



The Online Learning Effectiveness Towards the Students' Learning Outcome in Craft Subject

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Abstract. The research aims to define the effectiveness of online learning on students' learning outcome in Craft Subject. Google Classroom was used as a Learning Management System (LMS) in the teaching-learning process. The subject of the research is junior high school students of grade 8 at SMP N 8 Semarang. The technique of data analysis was using simple linear regression to find out the relationship between one independent variable and have a straight-line relationship with the dependent variable. Data were obtained using a questionnaire and test. The results showed that the online learning can increase the effectiveness of students' learning outcomes. The increase in the quantity of students on the test results was suitable with the decision making that the significant value is $0.017 < 0.05$ and the t count is $2.433 > t$ table 1.991. It can be concluded that the online learning using Google Classroom was effective to increase the students' learning outcomes in the Craft Subject at SMP N 8 Semarang.

Keywords: Online learning · Students' learning outcome · Craft subject

1 Introduction

The development of technology has become a potential in various fields, especially in education. This phenomenon should be positively and adaptively responded in order to face the challenges of the 21st century [1]. The development of science and technology in education requires teachers to be more creative and innovative in the process of learning activities in order to achieve the learning objectives.

The development of information and communication technology (ICT) has a significant impact on several aspects. Related to an education aspect, people can easily gain knowledge from the internet nowadays. Numbers of sources on the internet can be accessed via smartphones or gadgets [2].

The development of technology allows learning in the classroom to be accessed at home and in the surrounding environment. The use of technology has enabled the emergence of distance learning and encouraged greater innovation in creating teaching methods inside and outside the classroom [3].

The Minister of Education and Culture of the Republic of Indonesia issued Circular Letter Number 4 of 2020 on March 24, 2020 concerning the Implementation of Educational Policies in the Emergency Period of the Spread of COVID. It is explained that the learning process is carried out at home through online/distance learning to provide a meaningful learning experience to students. Studying at home can be focused on life skills education regarding the Covid-19 pandemic [4].

The COVID-19 pandemic is a major challenge for the education system. This point of view offers guidance for teachers, heads of institutions, and officials in dealing with the crises [5]. Current learning is more directed at modernization activities with the help of advanced technology with the expectation of helping students accept the material in an interactive, productive, inspiring, constructive, effective, and fun way. Based on circular letter number 4 of 2020, the most effective learning model used in this situation is an online learning.

Online learning is the use of the internet network in the learning process. With online learning, students have the flexibility of learning time, can study anytime and anywhere. Students can interact with teachers using several applications such as classroom, video conference, telephone or live chat, zoom or via WhatsApp group [6]. This learning is an educational innovation to answer the challenge of the availability of varied learning resources. The success of a model or learning media depends on the characteristics of the students. All the literature on e-learning indicates that not all students will be successful in online learning. This is due to the factors of the learning environment and the characteristics of students [7].

Online learning is a distance education system with a set of teaching methods where there are teaching activities that are carried out separately from learning activities [8]. Meanwhile, online learning is organized through internet and web 2.0 networks [9], meaning that the use of online learning involves elements of technology as a means and internet networks as a system. During online learning, there are several methods of carrying out the learning process, such as WhatsApp, video conferencing via Zoom, or online learning platforms and so many digital classes aimed at the teaching and learning process such as Rumah Belajar, Kahoot, Edmodo, and Google Classroom.

Based on an initial observation, in SMP Negeri 8 Semarang, Google Classroom was used in the learning process in order to facilitate the interaction of teachers and students, also students and students. Google Classroom is a free web service developed by Google for schools that aims to simplify the creation, distribution, and assessment of assignments. The main goal of Google Classroom is to simplify the process of sharing files between teachers and students. Google Classroom also provides students to be independent, engaged and motivated as most young learners tend to use technology in their daily lives [10].

There are so many challenges that have faced by the teachers and students, including unfamiliarity in mastering the learning media, lack of technology mastery, as well as unpreparedness in the learning process. Other obstacles were showing up during the learning process, such as bad internet networks, expensive price of internet access, device facilities limitation, lack of technology mastery, and the difficulty of interaction. The parents' involvement was also still minimal. Thus, it makes difficult for the students to understand the learning material, especially the practical subject, such as crafts.

Based on the descriptions and statements above, this research focused on the effectiveness of Google Classroom as the learning management system (LMS) of online learning at SMP N 8 Semarang towards the students' learning outcomes.

2 Methods

The type of research used in this research is quantitative. Quantitative research methods can be interpreted as research methods based on the philosophy of positivism, used to examine certain populations or samples [11].

The research population was students of class VIII, with the research sample of class VIII D and VIII E totalling 80 students from a total of 200 students. The data was collected using questionnaire and test instruments.

The questionnaire instrument measurement used a stratified scale measurement. The stratified scale has four answer options, namely: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). This questionnaire is used to measure the implementation of Google Classroom in the online learning. While the test instrument was used to measure students' abilities in cognitive aspects, or the level of mastery of the subject material. The test used multiple choice questions consisting of five alternative answers A, B, C, D, and E. The test was prepared based on indicators from the Craft material that has been taught.

3 Results and Discussion

This study aims to determine the effectiveness of Google Classroom as the media of online learning on students' learning outcomes. The subject of this research was students of class VIII D at SMP N 8 Semarang. Based on the results of data analysis using simple linear regression states that the hypothesis H_a (Google Classroom as a media of online learning is effective to increase the students' learning outcomes) is accepted and H_o (Google Classroom as a media of online learning is not effective to increase the students' learning outcomes) is rejected.

It can be seen from the results of hypothesis testing from simple linear regression analysis in accordance with decision making that the value of $\text{sig. } 0.017 < 0.05$ and t count of $2.433 > t$ table 1.991 , and the influence of the independent variable on the dependent variable is 71% . While the remaining 29% is influenced by other variables outside the study, so it can be concluded that the online learning variable based on Google Classroom (X) has an effect on the learning outcome variable (Y).

Google Classroom is an online learning media that is free and easy to use. The use of Google Classroom for learning at SMP N 8 made the learning process more interesting, interactive, effective, and efficient. Moreover, the quality of students' learning can be improved by the flexibility of the media used. This is in line with the previous research results. Google Classroom enhances the learning process and also reliable in improving students' access and attentiveness towards learning [12]. Google Classroom had also contributed to the improvement of students' ability and motivation in learning [13][14].

Related to the students' learning outcomes, Google Classroom was effective in improving the students' learning outcomes in several education level, such as elementary

and university students [15][16]. The increase in the students' learning outcome was due to the ease of use of the Google Classroom. Google Classroom's design intentionally simplifies the instructional interface and options used for delivery and tracking assignments. Communication with entire courses or individuals is also simplified through announcements and email notifications. Google classrooms are designed to save the teacher's time as well. It integrates and automates the use of other Google applications, including documents, slides, and spreadsheets, streamlining the process of providing document distribution, assessment, formative assessment, and feedback. Moreover, the app is easily accessible and can be used by teachers and students in both face-to-face learning environments and fully online environments. This enables educators to explore and influence reversed learning methods more easily as well as automate and organize the distribution and collection of assignments and communications within a few instructional milieus.

4 Conclusion

The pandemic COVID-19 changed the habit of learning from face-to-face into online learning. Various media of learning can be used for delivering the material for the students. Google Classroom is one of the media that used by the teachers and students at SMP N 8 Semarang. Based on the research result, the hypothesis H_a (Google Classroom as a media of online learning is effective to increase the students' learning outcomes) is accepted and H_o (Google Classroom as a media of online learning is not effective to increase the students' learning outcomes) is rejected. It can be seen from the results of hypothesis testing from simple linear regression analysis in accordance with decision making that the value of sig. $0.017 < 0.05$ and t count of $2.433 > t$ table 1.991, and the influence of the independent variable on the dependent variable is 71%. While the remaining 29% is influenced by other variables outside the study, so it can be concluded that the online learning variable based on Google Classroom (X) has an effect on the learning outcome variable (Y).

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