

THE EFFECTIVENESS OF GOOGLE CLASSROOM AS AN INSTRUCTIONAL MEDIA: A CASE OF STATE ISLAMIC INSTITUTE OF KENDARI, INDONESIA

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Abstract

Purpose: This study aims to explore the effectiveness of Google Classroom in the learning process at the State Islamic Institute of Kendari.

Methodology: The research method used in this study is a qualitative method, in-depth interview. Data collection was done through interview sessions with students from the Faculty of Teacher Training and Education.

Main Findings: The findings showed that the use of Google Classroom was effective with various limitations: (1) not all students got an account what was provided by the lecturers because they did not have a smartphone, (2) Wi-Fi availability in the campus was limited and (3) the students did not have enough mobile data plan during the time of online discussion and even some students submitted their assignments using their friends' account.

Applications of this study: The study will allow future initiatives to take into consideration the issues and challenges related to accessibility, connectivity and affordability among the users of the platform, in this case the students.

Novelty/Originality: This study provides valuable insights into the initiatives taken by the institutions of higher education in Indonesia that lack a proper platform for implementing e-learning. Issues and challenges found in this study contribute to making important strategic decisions when designing and implementing such initiatives in the future.

Keywords: *Effectiveness, Google Classroom, Learning Media, State Islamic Institute of Kendari*

INTRODUCTION

Advances in science and technology are increasing rapidly, especially in the field of technology. The dynamics of today's technology achieve outstanding acceleration ([Al-Emran, Elsherif & Shaalan, 2016](#); [Jano et al, 2015](#)). The educational model has now proven that a majority of educational activities is inseparable from technological practices ([Aagaard, 2017](#)). Technological developments take part in supporting the learning process. Online media becomes a tool for information and can be used as a learning resource ([Evans, 2014](#)). Hence, the learning resources can currently be completed, which is not only coming from lecturers or teachers but information can also be obtained from the online media. The use of online media as learning resources are deemed appropriate to produce global information without time and distance limitation ([Hamid et al, 2015](#)).

The learning activities are educative message transformation process in the form of learning materials from learning resources to learners. Learning resources in the learning activities are lecturers and the messages delivered are the learning materials received by the receiver of the message, namely students. In the process of learning to communicate the message of the lecturer to the students, the messages need to be received well to affect their understanding and induce changes in their behavior ([Anshari et al., 2017](#)). Thus, the success of learning activities is dependent upon the effectiveness of the communication process that occurs during the lesson ([O'Flaherty & Phillips, 2015](#)).

Approach to learning through Google classroom is a part of a strategy that uses technology to facilitate faculty and students in the learning process ([Ocampo, 2017](#)). In Google Classroom, lecturers can provide materials on the subject being taught. The lecturers can post some teaching materials, assign tasks for students, and upload the students' grade, so that they can immediately see the scores obtained in the course. In addition, Google Classroom can be an alternative to postpone meetings when the lecturers are outside the city or are busy during class hours. Google Classroom also minimizes the costs incurred due to the use of more affordable stationery and other materials, and can minimize time-released energy ([Inoue & Pengnate, 2018](#)). In short, the time and energy spent by Google Classroom users will be lesser than the usual. However, one of the significant barriers for realizing the effectiveness of learning from online classes is

that not all students have an online account. In addition, there are also students who do not have smartphones or a data plan for attending online discussion sessions. As a result, the use of Google Classroom by the faculty of teacher training and education may not be optimally effective.

Review of literature on Google Classroom shows that several studies focus on the effectiveness of E-learning Moodle, Google Classroom and Edmodo ([Hakim, 2016](#)), optimization of using Google Classroom as a learning media ([Soni, 2018](#)), Google classroom as an alternative way to enhance learning quality ([Sewang, 2017](#)), and Google Classroom as a media for Improving Attainment of Graduate Attributes ([Madhavi, Mohan & Nalla, 2018](#)). The present study focuses on ways in which Google Classroom can be used effectively as a learning medium. The effectiveness is analyzed from the aspects of message receiver, content, communication media, format, source, and appropriateness or timing. Moreover, the purpose of this study was to analyze the nature of Google Classroom utilization in the Faculty of Teacher Training and Education at IAIN Kendari, Indonesia.

LITERATURE REVIEW

The Effectiveness of Communication

According to [Hardjana \(2003\)](#), communication effectiveness is measured by several components including receiver / user (receiver), the message content (content), communication media (media), the message format (format), the source of the message (source), and appropriateness (timing).

1. Recipient / user (Receiver)

A receiver / user of the message is said to be effective if the recipient of the message is someone who is expected to receive the message. If the recipient of the message is in accordance with the intended recipient, it needs to measure the quantity of information to find out how the recipient uses the media to meet the need for information.

2. Message content (Content)

The properties of content or information that is expected from a media that conveys messages / information effectively include (a) Contents of the message must be accurate and prudent, starting from the accuracy of the spelling of the name, number, date and age, information and facts encountered. Not only that, accuracy also means the right to give a general impression, correct in view of the news achieved by the presentation of the details of the facts and by the pressure exerted on facts. (b) Contents of the message must be full, fair and balanced. What is meant by fairness and balanced is that a maker should provide information about what is really going on. Fair and impartial element in a message / information may be just as difficult to achieve as well as accuracy in presenting the facts. (c) Contents of the message must be objective. Message / Information objective refer to the message / information created which reflect reality, not biased, and free from prejudice. This objective includes the obligation of a communicator in conveying information about an event as a whole, not cut into pieces by a subjective tendency. (d) Contents of the message should be concise and clear. Its presentation must be simple. In short, the content must be concise, clear and simple. The message should not use a lot of words and must be direct and coherent.

3. Communication media

Selection of channel or media is very important in planning the message centered on the receiver. If the media has a high credibility factor, then the media is able to disseminate information quickly, easily used or accessed, and also it displays additional features of information to the recipient of the information

4. Message format

The properties of the format of the effective message/information are as follows: (a) It should be short and simple. Short format refers directly to the subject matter (to the point) and is not wordy, while simple means that it always gives priority to the selection of a word or phrase having most known and heterogeneous meaning in terms of the level of intellectual and demographic characteristics and its psychographics. (b) It should be clear and easy to grasp the point. It also has clear meaning and objectives. (c) It is able to generate interest and capture the attention of the recipients, triggering their willingness to read.

5. Source/information

The credibility of the source is essential to know whether the information presented is high quality or not credible. The credibility of a source of information is a level which describes the extent to which these resources can be trusted by the recipients.

6. Timing

The first thing that must be considered while using a social media is the target audience. The diversity of the audience can be described as two sides of a coin. On the one hand it can be a positive thing for targeting wider market opportunities, but on the other hand if it fails to target the right type of audience, it is quite likely the information will end up in vain. Also, the target audience are active only during certain times. That is it is always important to know the right time to post anything or any information on social media.

Google Classroom

Google Classroom is an internet-based service provided by Google as an e-learning system ([Martínez-Monés et al., 2017](#)). This service was designed to help teachers create and distribute tasks to the students in a paperless way. Users of this service must have an account in Google. In addition, Google Classroom can only be used by schools that have Google Apps for Education. Google Classroom was used to facilitate the interaction of a professor or teacher with a student or students in the virtual world ([Liu & Chuang, 2016](#)). Lecturers freely hand out a scientific assessment and provide an independent assignment to the students ([Wijaya, 2016](#)). In addition, professors can also open space for online discussion for students. Google Classroom utilization can be made through multiple platforms, i.e., through computers and mobile phones. Lecturers and students can visit the website at <https://classroom.google.com> or download the app via Play Store on android or iOS app store with keywords “Google classroom”. The LMS usage is free of charge, so that utilization can be performed as needed.

Google Classroom education is one of the features provided by Google Apps for Education (GAFE) which was released to the public on August 12, 2014. Google Classroom is an application that allows the creation of classrooms in cyberspace. Google Classroom can be used as a means for the distribution of tasks, assignments submission as well as assessment. Google Classroom can be downloaded without any charge by registering themselves on the Google account application for education [19]. Google Classroom app is very useful for online teaching and learning, and can be obtained for free of charge and can be used on any device. One of the sophistications of this application is that it can be used collaboratively with other groups. There are so many advantages of using Google Classroom as one of the Learning Management Systems (LSM) ([Izenstark & Leahy, 2015](#)).

1. Quick and convenient setting

The setup process of Google Classroom is very fast and convenient than having it installed or registered to local LMS or LMS provider. Lecturers can access Google applications and can begin to share tasks and learning materials. Lecturers can do this by adding a list of students or share a unique code that allows access to their online classes in Google Classroom. Google Classroom is simple and easy to use, making it ideal for lecturers although the levels of e-Learning experiences are diverse.

2. Time saving

Students no longer have to download a particular task by the lecturers. Lecturers just need to create and distribute files of duty to their students online. Lecturers can also determine the ranking, provide feedback for all the tasks and assess them using Google Classroom. Thus, there is the potential to save most of the time for both of them, both students and lecturers. Everything is paperless, so that no time is wasted distributing physical documents and that students can complete their tasks online on time, making it easier for them to meet the deadline and online learning can be tailored to daily schedule.

3. Increase in cooperation and communication

One of the most important benefits of using Google Classroom is the very possibility to achieve an efficient online collaboration. Lecturers can send notifications to their students to start an online discussion or tell them about certain online learning activities. On the other hand, students have the opportunity to give feedback to their friends by posting directly to the flow of discussions in Google Classroom. Thus, if they need help because they have difficulties to

understand an assignment or want to learn more about a particular topic, they can get feedback directly from their virtual classmates.

4. Centralized data storage

With Google Classroom, all participants including students and lecturers are located in one centralized location. Students can view all their tasks in a specific folder, the lecturer can keep learning materials and activities for the academic year in the cloud and all the scores/grades can be seen in this application. There is no need to worry about missing documents or missing votes, because it is all stored in this free LMS.

5. Quick sharing of resources

Online facilitator/lecturer has the power to share information and resources directly online with their students. Instead of having to update the e-Learning courses or sending individual emails to each student, they stay connected to Google Classroom and distribute links to online resources and e-Learning materials enhancements that can benefit their students. This gives students the opportunity to obtain timely updates related to the current lesson, so that they can better understand the material and access multimedia equipment that can improve their eLearning experience ([Anshari et al., 2017](#)).

METHODOLOGY

Data collection is an important step in scientific research. The method used in this research is descriptive qualitative through interview sessions with students from the Faculty of Teacher Training and Education at the State Islamic Institute of Kendari (IAIN Kendari). The data were collected through in-depth interview phase ([Creswell & Creswell, 2017](#)) to investigate the effectiveness of Google Classroom in the learning process. This interview was conducted with the students' consent. Furthermore, the obtained data were analyzed to describe the information collected so that the information can be understood not only by the researchers but also by those who seek the results of this research. The data were thematically analyzed to develop a communication effectiveness framework to understand the phenomena being investigated. Data analysis was conducted after the interviews were completed and the researchers analyzed the data thematically to explain the findings in accordance to the framework ([Glaser, & Strauss, 2017](#)).

FINDINGS

The faculty of teacher training and education is the oldest faculty at State Islamic Institute (IAIN) of Kendari. The faculty also has more departments than other faculties. From this research, we can put forward some important points that will be formulated from data obtained, both advantages and limitations as the important points in this discussion.

The Effectiveness of Google Classroom Learning

In order to measure the effectiveness of the utilization of Google Classroom, the researchers used previous theories about the effectiveness of the communication presented by [Hardjana \(2003\)](#) among others: the message recipients, contents, communication media, format, source, and timing.

1. Effectiveness of Message Recipients

Based on the interview responses from the students, the effectiveness of the message recipients of the online classes following the Google Classroom can be analyzed. It has been found that the message recipient is in line with the intended recipients. This means that when the lecturers want to a post material or provide a task, they post it directly on the accounts of students who are bound by the learning process so that the students could immediately see the lecturer's posts as a conduit of information.

2. Effectiveness of Content

Based on the interview responses from the students, the content of the message / information delivered by the lecturers in Google Classroom has been found to be quite complete but this information still required more explanation from the lecturers, especially the statistics module. So that when the students do not understand the material posted, they immediately commented and asked each other. Some students have also been asked by the professors to meet them directly on campus.

3. Effectiveness of Communication Media

Google Classroom learning communication is effectively used by the faculty of Teacher Training and Education. However, there are some technical constraints caused due to several issues like some students of the study group do not access the account provided by their concerned lecturers. In addition, there are also students who do not have a Smartphone. Wi-Fi availability on campus is still limited. There are also students who do not have an ideal data plan for attending online discussions and even some students submit their assignments using friends' account.

4. Effectiveness of Message Format

The level of effectiveness of online classes on the message format indicator shows that the format of the message that is the lecture materials matches to the students as recipients of the message. However, the materials posted must fully meet the needs of students effectively in addition to taking on Google Classroom materials; they are also looking for material in the libraries or other sources. However, not all students can understand the material posted, they need further explanation from the lecturer.

5. Effectiveness of Source

Based on the interview responses from the students, the effectiveness of the source of the message presented explain that the lecturers who use Google Classroom for posting the material always post only PDF materials in the form of journals and alumni thesis. There is also a lecturer who posts materials and resources in his own BlogSpot with complete sources at the end of their writing. Then it can be concluded that the source of the message has a clarity that can be accounted for truth.

6. Effectiveness of Timing

The level of effectiveness of Google Classroom on punctuality indicators indicate that the level is quite effective because professors do not have a time limit for posting material on Google Classroom. However, the students may sometimes submit their work assignments too late beyond the time specified by the lecturer due to lack of time or too much work. In such cases, the lecturers will provide scores/grades to students who are late.

DISCUSSION / ANALYSIS

Google Classroom is very useful in improving the abilities and skills of each student. Students can learn by themselves and through guidance. Students can find new things by demanding to actively learn through Google Class. While the role of supervisor is very vital for students to absorb the knowledge taught, the students can easily obtain the competence of the supervisor. However, the use of Google Class in learning must be supported by technological infrastructure. This requires a set of computers and the internet so that the Google Class can run well. The lecturers must prepare the material and upload them in Google Class so that students can access the material without any space and time constraint. The material uploaded can be in the form of articles or text, images, audio, videos, and several other teaching materials. Google Class provides facilities for the instructors to upload material. In addition, students' submission of online assignments can also be monitored in an orderly manner.

Lecturers and students can interact with each other through the chat facilities provided by Google Class. Interaction through these facilities can be carried out in groups or privately so that the lecturer is able to monitor the development of competencies among their students. The teacher can directly interact with an individual when he/ she experiences problems or asks something personal. Chat facilities can basically improve students' ability to communicate and collaborate. Video conference is an alternative choice if you want to invite speakers from outside. This can reduce the budget and costs associated with inviting speakers from outside, especially from other countries. In addition, this facility is used if it is not possible to have a face to face interaction in a classroom setting. Google Class is one of the choices for doing video conferencing, because it already integrates with Google Hangout. Unlike the Google Class, Edmodo can also be used for video conferencing that are integrated with Skype and BigblueButton which must be installed in advance so that they can be used properly (Rochmah & Majid, 2018). The use of Google Class can improve the attitude of students towards adopting new technologies. This is because the development of technology is getting faster, so that if students are not able to adapt well it is feared that there will be a lag in technology. Changing the learning paradigm from being teacher centered to student centered requires the use of technology. Students are more creative in exploring science and can easily adapt to technological developments. Thus it is hoped that when working later on, the student is able to adapt to the work environment. Good adaptability is very much beneficial for employees in order to survive and enhance their career opportunities at the workplace.

The current research is in line with the research conducted by [Rochmah and Majid \(2018\)](#) about building virtual classes in Indonesia. In their research, they indicated that virtual classes can improve students' abilities, skills, and independence in mastering the subject matter taught. Students can easily obtain the competence of the supervisor and access the learning materials easily, and the mentor will be able to blend with the students. Virtual classes are in the form of Moodle, Edmodo, Trello, Sophia, Remix Learning, Schoology, and Twiducate. In line with this research, [Gunawan and Sunarman \(2018\)](#) in their research also revealed that Google Classroom has been adopted by 88% Indonesian Vocational Schools. Learning with Google Classroom has the potential to enhance the problem solving skills of students. In addition, at Daffodil International University, Bangladesh, Google Classroom provides a vital chance to promote blended learning and professional development. The study can be effective in understanding and evaluating the perceptiveness to teachers 'and learners' quality teaching and learning through Google Classroom ([Iftakhar, 2016](#)). In Pangasinan State University, Lingayen Campus, Philippines, Google Classroom is recommended in teaching and learning processes ([Ventayen, Estira, De Guzman, Cabaluna, & Espinosa, 2018](#)). In the United States, the researchers found that students were very positive about Google Classroom and believed that they learned more from online classes than they would have from the traditional classes ([Dufresne, Gerace, Leonard, Mestre & Wenk, 1996](#)). Finally, this study confirms that Google Classroom is very useful and effective in improving students' skills, abilities, discipline, and independent learning through teaching materials.

CONCLUSION

In conclusion, the use of this application is effective. However, there are some technical constraints caused by several things including the students of any study group not able to access the account provided by the lecturers. In addition, there are also students who have limited access to smartphones. Besides, Wifi availability on campus is still limited. There are also students who do not have a suitable data plan for taking part in online discussions and some students even submit their assignments from their friend's account.

LIMITATIONS AND STUDY FORWARD

This study has some limitations. Only students from the Faculty of Teacher Training and Education Faculty in IAIN Kendari were interviewed. Future research could include students from other faculties and also lecturers in order to get more comprehensive and meaningful findings.

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