Google Classroom for Hybrid Learning in Senior High School

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ABSTRACT

Disruptive technology in industrial revolution 4.0 (iR4.0) has propagated the education sector to digitalize the teaching and learning process effectively and efficiently. However, some teachers still use paper-based worksheet assessment and teaching materials in conducting their teaching. The solution offered is to provide training on applying hybrid learning by integrating Google Classroom as a virtual classroom into a real classroom in which the teachers can also optimize the quality and quantity of learning in terms of materials or digital structured tasks. This study is conducted in two public high schools in Padang Panjang, West Sumatera, Indonesia that also engaged 18 teachers. It is a descriptive study that tries to describe the phenomena of using Google Classroom by applying Forum Group Discussion (FGD) and training method. Therefore, hybrid learning training by integrating Google Classroom is one of the most effective ways to improve the professional and pedagogic competence of teachers as well as digital competence.

INTRODUCTION

One of the main functions of teaching and learning in the digital era is to make the students actively engage in the learning process. This process of engagement makes the learning process to be in a students' centered, guide them to work together, build critical and creative thinking, and make them learn independently. Making the students be a center of their learning means letting them explore their ability in defining, analyzing, and applying the knowledge they learn in a specific course that depends on their learning objectives. However, their engagement in learning will be better to be stimulated not only in the classroom. They have to be actively involved in learning outside the classroom. One way to make this matter comes possible is by applying a digital classroom that the students can access outside, such as Google Classroom.

Google Classroom is a free online learning service for schools, non-profit institutions, and anyone who has a google account to participate in a specific digital course. It makes the students and teachers stay connected, both inside and outside the classroom. It is a hybrid learning platform developed by Google for schools that aims to simplify the creation, distribution, and assignment of tasks in a paperless way. Here, the teaching and learning process is conducted digitally without a paper-sheet. It was introduced as a feature of G Suite for Education (GAFE) on May 6, 2014, followed by its public release on August 12, 2014. In June 2015, Google announced a Suite for Education, and in April, it was possible for Google users to personally make and teach classes.

Heggrat and Yoo (2018) stated that Google Classroom does not only help students to increase their participation and learning but it also helps to improve classroom dynamics at the tertiary level. In addition, Iftakhar (2016) previously mentioned that Google Classroom promoted collaborative learning, however some teachers and students were still reluctant to use this device. Prastiyo, Djohar, and Purnawan (2018) integrated Google Classroom with YouTube as multimedia learning instruction and they found that this integration improved students' learning outcomes. These current studies highlight the benefits of

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integrating Google Classroom in learning and teaching. However, the study that focuses on giving training for teachers and students in using Google Classroom is still limited. In fact, this need is a crucial thing to be taken into consideration before applying this app inside and outside the classroom because the users need to have a well-defined knowledge to operate it.

Thus, based on preliminary observations in two senior high schools in West Sumatera, Indonesia; SMAN 1 Sumatera Barat and SMAN 1 Padang Panjang, Google Classroom had not been popular enough among the teachers and students. This is due to the lack of educator knowledge regarding the trend of hybrid learning, even though the existing facilities are quite capable and meet the criteria for applying this app. In addition, indications in the field prove that only a few teachers from the ICT majors have just integrated the technology in their teaching because indeed the learning objectives are mastery of technology, while teachers from other scientific fields such as English still apply conventional or cooperative methods, even though English teachers also need digital literary skill in learning the digital era. In addition, it is assumed that similar training has not been given to teachers so that educators do not have sufficient training on hybrid learning methods. Finally, it is needed in today's teaching and learning process when technology can not be separately included in a particular course.

ANALYSIS OF THE ISSUE

A shifting on learning approaches, methods, and strategies have taken place in the 21st century. Juliane (2017) asserts that this trend is due to the existence of social media and ICT. Peacock (2013) states that the digital revolution in learning has influenced the order of class patterns as a whole place of learning. Pricahyo et al (2018) mentioned that the effective use of technology is also being influenced by teacher awareness or human resources in using it and schools' infrastructure for teaching and learning activities. Therefore, training to operate this technology in education is important to be conducted.

However, preliminary observations in the form of informal observations indicated learning that integrates teaching tutoring with an application of science and technology is still very rarely done. Most of the teachers still use paper-based students' worksheet. In fact, the students taught in 2018 are the generation who are born form the explosion of information phenomena called Z, millennia, or digital natives who mostly have the characteristics of learning patterns in the digital age. They will be interested in digital and technology things.

Fallon (2016) argues that to engage millennial generations, educators must integrate technology into their learning. Therefore, the children's learning styles today are well accommodated according to the demands of the digital age skill achievement, then a teacher must be able to adjust the style of teaching with the digital concept without reducing the conventional process. One of the solutions is applying hybrid or blended learning.

Bersin (2004) defines hybrid learning as: "the combination of different training media (technologies, activities, and types of events) to create an optimum training program for a specific audience". The term "blended" means that traditional instructor-led training is being supplemented with other electronic formats. This term means that the incorporation of technology, activities, and forms of events into learning media in order to create an optimal learning program. Graham (2014) stated that hybrid learning is a form of learning that not only integrates face-to-face meetings with online or offline media but also integrates learning methods and learning modalities that must focus on three important components, namely explain, explore, and design with 6 elements (a) face to face that are synchronous (b) independent learning, (c) applications, (d) tutorials, (e) collaboration, and (f) process-based evaluation and results.

This learning method can be a good solution to meet market needs, where face-to-face learning methods are difficult due to time and place constraints, there is a reduction in operational costs, participants can determine their own pace in learning, not time bound but still have to have commited. The system regulated in blended learning also gives students the freedom to choose and determine themselves until the learning progress they have achieved so far (Miarso, 2007: 251). The main objective of hybrid learning is to provide opportunities for various students' characteristics to be independent, sustainable, and lifelong learning, so learning will become more effective, efficient, and interesting, without eliminating the essence of conventional learning. Broadly speaking, the concept of blended learning can be seen in Figure 1.
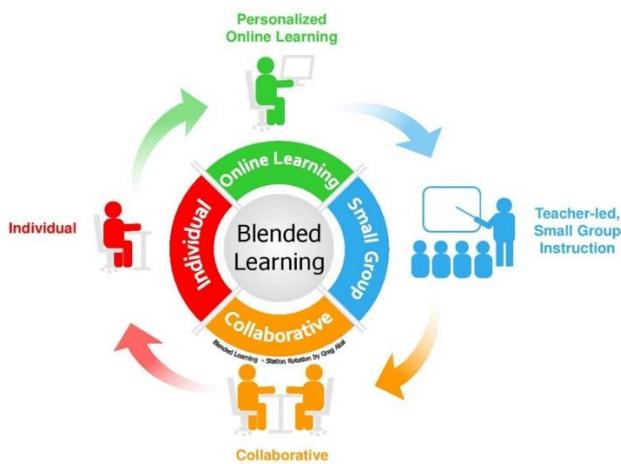
Figure 1. Blended learning (Adapted from http://www.staloysiusla.org/academics/lmu-ideal-institute-2/)

Hybrid learning has, in fact, been introduced in Indonesia and began to be popular since 2011. However, the application of this learning method is still not evenly distributed throughout Indonesia, especially in West Sumatra. From several literature studies, the results of the study found that the application of this method is still widely practiced in the area of Java, only a handful of Sumatra Island (Sari: 2016). In addition, the application focuses more on students' learning goals, without the slightest trace of the teacher's contribution. Therefore, concrete steps are needed to accommodate these problems in the form of debriefing or training in the implementation of Hybrid Learning by integrating an educational application such as Google Classroom in schools in West Sumatra.

METHOD

Participants

The participants involved in this study were 18 senior high school teachers in SMAN 1 Padang Panjang, West Sumatera, Indonesia with 4 subjects English, Math, Physic, and Biology. The selection of the participant was considered since the teachers were going to apply Google Classroom as a virtual additional classroom in teaching and learning process.

Research Method

This research was a descriptive study that focused on describing phenomena on the current trend of the technology to be applied in the teaching and learning process (Figure 2). It had been carried out in several stages. Broadly speaking, these stages were grouped into stages of concept recognition, forum group discussion, training, and evaluation.
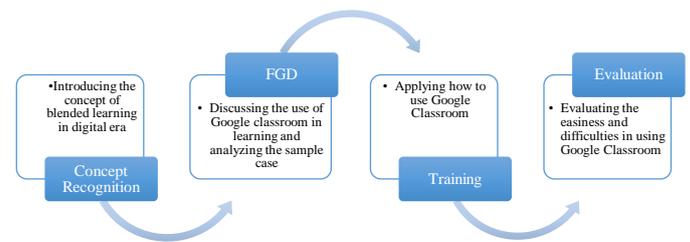

Figure 2. The stage of the training

Data collection tools

The data were gathered using pre and post questionnaire in the form of short essay questions (open question). This questionnaire aimed to see their initial and final knowledge of hybrid learning and the Google Classroom application. In addition, participants were also given a test of designing assignments for certain topics which would then be used in hybrid learning. The second form of this test was to measure the teacher's initial knowledge about designing the right task.

Data analysis

In the early stages, the teachers were given an explanation of the concept of hybrid learning using Google Classroom. The concept recognition was done through lectures followed by examples, questions, and answers. Activities at this early stage were expected to improve understanding, so that teachers understand the concepts and objectives of hybrid learning by integrating Google Classroom into real classes.

The next stage participants exhibited an example of a hybrid learning video that had been recorded. Participants were asked to observe the video and make notes about the video. After that, they were divided into small groups (2 people). Each group was asked to discuss their notes and submit their responses. They were then asked to discuss what challenges and difficulties they might face if they applied hybrid learning and discussed together what strategies to overcome these difficulties. These activities were intended to make teachers able to analyze hybrid learning as one of the strategies to enable them to see ways to implement and overcome problems in the implementation of hybrid learning they might face in class.

The next stage was training to make the right task to carry out the concept of hybrid learning. One important element in hybrid learning was the assignment of tasks that make students have to work together well to solve it. Designing a task with the right difficulty was not easy. Therefore, the teacher needed to practice doing it. A brief training was provided. Then, the teacher practiced designing the task, while the researcher helped and monitored. The tasks that had been designed were

discussed in small groups and classes to discuss their usefulness.

In the final stage, the teachers designed learning using hybrid strategies and implemented the learning in two forms, peer teaching, and in the real class. Peer practice was intended to provide opportunities for teachers to implement all concepts that have been discussed in a limited scope. The results of the implementation of the fellow teachers were discussed again to see their strengths and weaknesses so that improvements can be made. Then, each group of teachers voluntarily choose a teacher to practice this hybrid learning using designs that have been discussed together in the real class. Other teachers (teams) observed the implementation of learning and made important notes for use during reflection.

The final stage was a reflection. At the time of reflection, all team members and researchers were present. Teachers who practiced hybrid learning using Google Classroom in the class were allowed to convey their perceptions of the implementation of learning. After that, other teachers and researchers also conveyed their observations. The results of the daily notes were used as a source of reflection data by the teacher.

Evaluation of the achievement of the objectives of each stage and activity was carried out to measure teacher's understanding of both good concepts of a hybrid learning and the application of Google Classroom through question and answer at the end of the related stage and when designing learning and implementation. For this purpose, the researchers made observation notes using hybrid learning theory. In addition, focus-group interviews were carried out to explore the teacher's understanding of the concepts that had been introduced and their opinions. Then, the design tasks used for peer teaching were also assessed and compared to the design of tasks they used for classroom learning.

FINDING AND DISCUSSION

The following steps need to be done by the teachers to start learning using Google Classroom. It was started by opening Google Classroom through a web browser with the address https://classroom.google.com and log in using their personal Google account password. Then, select a teacher option for teacher use and students option for students to use.
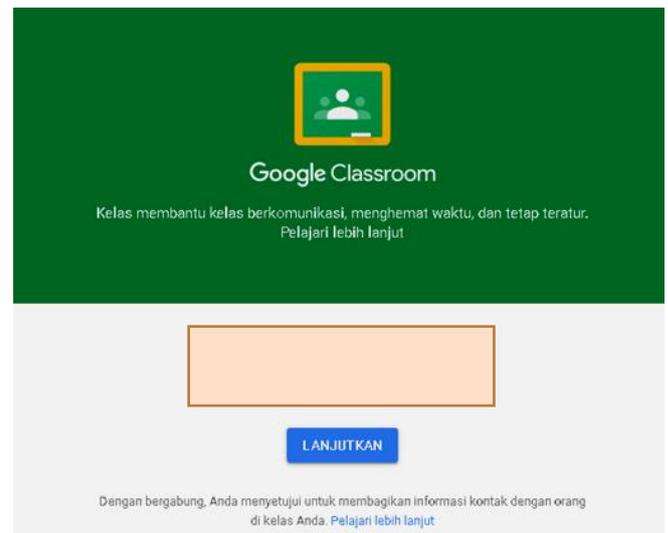
This log in the stage was considered to be an easy step by the teacher. Then, the teachers started to make classes on the bar by clicking + sign in the upper right corner and create the class. Give the name of the class and press create.
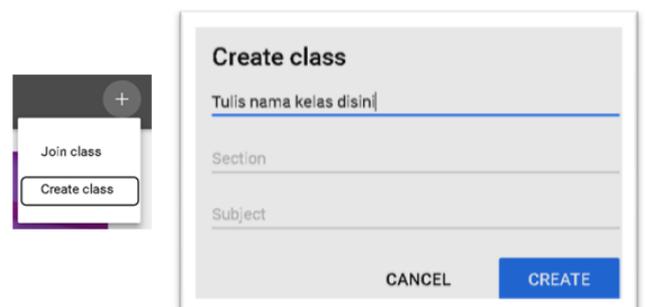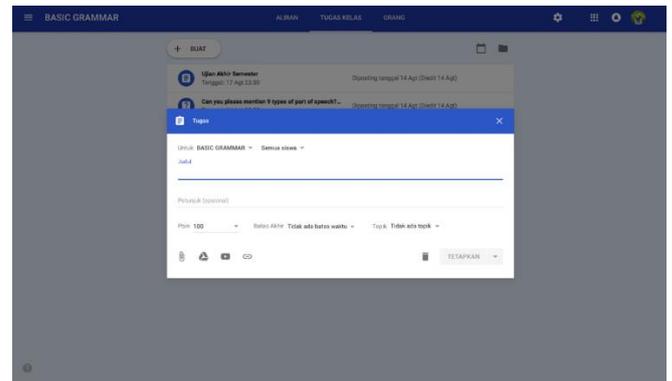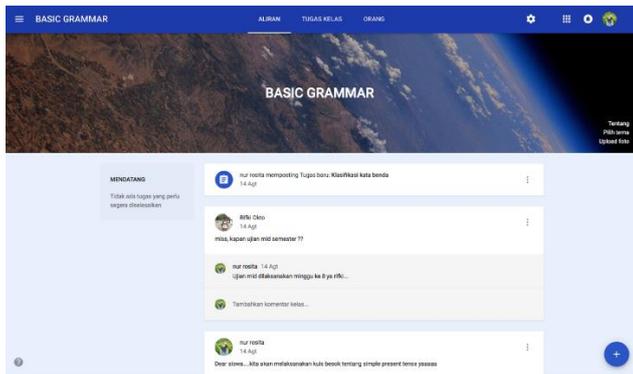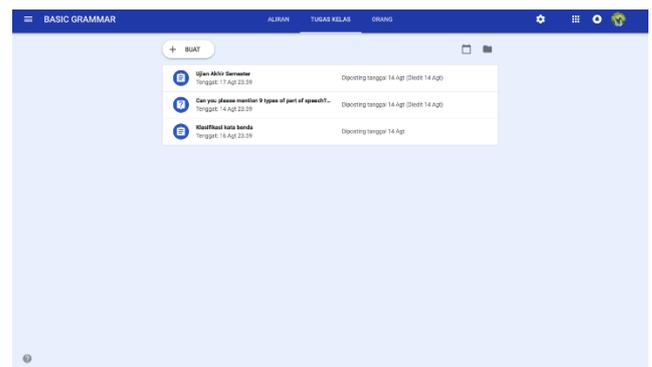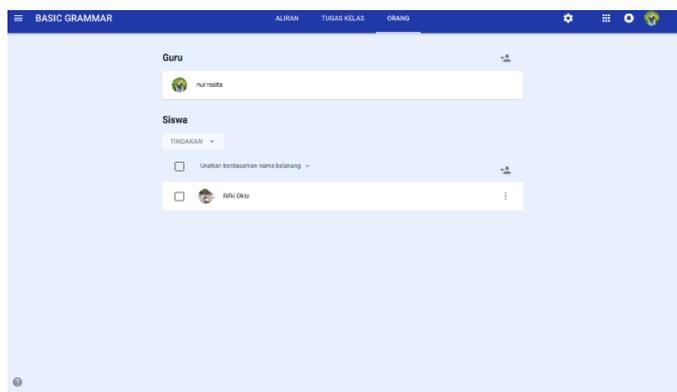
In other options, the teachers added the students to be involved in the class and peer collaborative teachers too. The people on the dashboard can be invited as teachers or students using class code or email invitations.
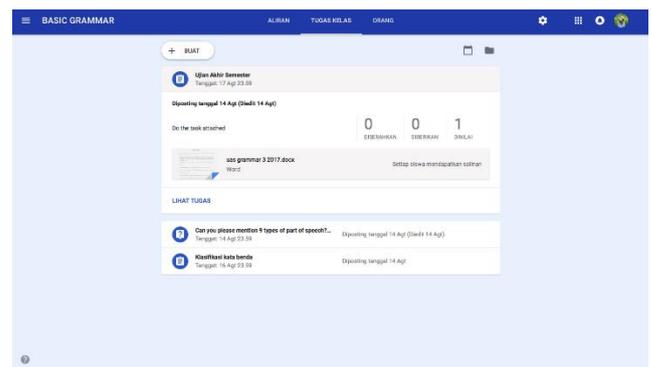

1. Creating the content on Google Classroom

To create content on Google Classroom, the teachers selected and clicked Stream with some activities can be selected such as:

a. Making Announcements (Announcement)
b. Making Assignments
c. Make Questions (Questions)
d. Creating Activities (Reuse post)

a. Make an announcement

To make an announcement or interact with students, the teachers typed it in the create announcement menu.

b. Make Assignments

To make a task, files should be prepared first in the form of pictures, documents, videos and others that contain instructions about what students should do. Likewise, what will be done by students. The work done by them must be attached to this menu assignment. Progress about the work done by students can be seen by the teacher in the dashboard like this:

c. Make Questions and Creating Activities

To make a question, teachers pressed created questions as in step, there were two types of choices, essays with short answers and multiple choice questions. Monitoring was done to monitor the work progress, whoever did the test or not was recorded. After the task was entered, correction and scoring can be asserted on the question that has been answered. Meanwhile, to reuse learning activities such as reusing previous

announcements, assignments, and questions in Google Classroom from one class to another, Reuse Post menu can be used by the teachers.
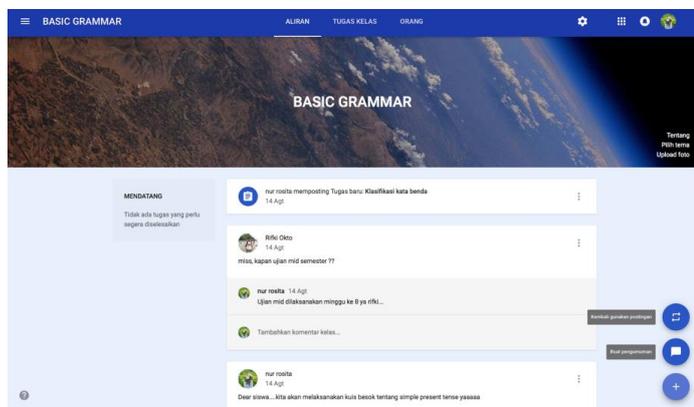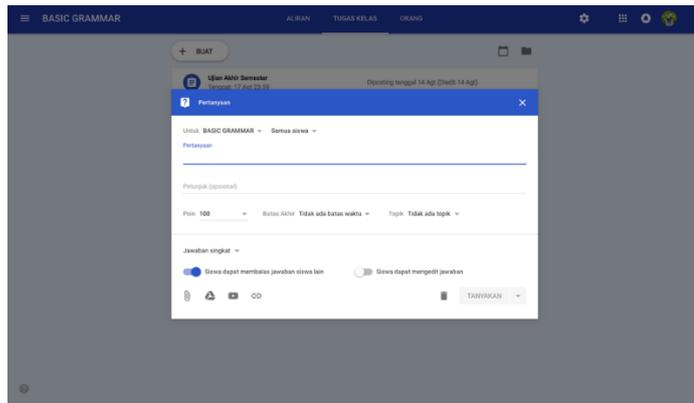
Finally, by these stages, the teachers were able to create a digital class using Google Classroom. They were trained to integrated the technology into the teaching and learning process. They were also willing to learn how to use it in holistically. For them, this app helped them a lot in managing tasks and time to handle the class outside the classroom.

CONCLUSION AND LIMITATION

Discussion

At the end, the problem that is often faced by teachers in learning in the digital era is the confusion of choosing the right educational applications that can be integrated in real classes. Besides that, the assignment given by the teacher when students are asked to complete in groups tends to be less challenging so that most students are less able to develop their critical and creative thinking power.

From the series of the activities that had been carried out, it can be concluded:

1) Teachers still have minimal knowledge related to 21st entury learning trends. However, there are some teachers who have begun trying out some educational applications that can be used in teaching and learning. Therefore, the Forum Group

Discussion activities related to this matter are very necessary to be done so that all teachers know and are able to follow the development of 21st century teaching and learning patterns.

2) Google Classroom as a form of digital hybrid learning class learning is very helpful for teachers in developing hybrid learning patterns through combining face-to-face learning with virtual classes. Where teachers and students can continue to interact in learning and teaching both inside and outside the class are not time bound. This activity can be done anytime and anywhere.

3) The features on Google Classroom are very user-friendly for the teachers since they are able to use it without any barrier after the training.

Limitation

It is known that today's trend of teaching and learning digitalization proposes a simplicity in supporting the effectivity and efficiency of time and place. This belief makes the technology is widely used either inside or outside the classroom. To promote this, the teachers' competence in using the technology are needed to be emphasize, because teachers is the main human resource that can lead the students to do the further activities in the course for specific tasks to achieve the learning outcomes. Thus, to improve digital competence of the teachers, forum group discussion and training are crucial elements. Thus, it will be better if these elements are applied holistically. They can not be separated from each other because gaining the concept recognition and evaluation are gathered in forming a meaningful final result in this research.

However, this research has not found the final model for integrating the Google Classroom as one of the ways to blends conventional teaching method and technology. It is only gives a brief description of how Google Classroom application is implemented in two public schools of senior high school level in Padang Panjang, West Sumatera, Indonesia with a small population. Further, in the future, it is hoped that the future research may conduct a research in finding an appropriate model to be implemented in blended learning through Google Classroom. More specific and wide research is needed to be done to see how Google Classroom affect the teachers' competence in using technology for teaching in the classroom too.

Young adulthood (span from ages 18 - 25) (Vaterlaus, Patten, Roche, & Young, 2015; Bonnie, Stroud, & Breiner, 2014; United Nations Fund for Population Activities, 2013) is a pivotal and significant time in human life. It has often been characterized by transitions, for instance, young men and women at this

stage develop a relationship and start working (Henderson & Robertson, 2000; Arnett, 2000).

REFERENCES

Bersin, J. (2004). *The Blended Learning Book Best Practices, Proven Methodologies and Lesson Learned*. San Fransisco: JohnWeley

Fallon, J. (2016*). Google Classroom for Third Grade Writing. Theses and Dissertations*, 577. http://rdw.rowan.edu/etd/577

Graham, C. R. (2006). Blended Learning System: Definition Current trends, And Future Direction. In C.J Bonk & C.R. Graham (Eds*), Handbook of blended learning: global perspective, local design (pp.3-12)*. San Fransisco, CA: Pfeiffer

Juliane, C., & Iping S. (2017). *Digital Teaching Learning for Digital Native*, Tantangan dan Peluang.

Peacock, M. (2013). *Innovations in Learning Technology for English Language Teaching*. British Council: London

Pricahyo, E., Akhyar, M., & Suharno, S. (2018). Modern technology: Has it been Utilized in Learning?. *Journal of Learning and Teaching in Digital Age (JOLTIDA), 3*(2), 3-11.

Sari, D. I. (2016). *Students' Perception in a Blended Learning Speaking Class*. Proceedings of 4th International Conference on Education and Language. (p.144-147), Labuhan Ratu, Bandar Lampung, Indonesia.

Heggart, K. R., & Yoo, J. (2018). Getting the Most from Google Classroom: A Pedagogical Framework for Tertiary Educators. Australian Journal of Teacher Education, 43(3). http://dx.doi.org/10.14221/ajte.2018v43n3.9

Iftakhar, S. (2016). Google Classroom: What Works and How. *Journal of Education and Social Science, 3*, 12-18.

Prastiyo, W., As'ari D., Purnawan. (2018). Development of Youtube Integrated Google Classroom Based E-Learning Media for The Light-Weight Vehicle Engineering Vocational High School. *Jurnal Pendidikan Vokasi, 8*(1), 53-66.