
Minimizing online learning obstacles in pandemic era of vocational students' remote area by using flipped classroom strategy.

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ABSTRACT

The purpose of this study was to minimizing online learning obstacles in pandemic era of vocational students by using flipped classroom strategy. Besides, it figured out the improvement of achievement and environment during the implementation of it. This research was classroom action research. It was carried out in Basic English Grammar Class. They consisted of 24 students from remote area. This research was conducted in two cycles with four stages; plan, action, observation and reflection. Overall, the majority of students reacted positively toward the teaching and learning atmosphere and it improved the achievement of the students. It could be seen by scores obtained from pretest (61.00), post-test of cycle 1 (69.00) and post –test of cycle 2 (71.00). Thus, flipped classroom handed over the obstacle of online teaching and learning process and it improved the achievement of the students.

Keywords: *Flipped classroom strategy, online learning, and remote area.*

INTRODUCTION

One of the core elements of national development is education sector. The spread of Covid-19 pandemic has affected this sector and caused the schools shut down. Indonesian government has considered in order to ensure that the education system run functionally, the distance learning is one the greatest choice to replace the conventional class, face to face meeting with online learning. The ministry also facilitates both teachers and students with free data package to support the teaching and learning processes. Johnson, et al (2009) argues that to fully participate in a globally networked society, every student needs to develop strategies for locating, comprehending and responding to text in ways that exploit the potentials of information and communication technologies (ICTs). Consequently, the students have to increase their knowledge in integrating technology in their learning processes. Moreover, the teacher also needs to take account into this situation since even if language teacher educators have mastery of their content and teaching methodology in physical classroom, they need to acquire new skills for the teaching online (Murray, 2013)

However, the practical implementation of online learning has faced several obstacles such as the students who live in the areas which has restricted internet access, electricity, and digital technology devices. This current situation has happened in Politenik Negeri Bengkalis in which most of the students come from many remote areas. Since all the subjects are taught through online

learning including English, it's hard for them to join online classes if the teachers do not consider the appropriate platform that could be used for all the students, for instance several students could not join video conference or zoom class since they need a good internet signal to access and join those learning platforms. Whereas in learning English they need more exposure and practice the target language to make the learning more meaningful for them. Joshua (2018) states that since the teacher is unphysically presence and only might meet the students virtually, it's needed to create convenient atmosphere during distance learning.

Therefore, to keep the students learning and being active during the crisis situation, especially in learning English and might minimize the challenges in online learning especially for the students in remote areas; flipped learning could be used as the teaching method by utilizing technological integration into online classroom. The flipped classroom is one in which lectures are presented as homework outside of class in online videos so that class time is reserved for engaging directly with the material (Gaughan 2014). The students are engaged to be active in gaining information independently outside the class by watching videos without teacher supervision as many times as needed to remember and to understand the concepts. While during the class they could get the feedback from the teacher and might use their thinking ability such as applying and analyzing the material given. This method could be applied in online learning promote the students' English proficiency.

This study is expected to increase the students' English proficiency during online learning by using flipped classroom and might cover all the obstacles for students in remote areas to keep learning and being motivated during the crisis period.

Online learning

Research indicates advantages of online learning, such as greater flexibility; providing any place, any time learning; opportunities for learners to access resources not available locally; and broader possibilities for collaboration (Matthews-Aydinli, 2005). Online learning has the —potential to bring students together and engage them collaboratively in purposeful and meaningful discourse through the creation of sustainable communities of learners (Garrison, 2009). This reflects a collaborative constructionist approach, consisting of interaction among learners with teacher guidance, as opposed to instructivism, or teacher-centered learning (Garrison, 2009; Gerstein, 2013). As the way to achieve optimal and effective online learning the teachers should have the competencies in using technology. Although they have mastery all the materials and teaching methodology in physical classrooms, they need to acquire new skills for teaching online and institutions need to provide the resources necessary for this professional development. It is not sufficient to merely upload print materials online (Murray, 2013). A number of different organizations and scholars have posited lists of the skills e-teachers require (Brinthaupt, Fisher, Gardner, Raffo, & Woodard, 2011; Healey et al., 2011; Hubbard & Levy, 2006; Trentin, 2010). These skills include such as mastery of the technology, including social software; developing new teacher roles; understanding distance learner needs, ability to foster online interaction among students, between teacher and students and between course content; understanding the legal and ethical issues around online education; ability to situate learning and create communities of practice (Lave & Wenger, 1991); ability to employ project-based learning

ability to develop and support autonomous learning among students; and using constructive, timely feedback.

Flipped learning

The flipped classroom is a pedagogical approach which moves the learning contents taught by teachers' direct instruction to the time before class in order to increase the chances for students and teachers to interact. Therefore, teachers would have more time to guide learning activities and solve students' problems in order to promote learning effects (Hwang, Lai, & Wang, 2015). Hung (2015) states that flip teaching can be conducted with many kind of instructional videos, and other forms of pre-class assignments, such as reading quizzes or worksheets, are often presented together to help students better prepare in class participation. Using flipped learning also might promote the students' thinking skill. By viewing it through Bloom' taxonomy the students are required to obtain the information independently outside the class by watching the videos or material given as many time as needed to remember the information and to understand them without teachers supervision. While the thinking processes -analyzing and applying occur in class by having teachers or peer assistant. When the students master the material given they could accomplished the task independently and accurately, this means they could reach the top level of thinking -evaluating and creating (Eppard & Rochdi, 2017).

METHODS

This research was classroom action research. The aim of the classroom action research is to find solution of the problems found in teaching and learning process. According to Khasinah (2013) Classroom action research focuses on optimizing instructional process by using new method, strategy and approach. In addition, it creates innovative teaching and learning process in class.

The design of this research according to Khasinah (2013) are plan, Action, Observation and Reflection. The activities were clarified as follow:

Plan

Plan was the first stage used in this design. The lesson plan, material, media (video), link of learning management system (YouTube, google classroom and WhatsApp) are prepared before teaching and learning processes were conducted.

Action

- 1) The activities in this stages were:
- 2) Giving pretest to see initial knowledge of the students
- 3) Activities before class hour.

First, the video shared in YouTube channel 2-3 days before class hour. Then, the students were asked to watch and take some notes for necessary information.

- 4) Activities in class hour

First, there was class discussion talking about the material in WhatsApp group. Then the teacher gives conclusion about the discussion. The students were given some exercise. The exercise was collected in google classroom. Teacher examined the exercise. Then, the items which were commonly got mistaken by the students are discussed. All of the exercise were done in class hour. Finally, the students were given a post test.

1. Observation: In this stage, the understanding and participation and activities in the teaching and learning process of the students were observed while implementing the Flipped classroom strategy.
2. Reflection: After implementing flipped classroom strategy in the teaching and learning process, the result of the activities were identified as the reflection of the action. Here, the input and output of the implementation of flipped classroom strategy were analyzed and evaluated.

Observation was used to observe the students' attitudes in teaching and learning process. While doing observation, the researcher took some notes about what she observed. Next, the questionnaire was set and shared to the students in order to see the students' perception toward flipped classroom strategy. The questionnaire used Likert scale 1-5 (totally disagree, disagree, neutral, agree and totally agree). The number of students participating in this surveys was 22. The last, the post-test for each cycle were administered to the students. This was done to see the students' understanding and achievement for each cycles. Quantitative data were analyzed by calculating the mean score of from the tests. Then qualitative data were obtained by analyzing student's perception toward the flipped classroom strategy.

FINDINGS AND DISCUSSION

All of the data finding were collected by using the mean score of the students from Pre-test, Post-test of cycle 1 and Post-test of cycle 2. In addition, students' perception toward this learning strategy was also gathered.

To find the students' achievement by using flipped classroom. The test for each cycle was distributed. First, the pre-test was administered to find the initial capacity of the students. Then, after the cycle 1 had been done, post-test of cycles 1 was administered. In addition, post-test of cycle 2 was administered, after the cycle 2 had been done.

Table 1. The test score.

Pre-test	61.00
Post-test of cycle 1	69.00
Post-test of cycle 2	71.00

The table shows that the score for pre-test is 61.00. Then, the score for Post-test of cycle 2 is 69.00. In addition, the score for cycle 2 is 71.00. It means that there was improvement after conducting each cycle. Guvenc (2018) says that flipped classroom gives contribution to learning output.

To find the student's perception of flipped classroom, the questionnaires were distributed to the students. Six question has been conducted for 22 students. The table above shows students' perception toward flipped classroom strategy.

Table.2. Students' perception of flipped classroom

Survey Items	Total Items 100%	Totally disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Totally agree
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		(%)				
It was easy to understand the material in the learning video	22	1 (0)	3 (14)	2 (0)	10 (45)	6 (27)
I was more motivated and active to learn the learning video distributed before the class hour	22	0 (0)	1 (4)	0 (0)	12 (54)	9 (41)
I had a chance to choose the right time and better internet connection to access the learning video	22	0 (0)	0 (0)	2 (9)	7 (32)	13 (59)
It was easy to learn the material in the learning video anytime and anywhere	22	0 (0)	0 (0)	1 (0)	2 (9)	19 (0)
the learning video was interesting to learn.	22	0 (0)	0 (0)	0 (0)	7 (32)	15 (68)
I liked to finish all the exercise before class was over	22	1 (5)	3 (14)	0 (0)	10 (45)	8 (36)
I need this strategy would be implemented for the next meetings.	22	2 (9)	3 (14)	3 (14)	8 (36)	6 (27)

Form the table, it can be seen that more than half students 72 % reacted that they were easy to understand the material in the learning video. Almost all students were more motivated and active to learn the learning video distributed before the class hour. It means that flipped classroom strategy led to the positive atmosphere for the students to study even they were in complicated condition. According to Bergmann and Sams (2012) flipped classroom strategy does not only make students motivated to learn but also it enhances learning autonomy.

Moreover, from the table almost all students (91%) had a chance to choose the right time and better internet connection to access the learning video. The students searched the places where it had better internet connection to access the learning video. They also had time to access the video when there was electricity power. Because, when there was no electricity power, the internet connectivity would be down. Thus, this strategy really helps the students learn optimally even though they are from remote area. It is supported by Kim, Kim, Khera and Getman (2014) Flipped classroom strategy can hand over some interference in technology.

Next, from the table it can be seen that almost all the students were easy to learn the material in the learning video anytime and anywhere. After they access by downloading the video from YouTube, the students learn by themselves anywhere and anytime. They don't depend on the need of internet connection and electricity. It means that Flipped classroom strategy helps them in learning process. Sadiyoko (2017) technology helps instructional process occurs anytime and anywhere. This flexibility helps the students with any condition and limitation learn more.

After implementing flipped classroom strategy, it was obvious that there was improvement in teaching and learning environment. Based on observation, the process of teaching and learning was more life. The students were more active in teaching and learning process. This was caused by the problem were handled by this strategy. Guvenc (2018) states that flipped classroom strategy increasing students' motivation so it contributes to significant development in learning.

Moreover, the improvement learning environment contributes the improvement of student's achievement. When they were more motivated to learn with flipped classroom strategy, they had better understanding about material as well. Since Flipped classroom has several advantages for teaching and learning process such as; improving achievement of the students, transforming students from passive listener to active learners, providing motivation for students to prepare themselves in preparing the for class (Bergman & Sams, 2012; Kim, Kim, Khera & Getman, 2014.)

Flipped classroom became solution for teacher when the students had problem in following online teaching and learning process. The problem were related to limited internet connectivity and electricity. The easiest platform to reach when it was down was that Whatsapp application. So, to make the teaching and learning process became more optimal, sharing interesting learning video before the class hour was the best option as the implementation of the flipped classroom. So, Bergman & Sams (2012) says Flipped classroom gives better wisdom to overcome the student's problem.

CONCLUSION

Online learning is the only choice for teaching and learning process since the pandemic attack people live. While this can be an obstacle for students who are from remote area. They have some barriers; internet connection and electricity. So by conducting flipped classroom strategy this obstacle can be minimized. The teaching and learning process can run optimally.

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