STUDENTS' PERCEPTION OF THE EFFECTIVENESS OF USING GOOGLE CLASSROOM APPLICATION AS AN INTEGRATION OF DISTANCE LEARNING TECHNOLOGY

Annisa Putri Octaviani[1] dan Ine Rahayu Purnamaningsih[2]
[1, 2]English Study Program Facuty of Teacher Training and Education University of Singaperbangsa Karawang
Jl. HS.Ronggo Waluyo, Puseurjaya, Teluk Jambe Timur, Karawang, Jawa Barat 41361
[1]Email: annisaputrio0610@gmail.com
[2]Email: ine.rahayu@fkip.unsika.ac.id

ABSTRACT

Distance learning during a pandemic like this is enough to make it difficult for some students to participate in learning activities. Google Classroom is an application that can be used as distance learning. Therefore, this study aims to obtain an overview of students' perceptions of the effectiveness of using the Google Classroom application as an integration of distance learning technology. This research uses a qualitative method. With data collection techniques based on observations, interviews and filling out forms. With involving 30 students who have or are currently using the Google Classroom application as an integration of distance learning technology. The result of the study show that: (1) Students already have the basic facilities needed to participate in distance learning; (2) Distance learning using the Google Classroom application has flexibility in its implementation and is able to create independent learning and motivation to be more active in learning.

Keyword: distance learning; google classroom; technology integration

INTRODUCTION

Distance learning media innovation is currently one of the solutions in the educational environment, Popkova, Ragulina and Bogovis (2018) say that today's society has a tendency related to 'digitalization'. According to Hwang, Lai and Wang (2015), in the concept of education, of course this has a considerable change impact, there is a lot of emphasis on integrating technology in the classroom through innovative teaching that focuses on students in achieving the desired learning goals. By using technology involvement to improve students (Northey, Bucic, Chlynski & Govind, 2015) which is very important in achieving learning objectives (Bolkan, 2015).

Meanwhile, Ghorbani, Jafari and Sharifian (2018) explain that 21st century teachers must educate students in a way they can learn today. Darling Hammond (2006) also stated that teachers in the 21st century must not only teach and organize classroom activities effectively, but also must be able to build effective relationships between students by using technology to support the quality of learning. At this time students' are indeed using e-

learning, especially using the google classroom application as a learning medium used in lectures (Nurre and Sharkey, 2013).

This study focuses on students' perceptions of the effectiveness of using google classroom as a medium of distance learning innovation. With the aim of research to determine student perceptions of the effectiveness of using google classroom in Indonesia. Technology is very important for the younger generation. The widespread use of technology today has increased interest for researchers to explore what teachers do to improve learning for students. One application that can be used as a medium for distance learning education innovation is Google Classroom whose users are increasing every day. Researchers hope that the results of this study can provide evidence to students about the effectiveness of Google Classroom.

To understand the meaning of google classroom, the author gives several perceptions. Google classroom was launched in 2014, Shaharanee, Jamil, & Rodzi (2016) analyzed google classroom as an active learning activity, and they argued that google classroom performance was good in the areas of communication, interaction, usability, ease of use and overall student satisfaction. Likewise, (Espinosa, Estira, & Ventayen, 2017) conducted a study to evaluate the function of google classroom as collaborative learning through assignments is seen as very effective for increasing student engagement.

Meanwhile Liu & Chuang (2016) conducted research in Taiwan using google classroom which resulted in positive perceptions and learning objectives were also achieved by using the google classroom application. Based on Martínez-Monés et al (2017) argue that learning with google classroom because they believe that it is a tool that emerges from the main limitation. So far all research conducted involving the Google Classroom application has shown positive responses from students. None of the studies focused on considering students' perceptions of the effectiveness of the google classroom. The role of students in obtaining new learning methodologies should not be ignored because students are also included in the central figure in the transformation of educational innovation practice.

Based on Machado & Chung (2015) showed the same findings, they studied the role of students in the process of technology integration during distance learning. The findings reveal that the lack of technical training and student competencies prevents technology integration. Samy et al (2008) argue that students are an important factor besides teachers in the effective use of technology during distance learning. The role of the administrator

can be to facilitate teachers as well as students. However, in the end it is teachers and students who must increase the use of technology in distance learning.

Therefore, the role of the teacher is very important even though technology is present. The main purpose of this study was to determine the students' perspective on the Google Classroom application as an integration of distance learning technology. Blair (2012) mentions two elements in providing an environment for technology integration. First, teachers need to put technology into students' hands carefully in choosing the right media. Second, technological tools must be constantly evolving to enhance innovation and problem solving, decision making and teamwork. Based on this, the research focused on students' perceptions of the effectiveness of using the Google Classroom application.

RESEARCH METHOD

In this study using descriptive research. This research first conducted a survey to students regarding the implementation of distance learning. The survey was carried out using a google form by distributing the link through the whatsapp application. There were 30 students who gave responses to the survey conducted. The results of this survey were then grouped based on 3 categories of student responses: (1) agree with the effectiveness of implementing the Google Classroom application as an integration of distance learning technology; (2) disagree with the effectiveness of implementing the google classroom application as an integration of distance learning technology; (3) doubts about the effectiveness of implementing the google classroom application as an integration of distance learning technology. As for the design, the researcher uses a case study. According to Rahardjo (2017) a case study is a collection of scientific activities carried out intensively, in detail, either individually or in a group, to gain in-depth knowledge of the event.

Research participants are high school students who have or are currently using the Google Classroom application for at least one semester, and are selected based on the category of student responses obtained from the survey results. There were a total of 5 participants, 2 of whom were male and 3 were female. With data collection is done through interviews via telephone. The aspects that were asked during the interview were: (1) the facilities owned by the students to support the implementation of distance learning; (2) Student responses regarding the effectiveness of the Google Classroom application as an integration of distance learning technology. Analysis of research data using the analysis

model of Miles & Huberman (1994) which consists of three stages, namely data reduction, data display and conclusion drawing and verification.

FINDING AND DISCUSSION

1.   Students Have Adequate Facilities to Implement Distance Learning

In this modern era, the increasing use of the internet in Indonesia is strongly influenced by the rapid development of information and communication technology. A total of 62.41% of the Indonesian population owns a cellular phone and 20.05% of households own a computer, in 2018 (BPS, 2019). This data is very relevant to the results of research which shows that even though students do not have laptops, almost all high school students in one of the senior high schools in Indonesia already have a smartphone. The results of a survey conducted at the beginning of the study showed that of 30 respondents17 stated that they had laptops and smartphones, while 13 other students stated that they only had smartphones.

There are many studies investigating the use of technology such as laptops and smartphones in learning. The ability of smartphones and laptops to access the internet allows students to participate in learning that is carried out in the form of video conferencing or using applications available online such as Google Classroom (Kay & Lauricella, 2011; Gikas & Grant, 2013; Chan, Walker, & Gleaves, 2015). Laptops and smartphones that have an economical dimension provide guaranteed mobility that allows students to take school lessons anywhere.

Meanwhile, distance learning also has its own challenges, one of which is the availability of internet services. According to research data, it shows that most students access internet services using cellular services, while a small proportion use WiFi services. Based on BPS data (2019) as of 2018 there are 66.13% of Java island with cellular services with strong signal reception strength, 27.22% areas with weak signal reception strength, and 6.64% of areas still not covered by cellular services. At this time distance learning policies are implemented in Indonesia, some of them admit that it is difficult to participate in distance learning because not all areas, especially their village areas, get a cellular signal, even if there is a very weak signal. Things like this make students sometimes late in getting learning information and collecting school assignments.

In addition to the availability of internet services, another challenge faced is cost constraints. Students said that to take distance learning, they had to pay more to

buy internet quota. According to students, learning carried out in the form of video conferencing consumes a very large quota, while online discussions through instant messaging applications or other applications such as Google Classroom do not require a lot of quota, although the use of technology can support the distance learning process, there are several things that must be considered. , including the possible negative impact of misuse and excessive use of technology. Students admit that apart from learning, they also access social media. According to Lau (2017) said that social media has entered the lives of young adults. Students use social media to express themselves, opinions and build friendships (Kim, Wang & Ohm 2016). This raises concerns about the negative effects of using technology and social media such as the possibility of being exposed to wrong information and not paying attention during learning due to playing social media (Shiddiqui & Singh, 2016).

2. The Effectiveness of the Google Classroom Application as an Integration of Distance Learning Technology

Distance learning implemented in high schools in Indonesia as an effort to suppress the spread of Covid-19 is carried out using learning applications, one of which is the Google Classroom application which can be accessed using internet network services. In general, students are satisfied with the flexibility of the current distance learning implementation. Students are not pressured by time because they can set their own schedule and place where they want to take part in learning. Through distance learning, teachers provide lessons through class but in a virtual way that can be accessed anywhere and anytime. This allows students to freely choose which courses to follow and which assignments to do first. Sun et al., (2008) revealed that the flexibility of time, place and distance learning methods affects student satisfaction with learning.

In this finding there is one interesting thing, students feel more comfortable to ask questions and express opinions in this remote learning forum. Studying from home makes them not feel the peer pressure they usually feel when studying together in face-to-face classes. The teacher's physical absence made them feel less awkward in expressing their opinions. This is supported by the absence of physical barriers and the limitations of space and time making it easier for students to communicate (San et al., 2008). In addition, distance learning eliminates awkward feelings so that students can more easily express their thoughts and can ask questions freely.

Distance learning using learning applications such as Google Classroom. This is very easy considering that Google Classroom can be accessed anytime and anywhere. Teachers can use this application during distance learning, for example by providing material or assignments to be given to students. The services offered by Google Classroom are quite adequate and make it easier for both teachers and students themselves. This can make students more independent and quite effective during distance learning. According to Kuo et al., (2014) stated that distance learning like this is student centered, of course this can lead to responsibility for students in learning. Distance learning using the Google Classroom application can require students to prepare their own learning, organize and evaluate and maintain their learning motivation (Sun, 2014).

But on the other hand distance learning using the Google Classroom application also has its own challenges. This happens because between teachers and students who are separated when carrying out learning makes teachers unable to directly monitor student activities during the learning process. There is no guarantee that all students really pay attention or read the explanatory material that has been given by the teacher. According to Szpunar, Moulton, & Schacter (2013) said that students fantasize more often during distance learning than during face-to-face learning. So Khan (2012) suggested that distance learning should be implemented in a short time because students have difficulty maintaining concentration if distance learning is carried out for more than one hour. But on the other hand distance learning using the Google Classroom application also has its own challenges. This happens because between teachers and students who are separated when carrying out learning makes teachers unable to directly monitor student activities during the learning process. There is no guarantee that all students really pay attention or read the explanatory material that has been given by the teacher. According to Szpunar, Moulton, & Schacter (2013) said that students fantasize more often during distance learning than during face-to-face learning. So Khan (2012) suggested that distance learning should be carried out in a short time because students have difficulty maintaining concentration if distance learning is carried out for more than one hour.

The research data also shows that many students have difficulty in understanding the subject matter given through the google classroom, because the explanation is quite minimal where the subject matter is mostly in the form of reading material that cannot be understood thoroughly by each student. Students also

assume that reading the material and doing assignments is not enough, they need a direct or verbal explanation from the teacher regarding some complex material. Communication with the teacher through the discussion column provided by the Google Classroom application is not able to provide a more comprehensive and comprehensive explanation of the material being discussed. Based on research conducted by Garrison & Cleveland-Innes (2005) researched and engineered teacher involvement in distance learning. In a classroom where teacher involvement is very little, or does not indicate a deep and meaningful learning, only by providing notes and assignments to be done in the Google Classroom application.

CONCLUSION

Through this study, we can see in general how students' perceptions of the effectiveness of using the Google Classroom application as an integration of distance learning technology are carried out in senior high schools in Indonesia today. That way we can know that students already have the basic facilities needed to take distance learning. However, there are some things that need to be considered, including the availability of internet services and additional fees required by students.

Distance learning using the Google Classroom application received a very good response from students, especially regarding the flexibility of its implementation. This learning method is also able to trigger the emergence of independent learning and encourage students to be more active in participating in learning. However, interactions in distance learning using the Google Classroom application have limitations so that it is not possible for teachers to directly monitor student activities during learning. Students also have difficulty understanding subject matter delivered remotely or online. The limited communication between teachers and students through the discussion column provided by the Google Classroom application is not enough for students.

The implementation of distance learning allows students to participate in learning from their respective homes. This encourages an integration of technology for the world of education where technology continues to change with the times. Students' perceptions of the effectiveness of using the Google Classroom application as an integration of distance learning technology have two sides to its use. However, this can be a lesson for all of us to always take something positive in this research so that we can become the nation's successors who understand the integration of distance learning technology today.

REFERENCES

Blair, N. (2012). Technology Integration for th. Principal, 91(3), 8–11

Bolkan, S. (2015). Intellectually Stimulating Students' Intrinsic Motivation: The Mediating Influence of Affective Learning and Student Engagement. Communication Reports, 28(2), 80–91. https://doi.org/10.1080/08934215.2014.962752

Chan, N. N., Walker, C., & Gleaves, A. (2015). An exploration of students' lived experiences of using smartphones in diverse learning contexts using a hermeneutic phenomenological approach. Computers and Education. https://doi.org/10.1016/j.compedu.2014.11.001

Darling-Hammond, L. (2006). Constructing 21st-century teacher education. Journal of Teacher Education, 57(3), 300-314.doi: https://doi.org/10.1177/0022487105285962

Espinosa, N., Estira, K. L., & Ventayen, R. J. M. (2017). Usability Evaluation of Google Classroom: Basis for the Adaptation of GSuite E-Learning Platform. Asia Pacific Journal of Education, Arts, and Science, 5(1).

Garrison, D. R., & Cleveland-Innes, M. (2005). in Online Learning : Interaction Is Not Enough. American Journal of Distance Education. https://doi.org/10.1207/s15389286ajde1903

Ghorbani, S., Jafari, S. E. M., & Sharifian, F. (2018). Learning to be: teachers competences and practical solutions: a step towards sustainable development. Journal of Teacher Education for Sustainability, 20(1), 20- 45.doi: https://doi.org/10.2478/jtes- 2018-0002

Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. Internet and Higher Education. https://doi.org/10.1016/j.iheduc.2013.06.002

Hwang, G.-J., Lai, C.-L., & Wang, S.-Y. (2015). Seamless flipped learning: a mobile technologyenhanced flipped classroom with effective learning strategies. Journal of Computers in Education, 2(4), 449–473. https://doi.org/10.1007/s40692-015-0043-0

Kay, R. H., & Lauricella, S. (2011). Exploring the Benefits and Challenges of Using Laptop Computers in Higher Education Classrooms: A Formative Analysis. Canadian Journal of Learning and Technology / La Revue Canadienne de l'apprentissage et de La Technologie. https://doi.org/10.21432/t2s598

Kim, Y., Wang, Y., & Oh, J. (2016). Digital Media Use and Social Engagement: How Social Media and Smartphone Use Influence Social Activities of College Students. Cyberpsychology, Behavior, and Social Networking. https://doi.org/10.1089/cyber.2015.0408

Kuo, Y. C., Walker, A. E., Schroder, K. E. E., & Belland, B. R. (2014). Interaction, Internet self-efficacy, and self-regulated learning as predictors of student satisfaction in online education courses. Internet and Higher Education. https://doi.org/10.1016/j.iheduc.2013.10.001

Lau, W. W. F. (2017). Effect of social media usage and social media multitasking on the academic performance of university students. Computers in Human Behavior. https://doi.org/10.1016/j.chb.2016.11.043

Liu, H.-C., & Chuang, H.-H. (2016). Integrating Google Classroom to Teach Writing in Taiwan. Minnesota eLearning Summit. Retrieved from https://pubs.lib.umn.edu/index.php/mes/article/view/730

Machado, L. J., & Chung, C.-J. (2015). Integrating Technology: The Principals' Role and Effect. International Education Studies, 8(5), 43. https://doi.org/10.5539/ies.v8n5p43

Martínez-Monés, A., Reffay, C., Torío, J. H., & Cristóbal, J. A. M. (2017). Learning Analytics with Google Classroom: Exploring the Possibilities. In Proceedings of the 5th International Conference on Technological Ecosystems for Enhancing Multiculturality (p. 47:1–47:6). New York, NY, USA: ACM. https://doi.org/10.1145/3144826.3145397

Miles, M. B., & Huberman, M. (1994). Qualitative Data Analysis Second Edition. SAGE Publications.

Northey, G., Bucic, T., Chylinski, M., & Govind, R. (2015). Increasing Student Engagement Using Asynchronous Learning. Journal of Marketing Education, 37(3), 171–180. https://doi.org/10.1177/0273475315589814

Nurre, G. S., & Sharkey, T. C. (2017). Online scheduling problems with flexible release dates: Applications to infrastructure restoration. Computers & Operations Research, 92, 1-16. doi: https://doi.org/10.1016/j.cor.2017.11.014

Popkova, E. G., Ragulina, Y. V., & Bogovic, A. V. (Eds) (2018). Insdustry 4.0: Industrial revolution of the 21st Century. Switzerland: Springer International Publishing

Prof. Dr. H. Mudjia Rahardjo, M.Si. 2017. STUDI KASUS DALAM PENELITIAN KUALITATIF: KONSEP DAN PROSEDURNYA. http://repository.UINMalang.ac.id.//1104/1/studi-kasus-dalam-penelitian-kualitati

Salman Khan. (2012). The One World Schoolhouse. In Hachette Book Group. https://doi.org/10.1111/edth.12072

Samy, N. K., Che Rose, R., & Alby, J. L. D. (2008). Teachers' readiness to use technology in the classroom: an empirical study. European Journal of Scientific Research, 21, 603–616.

Shaharanee, I. N. M., Jamil, J. M., & Rodzi, S. S. M. (2016). Google classroom as a tool for active learning. AIP Conference Proceedings, 1761(1), 020069. https://doi.org/10.1063/1.4960909

Siddiqui, S., & Singh, T. (2016). Social Media its Impact with Positive and Negative Aspects. International Journal of Computer Applications Technology and Research. https://doi.org/10.7753/ijcatr0502.1006

Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008). What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction. Computers and Education. https://doi.org/10.1016/j.compedu.2006.11.007

Sun, S. Y. H. (2014). Learner perspectives on fully online language learning. Distance Education. https://doi.org/10.1080/01587919.2014.891428

Szpunar, K. K., Moulton, S. T., & Schacter, D. L. (2013). Mind wandering and education: From the classroom to online learning. Frontiers in Psychology. https://doi.org/10.3389/fpsyg.2013.00495

Badan Pusat Statistik Indonesia. 2018. Data Perguruan Tinggi dan mahasiswa di Indonesia. Retrieved from http://www.bps.go.id