



Teacher Competency Improvement Training Using Distance Learning Media Using Google Classroom, Zoom, and Google Meet at SMAN 1 Teluk Sebong Bintan

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ABSTRACT

The government's approach to preventing the spread of the COVID-19 virus is to establish social distance, despite the fact that the program is still regarded as ineffectual because many individuals refuse to obey these guidelines. The government's plan to relocate the teaching and learning process to the home sparked outrage among various political groups. The fundamental source of this worry was the school's lack of preparation in deploying online learning technologies (online). According to observations, teachers at SMAN 1 Teluk Sebong are still quite inexperienced in managing online learning. During the COVID-19 epidemic, the goal of this research was to increase teacher competency in utilizing the Google Classroom, Zoom, and Google Meet application media. The advantage of research is that it may expand knowledge in the field of education, particularly in increasing abilities using the Google Classroom, Zoom, and Google Meet applications as reference material for every instructor in carrying out the learning process. Methods This study employs an R & D (Research and Development) research paradigm based on the ADDIE model. According to the findings of this study, school-based training might increase teacher competency in the online teaching and learning process throughout the pandemic. This is based on data from pretest and posttest findings, as well as the training process used by schools to increase instructors' professional abilities in the online teaching and learning process. The average pretest score is 1.62, while the average posttest score is 3.14. It was decided that the training offered at SMAN 1 Teluk Sebong benefited instructors by strengthening their professional competence in the online teaching process. Continual and continuous training gives instructors an excellent opportunity to expand their knowledge and develop their abilities.

Keywords: Teacher Competence, Google Classroom, Zoom, Google Meet.

1. INTRODUCTION

The country of Indonesia is still struggling to fight the COVID-19 virus, this virus has spread very quickly, and there is almost no country or region in the world that is not affected by the impact of COVID-19. With so many cases of spread that have occurred, several countries in the world have taken steps to prevent it by implementing several policies and various kinds of rules, one of which is a lockdown, for example, the country implementing the lockdown is China, so most of the western countries such as Italy and English and even Indonesian too. Since the government announced the first case of COVID-19 in Indonesia on March 2, 2020, the government has appealed to the public to reduce activities carried out outside the home to reduce the spread of COVID-19 in Indonesia [1].

The policy that has been taken by the government to prevent the spread of the COVID-19

virus is to implement social distancing, even though the policy is still considered ineffective because there are still many people who do not want to follow these rules.

In a learning process, a method or method is needed that can deliver messages that are conveyed by the sender of the message to the recipient of the message [2]. In the process, communication must run clearly so that the message to be conveyed by educators can be received properly and properly by students [3]. In the process of delivering this message, sometimes disturbances often occur, which result in learning messages that cannot be accepted by students as intended by educators.

The government's decision to move the teaching and learning process to home made various parties panic. The main factor that caused this panic was the school's unpreparedness in implementing online learning systems (online). The transition to the implementation of learning makes

the use of technology an option to facilitate the activities of the online learning process [4]. But in reality, there are still some obstacles in the use of technology to support the learning process, one of which is the competence of teachers in mastering or the ability to use technology which is still relatively low. Many of the problems that occurred in the field of education during the COVID-19 pandemic that required distance learning from home were the lack of teacher competence in utilizing technology as one of the supports for the learning process. In essence, a teacher is required to continue to improve competence in terms of education and teaching.

Based on observations, the competence of teachers at SMAN 1 Teluk Sebong in managing online learning is still very minimal. This is because almost all teachers are technology literate, especially teachers born in the 1980s and below, were at their time, the use of technology was not as developed as it is today. Online learning is growing rapidly, and this is supported by the development of sophisticated technology, internet connectivity. Online learning is very popular mainly because of its flexibility, accessibility, and affordability for people who cannot get an education due to physical distance and schedule conflicts [5]. However, online learning cannot completely replace the role of a teacher in the classroom in the learning process.

The purpose of this study was to develop teacher competence in using the Google Classroom, Zoom, and Google Meet application media during the COVID-19 pandemic. The benefit of research is that it can increase knowledge in the field of education, especially in improving skills using the Google Classroom, Zoom, and Google Meet applications as reference material for every educator in carrying out the learning process.

2. LITERATURE REVIEW

a. Understanding Google Classroom

The rapid growth of digital technology has changed mindsets, activities, and the environment [6]. The education sector, for example, is currently turning to digital, where students can access whatever information they need through the internet.

Google Classroom (Google Class) is an online learning media that allows connecting teachers and students to connect online from anywhere and anytime. Google Classroom is a bridge for teachers to create assignments, share, and grade assignments without having to meet face-to-face [7]. Google Classroom can streamline the teaching and learning process between teachers and students through internet media. Functions and benefits of google classroom

b. Economical and Efficient

By using Google Classroom, teachers and students don't have to bother to hold meetings. All meetings occur online, starting from making assignments/quizzes, collecting assignments, conducting assessments, to adding comments for students.

In addition to facilitating meetings, Google Classroom is also able to save paper usage in every assignment that is shared and done. Everything can be done through Google Docs, Google Slides, and other G Suite products for free.

c. Data sharing is more efficient and practical

Teachers no longer bother sharing assignments via email, chat, or WhatsApp groups. All assignments can be shared through Google Classroom so that task/document management is more organized and does not confuse teachers or students. The data is automatically linked and stored in the Google Drive folder. Teachers can access documents via Google Drive/ Google Classroom directly.

d. Make class faster and instant

The LSM (Learning Management System) developed by Google is very easy to use. A user-friendly interface with a simple interface makes it easy for teachers and students to understand each menu/feature available. To use it, teachers can directly create a class via the classroom.google.com page. After creating a course, teachers can share class codes, add students, create assignments, share materials, and more.

e. Online discussion and communication

Not just sharing and completing assignments, other benefits of Google Classroom can also be used for discussions with teachers and other students. In a class, the teacher can make an announcement in the form of a post which can be seen by every student. Then students can add comments to the announcement/meeting, either publicly (seen by other students) or privately (only seen by the teacher).

Thus, students and teachers can communicate with each other and ask questions when experiencing difficulties/obstacles regarding a given material/task. This method will certainly be very effective in conducting online learning even without face-to-face.

a. Understanding the Zoom app

The Zoom app is one of the most used platforms in recent times, one of which may be because the service is free and has features, one of its great features is that it can share screens as well as share presentations, which can help the learning process [8]. This Zoom application can be downloaded for free on Google Playstore, and its use is relatively easy. The zoom application is now a conversation among program actors in the world

of education because many groups from various students and teachers use this application.

Zoom, an application to provide material delivery to students to gain more knowledge and improve learning outcomes as usual, by using zoom, and can also make a schedule to start a new class meeting that has been scheduled by the teacher so that students can be disciplined in time, and the application later also used in various mobile devices, and desktops. This application feature is very supportive of the current COVID-19 era. So this application does not need to be face to face directly.

b. Definition of google meet

Google Meet is a video conferencing application or also known as an online meeting [9]. Google Meet is a product made by Google, which is a video communication service developed by the Google company. The Google Meet application is one of the two newest versions of the application, the previous versions being Google Chat and Google Hangouts. In October 2019, Google discontinued the classic version of Google Hangouts. In February 2017, Google Meet was released only for iOS users, which was done secretly. Then, the following month Google officially launched the Google Meet application. The communication service used as a video conferencing application can be watched by up to 30 participants. Google Meet is claimed to be a more powerful version than its predecessor Google Hangout, because Google Meet can be accessed on Android and iOS applications, and can be accessed using a desktop-based web application. Google Meet in online learning can also improve student learning outcomes. This can be seen from the implementation of the use of various features available on Google Meet, such as share screens that can be used to make it easier for teachers to convey material to students. The utilization of various features that exist in Google Meet is very effective and efficient to use during online learning today. By using Google Meet, the enthusiasm of students in participating in learning is also seen. This can be seen from the activeness of students when conducting question and answer sessions with the teacher as well as in conveying ideas, thoughts, and opinions related to the learning material presented by the teacher.

3. RESEARCH METHODOLOGY

Methods This research uses an R & D (Research and Development) research model, which refers to the ADDIE model. ADDIE produced eLearning content in distinct and iterative phases: Analysis, Design, Development, Implementation, and Evaluation [10]. The stages of the research are as follows:

a. Analysis

In the analysis stage, there are two parts of activities to be carried out, namely:

- 1) The first stage is analyzing performance, at this stage, the researcher conducts an analysis of performance problems and determines the solution to be taken to the problem.
- 2) The second stage is a needs analysis. In this step, the researcher analyzes the needs needed by the participants in determining the abilities or competencies to be achieved.

Then after the two activities in the analysis phase have been carried out, the next step is the design phase.

b. Design

The design stage includes several activities. The design stages include:

- 1) Determine the learning needs
- 2) Formulate the results of the learning objectives to be achieved in this activity.
- 3) Carry out training

c. Development

At the development stage, they are namely making a scenario of learning activities and guidelines for using the Google Classroom, Zoom, and Google Meet applications. Submission of training content or materials from facilitators will be carried out online and online. Before carrying out the training, the resulting product is validated by the validator, so that before being applied to the teachers of SMAN 1 Teluk Sebong, revisions and improvements can be made to the training device.

d. Implementation

The next step is to carry out the implementation stage, namely, realizing training on the use of the Google Classroom, Zoom and Google Meet applications to improve teacher competence in managing online classes during the COVID-19 pandemic. The location of the research was carried out at SMAN 1 Teluk Sebong, with the research subjects being teachers at SMAN 1 Teluk Sebong. The data used in this study are qualitative and quantitative data.

e. Evaluation

At the evaluation stage, it was taken from the results of the trials conducted at SMAN 1 Teluk Sebong, namely the results of the pretest and posttest, which were carried out before conducting training activities and after carrying out training activities.

4. RESULTS AND DISCUSSION

This research is an R & D research that refers to the ADDIE model, which aims to improve teacher competence in using the google classroom, zoom, and google meet application media. One of the things that become a benchmark for research results is the achievement of research objectives. The indicators for achieving the research objectives can be seen from the results of the discussion as follows:

a. Analysis

At this stage, the main activity is to analyze performance, namely clarifying the performance problems faced at SMAN 1 Teluk Sebong by providing solutions in the form of organizing training programs using the Google Classroom, Zoom, and Google Meet applications during the COVID-19 pandemic in managing online learning. Analyze the needs needed to determine the competencies needed by SMAN 1 Teluk Sebong teachers to improve performance. Based on the results of monitoring and observations made, information was obtained that almost most of the teachers of SMAN 1 Teluk Sebong did not know how to use the Google Classroom, zoom and google meet applications.

b. Design

The design of the training model uses the google classroom, zoom and google meet applications during the COVID-19 pandemic in managing online learning using the three stages of the CEM model. The aim at this stage is to prepare a training model design that will be implemented for teachers at SMAN 1 Teluk Sebong. This stage includes: determining the needs of learners, formulating learning objectives and implementing training.

c. Development

At the development stage in this research are as follows:

- 1) Development of the Training Model: the activities carried out at this stage are the realization of product designs, including the preparation of learning activity scenarios, preparation of guidelines for using google classroom, zoom, and google meet as well as evaluation tools.
- 2) Initial Model Design: At this stage, it includes the first, the model component, namely the involvement of training participants, in this case, the teachers of SMAN 1 Teluk Sebong. The participation of participants has a very important role in the planning, implementation, and evaluation stages. Second, the content of the model is more directed at the training process in the form of determining learning materials and the methods and techniques used. Third, the model process includes the implementation of training, and evaluation of the training program where the process is carried out by providing theory and practice. Fourth, the training model was developed to determine the increase in the competence of SMAN 1 Teluk Sebong teachers in managing online learning using google classroom, zoom, and google meet.

d. Implementation

The implementation phase is carried out by carrying out online training to develop teacher competence in using the Google Classroom, Zoom, and Google Meet application media in managing online learning. This activity involved 34 teachers at SMAN 1 Teluk Sebong.

Prior to the training, a pretest was given to determine the extent of the teacher's initial ability in using the Google Classroom, Zoom, and Google Meet applications. The following are some assessment indicators in the use of the Google Classroom, Zoom, and Google Meet applications.

- 1) The teacher's ability to create a google account, create classes, provide materials, make attendance, create assignments, and be able to make quizzes in the google classroom. Before giving the teachers of SMAN 1 Teluk Sebong training on the use of the Google Classroom application, they were first given a pretest to measure their initial ability to use Google Classroom. The results of the pretest showed that the assessment of the ability to use google classroom obtained an average of 1.99, which indicates that the competency is in the incompetent criteria. It can be seen in the graph below:

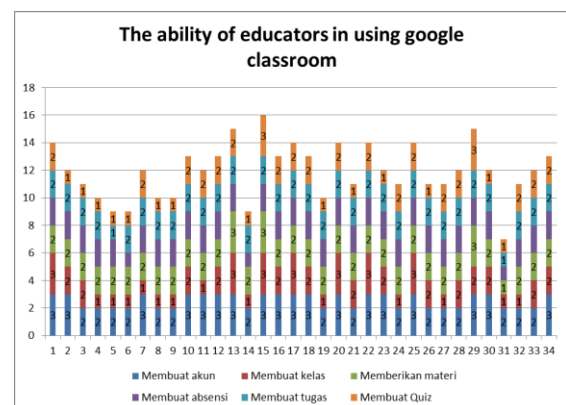


Figure 1. Bar chart of the results of the pretest of the ability of educators to use google classroom

The posttest results after the teachers received training on the use of the google classroom application in online learning showed that the assessment of the ability to use google classroom obtained an average of 3.18 and experienced increased development and was included in the competent criteria. It can be seen in the graph below:

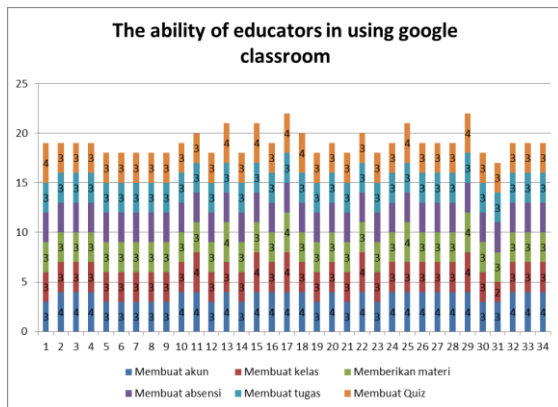


Figure 2. Bar chart of the results of the posttest of educators' ability to use google classroom

2) The ability of teachers to create accounts, create meetings, share links, manage, share views, and record zoom. Before giving the teachers of SMAN 1 Teluk Sebong training to use the zoom application, they were first given a pretest to measure their initial ability to use the zoom application. The results of the pretest showed that the assessment of the ability to use the zoom application obtained an average of 1.43, which indicated that the competency was in the incompetent criteria. It can be seen in the graph below:

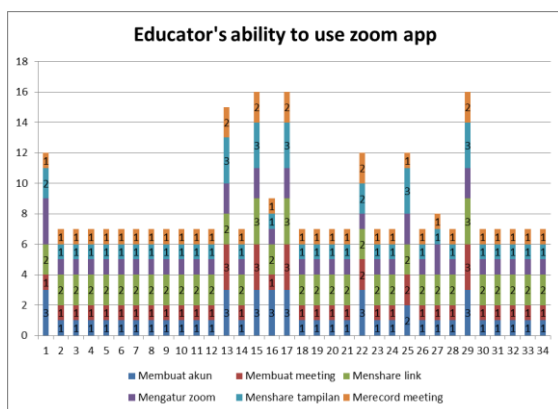


Figure 3. Bar chart of the results of the pretest of educators' ability to use the zoom application

The posttest results after the teachers received training on the use of the google classroom application in online learning showed that the assessment of the ability to use google classroom obtained an average of 3.18 and experienced increased development and was included in the competent criteria. It can be seen in the graph below:

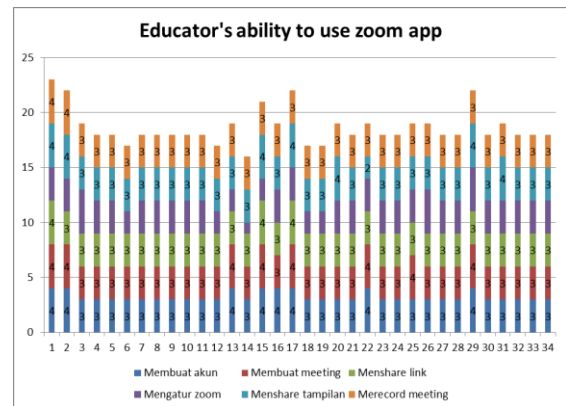


Figure 4. Bar chart of the results of the pretest of educators' ability to use the zoom application

3) The ability of teachers to create meetings, share links, organize, share views, and record zoom. Before giving the teachers of SMAN 1 Teluk Sebong training on the use of the Google Meet application, they were first given a pretest to measure their initial ability to use the Google Meet application. The results of the pretest showed that the assessment of the ability to use the google meet application obtained an average of 1.46, which indicates that the competency is in the incompetent criteria. It can be seen in the graph below:

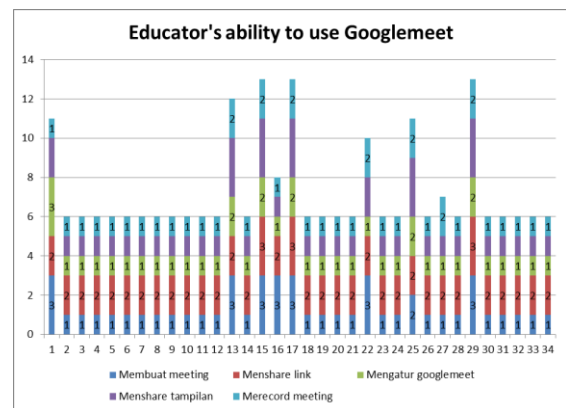


Figure 5. Bar chart of the results of the pretest of educators' ability to use google meet

The results of the posttest after the teachers received training on the use of the google meet application in online learning showed that the assessment of the ability to use google meet obtained an average of 3.14 and experienced increased development and was included in the competent criteria. It can be seen in the graph below:

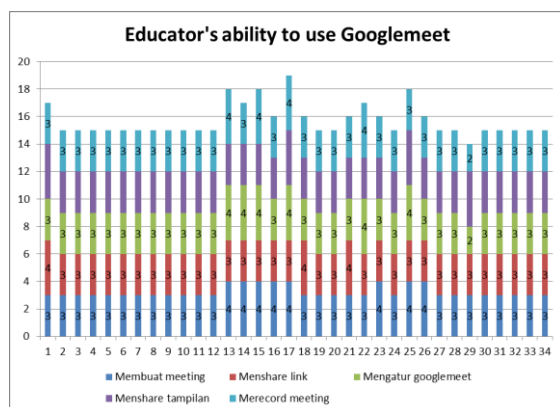


Figure 6. Bar chart of the posttest results of educators' ability to use google meet

After the trial was carried out, the next stage was to study whether the competency development of SMAN 1 Teluk Sebong teachers was in accordance with the previously determined objectives in this case, increasing teacher competence in using the Google Classroom, Zoom, and GoogleMeet applications during the pandemic-19. This evaluation stage consists of a formative evaluation taken from the results of the pretest and posttest conducted at SMAN 1 Teluk Sebong, namely the results of teacher learning in using the Google Classroom, Zoom, and Google Meet applications before and after participating in training activities.

5. CONCLUSION

Based on the results of this study, it was concluded that training held by schools could improve teacher competence in the online teaching and learning process during the pandemic. This is based on data from pretest and posttest results and the training process carried out by schools to improve the professional abilities of teachers in the online teaching and learning process. The average pretest result is 1.62, and the posttest average result is 3.14. It was concluded that the training carried out at SMAN 1 Teluk Sebong provided benefits by increasing the professional competence of teachers in the online teaching process. Continuous and continuous training offers an excellent opportunity for teachers to increase their knowledge and improve their skills. Schools play an important role in holding training that is in accordance with the needs of teachers during this pandemic.

Suggestions For teachers, it is recommended that they always learn and continue to learn using digital technology that is developing in the online learning process. For school principals, it is

recommended to hold training on the use of online learning applications during the COVID-19 pandemic so that the education staff in schools can improve their professional abilities in teaching.

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