High School

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ABSTRACT

Teachers use Google Classroom for online learning so that learning continues despite the policy of learning from home and the existence of distance restrictions. This study aims to analyze the use of Google Classroom in online learning. This study uses a quantitative survey method involving 84 students and 5 teachers. Research data collection through surveys containing several questions assisted through Google Forms. Likert scale questionnaire (1-5) was used to collect data on student perceptions of teacher teaching skills, implementation, barriers to learning, and student satisfaction. Qualitative data were analyzed by descriptive technique. The results of this study indicate that Hybrid Learning by utilizing Google Classroom, especially online learning is able to effectively support the learning process based on teacher teaching skills data by 85%, learning implementation by 85%, and student satisfaction by 97.6%. Thus, Google Classroom is the right application for teachers to use in online learning and distance learning. The obstacles in online learning can be optimized through classroom learning. Suggestions for further research is to develop teaching materials both printed and electronic using Google Classroom.

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1. INTRODUCTION

Learning is a process that integrates several components that have their own characteristics, influence each other, and are related to achieving the expected learning objectives. These components include objectives, materials, media, methods, learning resources, teachers, students, and the environment (Sukirman, 2009). These components support each other in the learning process to facilitate students to learn well from the aspects of acquiring knowledge, mastering competencies, and forming attitudes in students.

Learning must continue to be carried out under conditions, especially when Covid-19 hits the world, including Indonesia (Ihsanuddin, 2020). In this case, the Indonesian government imposed large-scale social restrictions (PSBB) to restrict community activities (PPKM). In response, the Ministry of Education and Culture has implemented learning from home (BDR) policy (Kemdikbud, 2020b). The policy of learning from home as a form of anticipating the spread of the virus is increasingly widespread and is a solution so that learning continues to take place.

The policy of learning from home uses a distance learning system (PJJ) both offline and online with the support of various platforms such as Learning Houses (Kemdikbud, 2020a). However, this system is not permanent, and the Ministry recommends using hybrid learning. Through learning with a combination model, teachers and students will continue to apply technology combined with face-to-face as an integrated learning method. That way, learning aids are not only in the form of textbooks but also in various technology platforms used in distance learning during the pandemic (Kemdikbud, 2020a). Along with the decline in the level of PPKM, different regions carry out limited face-to-face learning with combination learning, namely face-to-face learning and online learning. For example, Palembang implemented two days of studying at school and three days from home (Aini, 2021). Meanwhile, in DKI Jakarta, PTM is limited to 50%, with 4 hours per day (Azzahra, 2022). For other regions, adjust policies according to the Circular (SE) of the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) No. 2 of 2022 concerning the Discretion of Implementing a Joint Decree of 4 Ministers on Guidelines for the Implementation of Learning in the Time of the COVID-19 Pandemic.

The innovation made by teachers in learning during the Covid-19 pandemic is the application of hybrid learning. Hybrid learning is learning that combines all learning such as online, live, and face-to-face (Surjono, 2010). The innovation made by teachers in learning during the Covid-19 pandemic is the application of hybrid learning. Hybrid learning is learning that combines all learning such as online, live, and face-to-face (Bibi & Jati, 2015). This learning is very suitable to be applied because face-to-face learning is limited, which means that learning is not 100% with the duration of learning being reduced. In the future, learning materials will be added to online learning.

Online learning is a distance learning system that is carried out using applications that can help the learning process. The goal is to provide quality and open learning to reach more and broader students in learning (Nafrin & Hudaidah, 2021; Sofyana & Rozaq, 2019). For online learning by utilizing internet technology (Kurniasari, Pribowo, & Putra, 2020) and online applications such as Bandicam, YouTube, and Google Classroom (Kristiawan, Aminudin, & Rizki, 2021). Teachers use many more applications in learning, such as WhatsApp, Telegram, Zoom, Skype, and other learning applications. Not only applications, but learning resources are also provided such as Rumah Belajar, Ruangguru, and Zenius (Handarini & Wulandari, 2020). The selection of media, applications and learning resources is part of the teacher's efforts to provide quality learning.

Online learning is carried out by several teachers using the Google Classroom application. Google Classroom is an application that allows the creation of classrooms in cyberspace. In addition, Google Classroom can be a means of distributing assignments, submitting assignments and even assessing submitted assignments (Hammi, 2017; Ramadhani & Rahmawati, 2021). The features in the Google Classroom application such as post reuse, create questions, create assignments, create announcements can be used by students to re-upload several files, provide discussion space, make announcements, distribute assignments and learning materials, collect assignments until the teacher can see who is there. who have submitted assignments. In addition, files that can be uploaded are also not limited in format, all files can still be uploaded such as word, power point, PDF, video, or in the form of a link can also be used (Salamah, 2020).

Several studies on the use of Google Classroom with different findings such as Astriningsih (2022) found that Project Based Learning with Google Classroom in learning to write book reviews was in a good category as well as student learning outcomes were satisfactory. Inayati's research (2022)) found that field trips through google classroom were effectively used in learning to write texts of observation

reports. Another research is Cholik (2022) that Google Classroom is effective in improving the quality of learning, student creativity (Fatayan & Fauziah, 2022), complete learning (Uliya & Muchlis, 2022) and learning continuity (Sari & Kasiono, 2022).

Many research on Google Classroom has been done, especially during the Covid-19 pandemic. Previous research has focused more on its impact on learning in a single subject. Therefore, this research focuses on the effectiveness of Google Classroom on several topics from aspects of teacher competence, implementation, barriers, and student satisfaction.

2. METHODS

This study uses a quantitative survey method involving 84 students from 3 classes in 8th grade of state junior high school and five teachers. Research data collection through surveys containing several questions assisted through Google Forms. A Likert scale questionnaire (1-5) was used to collect data on student perceptions of teacher teaching skills, implementation, barriers to learning, and student satisfaction. The instrument in the form of a questionnaire that has been prepared is tested to determine the quality of the instrument. The results of the questionnaire trial were analyzed to determine the level of validity and reliability using Cronbach's Alpha.

Data were analyzed to determine the average score of each item. Then, to identify the verbal interpretation of the mean score range, the Bringula interval was used. The open questionnaire was analyzed using thematic analysis. Qualitative data were analyzed using descriptive techniques to obtain accurate and accountable data by matching the data obtained through surveys, interviews, documentation, and observations monitored and guided by the research team.

Table 1. Interpretation of scores

No.	Range of Values/Scores	%	Criteria
1	1,00 – 1,80	20% - 36%	Very low
2	1,81 – 2,60	37% - 52%	Low
3	2,61 – 3,40	53% - 68%	Enough
4	3,41 – 4,20	69% - 82%	Good
5	4,21 – 5,00	83% - 100%	Very good

This study obtained data on student perceptions of teacher teaching skills, implementation, barriers to learning, and student satisfaction. The data is interpreted and analyzed to obtain an overview of the effectiveness of Google Classroom on hybrid learning.

3. FINDINGS AND DISCUSSION

3.1. Teaching Skills

Teachers with their professional abilities are relevant in training and preparing didactic and methodical plans, organizing and carrying out work on student learning (Murati, 2015). In other words, the success and achievement of educational goals place the teacher as the main actor. Teachers need to have special teaching skills to teach correctly, especially during a pandemic by utilizing online applications. Because learning conditions during a pandemic require unusual solution actions. For learning to be carried out according to the learning objectives, the teacher must master the basic skills of managing learning. There are eight teacher skills in teaching, including 1) opening and closing lessons; 2) asking; 3) explaining; 4)) making variations; 5) guiding small group discussions; 6) managing the class; 7) teaching small groups and individually; and 8) provide reinforcement (Usman, 2004).

A survey was conducted to 84 students from 3 classes via Google Form to measure teaching skills, as shown in table 2.

Table 2. Teacher Teaching Skills

No.	Aspect	Score	%	Interpretation
1	Skills of opening and closing lessons	4,5	90	Very good
2	Ask	4	81	Good
3	Explain	4,4	87	Very good
4	Making variations	4,1	82	Good
5	Guiding small group discussions	4,1	81	Good
6	Manage class	4,3	85	Very good
7	Small group and individuals teaching	4,2	83	Very good
8	Gives reinforcement	4,3	86	Very good
	Averaga	4,2	85	

The survey results related to the teaching skills of teachers are at an average of 4.2 or 85%, indicating that the skills of teachers who use Google Classroom in online learning are very good. The highest score is in the aspect of opening and closing the lesson skills. At the same time, the lowest score is guiding small and individual discussions. Of the eight aspects that were measured, the skills aspect of opening and closing lessons, explaining, managing classes, teaching small groups and individually, and providing reinforcement were very well done. While the other two aspects were carried out well. These results prove that teachers can manage learning by mobilizing teaching skills that refer to learning objectives.

The highest survey result is the skill of opening and closing lessons. This skill can be done using Google Meet in Google Classroom. With this menu, teachers can make video calls to say hello, open and close lessons, explain the material, and more. According to Usman (2004), the activity of opening lessons is carried out by the teacher at the beginning of the lesson and at the beginning of each piece of the core lesson activities given during the lesson. This can be done by stating the objectives to be achieved, attracting students' attention, providing references and making links between the subject matter that has been mastered by the students and the material to be studied. The primary purpose of opening lessons is to prepare students mentally to enter the issues that will be studied or discussed and generate interest and focus students' attention on what will be discussed in teaching and learning activities. Closing the lesson is an activity carried out by the teacher to end the lesson or teaching and learning activities and to provide a comprehensive picture of what the students have learned, knowing the level of student achievement and the level of success of the teacher in the teaching and learning process.

Furthermore, the weakness in online learning is conducting group discussions because of several obstacles, such as network and internet quotas. According to Usman (2004), activities must exist in the teaching and learning process. However, not every teacher and teacher candidate can guide their students to discuss without experiencing practice. Therefore, these skills need to be considered so that teachers and prospective teachers can carry out this task well.

3.2. Learning Implementation

In this study, we tried to measure the implementation of learning by surveying the implementation of learning by referring to 8 learning activities in Google Classroom by Nurfalalah (2019) and Padjrin (2021), namely 1) interacting in the forum; 2) create tasks; 3) manage members; 4) assign tasks; 5) give quiz assignments; 6) ask questions; 7) distribute teaching materials; and 8) make video calls.

A survey was conducted to 84 students from 3 classes via Google Form to measure teaching skills as shown in table 2.

Table 2. Implementation of Learning by Teachers

No.	Aspect	Score	%	Interpretation
1	Interact on the forum	4,2	84	Very Good
2	Create tasks	4,5	91	Very Good
3	Manage members	4,3	85	Very Good
4	Giving assignments	4,5	90	Very Good
5	Giving quiz assignments	4,2	84	Very Good
6	Asking question	4,3	85	Very Good
7	Sharing teaching materials	4,3	85	Very Good
8	Make a video call	3,9	78	Good
	Average	4,3	85	

The survey results related to the implementation of online learning using Google Classroom are on average 4.3 or 85% indicating that it is very good. The highest score was in the aspect of creating and giving assignments, while the lowest score was making video calls. Of the eight aspects that were measured, the aspects of interacting in the forum, making assignments, managing members, giving assignments, giving quiz assignments, asking questions, and distributing teaching materials were very well done. While making video calls went well.

This data shows that online learning using Google Classroom can be carried out well as conventional learning. However, what is noted in this finding is that the frequency of teachers giving assignments to students is 91%. Many of these tasks become obstacles for students in online learning as research by Umairah and Zulfah (2020) constrains the collection of assignments because students have many assignments from each subject teacher so they do not have time to collect the assignments given. Furthermore, the note is that the teacher needs to increase the duration of explaining the material or interacting with students via video calls so that students can listen to the material directly and the clarity of instructions in giving assignments. However, there are several reasons why teachers reduce video calls, including saving students' internet quotas and participant quotas.

Google Classroom is an application that is available in web and smartphone versions developed by Google that can be accessed for free. The application which was first introduced in August 2014 can be used by students and teachers to share material among themselves. In Google Classroom, teachers can create and submit assignments while students can work on assignments without using paper. Some of the activities that teachers and students can do in Google Classroom include sharing subject matter/syllabus; assign/submit assignments; holding interactive question-and-answer exams/quizzes; view upcoming tasks via Google Calendar. In addition, Google Classroom can be accessed for free and safely (Prihatin, Hernayati, & Misbah, 2021).

While the implementation of online learning utilizing Google Classroom carried out by students is measured in several aspects, including attendance, discipline in collecting assignments, reviewing learning, activeness, independence, and interaction as shown in Figure 1.

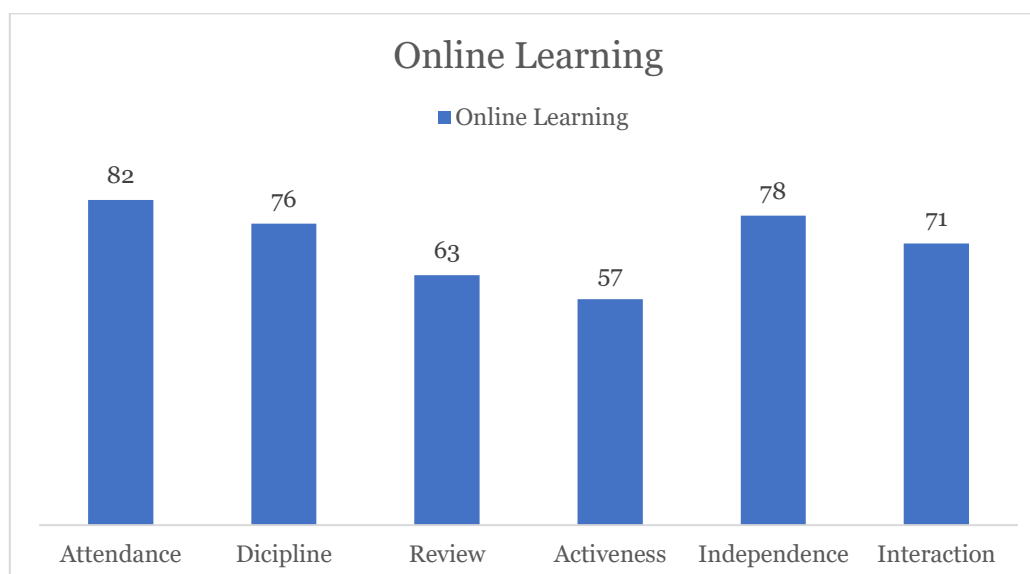


Figure 1. Online learning by students

Meanwhile, students' implementation of online learning is at 72.83%, indicating that learning is carried out well. However, from these 6 points, 2 points need to be improved, namely learning reviews and student activity in learning. These results are in line with research by Setyaningsih (2021), Manurung (2021) that Google Classroom is effective in increasing student learning activities.

The learning process is essentially to develop student activity and creativity through various interactions and learning experiences. Student learning activity is an important basic element for the success of the learning process. According to Whipple, student learning activity is a teaching and learning process that emphasizes student activity physically, mentally, intellectually and emotionally in order to obtain learning outcomes in the form of a combination of cognitive, affective and psychomotor aspects while students are in class (Hamalik, 2013).

Meanwhile, Paul D. Deirich stated that the indicators of student learning activity were based on the type of activity in the learning process, namely: 1) Visual activities, namely reading, paying attention to pictures, observing demonstrations or observing other people's work; 2) Oral activities, namely the ability to state, formulate, discuss, ask or interrupt; 3) Listening activities, namely listening to the presentation of materials, discussions or listening to conversations; 4) Writing activities, namely writing stories, doing questions, compiling reports or filling out questionnaires; 5) Drawing activities, namely painting, making graphics, patterns, or pictures; 6) Emotional activity, i.e. taking interest, having fun or daring; 7) Motor activities, namely conducting experiments, selecting tools or making models; and 8) mental activities, namely remembering, solving problems, analyzing, seeing relationships or making decisions (Hamalik, 2013). Student activity varies greatly, the teacher's role is to ensure each student to acquire knowledge and skills under the existing conditions. Teachers must also always provide opportunities for students to be active in seeking, obtaining, and processing their learning outcomes.

Teachers in managing online learning need to pay attention to three things so that learning can run successfully, namely First, teachers regularly attend competency development programs for using internet technology for learning so that they gain knowledge and learning practices at the beginning of the semester or the beginning of the academic year. Teachers are motivated to participate in a workshop that begins with an introduction to the platform, its benefits and how to operate it to support online learning. From this program, teachers will gain a deeper understanding of the application to maximize their operation according to their needs and learning outcomes both synchronously and asynchronously. Second, awareness for the transformation of face-to-face learning into online learning also encourages teachers to manage classes using technology, so that learning does not require a lot of paper and printed worksheets. This is certainly in line with the momentum of the green campaign with

technological advances and awareness to maintain the consumption of natural resources. Finally, students have personal facilities in the form of laptops and gadgets/smartphones that can support online learning needs and replace the availability of workbooks and printed teaching materials. This is the nature of using digital technology in learning where students take advantage of digital and reduce dependence on printed text sources (Okmawati, 2020).

3.3. Barriers to Online Learning

Online learning is a learning model that utilizes the internet network with accessibility, connectivity, flexibility, and the ability to bring up various types of learning interactions (Sadikin & Hamidah, 2020). However, learning to use Google Classroom certainly has obstacles faced by students. The barriers encountered in this study refer to several studies including quotas, internet networks (Famukhit, 2021), many tasks (Umairah & Zulfah, 2020), lack of focus, and don't have a cellphone with high specifications (Proborini & Herawati, 2021). The results are as in table 3.

Table 3. Barriers to Online Learning by Students

No.	Barriers	%
1	Internet quota	36,9
2	Internet Network	54,8
3	Number of tasks	19
4	Less focus	38,1
5	Cellphone specifications	8,3

The results show that internet quota, internet network, many tasks, lack of focus, and not having a cellphone with high specifications are obstacles in online learning using Google Classroom so it has an impact on learning effectiveness. The results of this study are in line with research conducted by Famukhit (2021), Umairah (2020), and Proborini (2021). These obstacles need to be anticipated by strengthening face-to-face learning in the classroom.

3.4. Student Satisfaction with Online Learning

Furthermore, the response of student satisfaction about online learning using Google Classroom. The survey results showed 82 students (97.6%) who responded as very satisfied and satisfied. This means that students are satisfied with online learning using Google Classroom as shown in table 4.

Table 4. Barriers to Online Learning by Students

No.	Response	%
1	Very satisfied	39,3
2	Satisfied	58,3
3	Less satisfied	2,4
4	Not satisfied	0

This study indicates that Google Classroom is an effective medium for hybrid learning, especially online learning. This effectiveness can be seen in teaching skills, implementation of learning, and very high student satisfaction. The results of this study are in line with Salamah (2020) that the Google Classroom application is a very flexible learning medium in place and time. The Google Classroom application is also effective in delivering material and collecting assignments because it does not use stationery. Every teacher can easily upload power points, videos and questions using Google Classroom. The Google Classroom application is also the best application that can be used for learning because the learning presented is like learning done in offline classes, it's just that in Google Classroom, online class learning is not face to face. Permata research (2020) that Google Classroom is effective for virtual classes. And Longa (2021) that Google Classroom effectively improves student learning outcomes.

Mafa (2018) states that there are four uses of Google Classroom in supporting the learning process, namely first, classroom management. Teachers can use Google Classroom to create and post materials for students. The material can be in documents, images, audio, and even videos. In addition, teachers can interact and discuss through forums. Also makes announcements, upcoming assignments, deadlines, and feedback. Second, flexibility. Teachers and students can easily access Google Classroom and its features via a computer or smartphone, which is integrated with Gmail. Third, safety and security. Students can register a class by entering the class code or based on the teacher's invitation via email. It is restricted to certain people and no intruders or unapproved groups or classes can access it. And fourth, Promote collaboration. Students can interact with others on the discussion board, which encourages better collaboration. They can discuss assignments or projects online. In addition, teachers can invite parents or guardians of students to be involved in the class. This means that they can monitor their child's progress at any time. They can easily get information about announcements and/or other questions in the class stream.

Google Classroom is very useful for improving the abilities and skills of each student. Students can learn on their own and through guidance. There are three pages on the Google Classroom main menu, first, Stream, a notification page including announcements or chats from teachers. Students can also replay live chats. Teachers and students can interact with each other through the chat facility provided by Google Classroom. Interaction through these facilities can be done in groups or privately so that teachers are able to monitor the development of competence among their students. Teachers can interact directly with individuals when experiencing problems or asking something personal. Chat facilities can basically improve students' ability to communicate and collaborate. Second, Classwork, the teacher must prepare the material and upload it in the class assignment so that students can access the material without the limitations of space and time. The uploaded material can be in the form of articles or text, images, audio, video, and some other teaching materials. In addition, student submission of online assignments can also be monitored in an orderly manner. In addition to supporting materials, teachers can also create Quiz Assignments, the progress of the work done by students can be seen by the teacher and assessments can be displayed in this feature. And third, People, shows the class members that the teacher knows the students whether they participate in the class (Harjanto & Sumarni, 2021).

4. CONCLUSION

Hybrid Learning by utilizing Google Classroom, especially online learning, can effectively support the learning process based on teacher teaching skills data by 85%, learning implementation by 85%, and student satisfaction by 97.6%. Thus, Google Classroom is the right application for teachers to use in online learning and distance learning. The obstacles in online learning can be optimized through classroom learning. Suggestions for further research are to test Google Classroom's effectiveness for students and teachers simultaneously. Suggestions for further research is to develop teaching materials both printed and electronic using Google Classroom.

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