The Role of Google Classroom Accompanied by YouTube Media in Efforts to Improve The Quality of Microteaching Lectures in The Biology Department of IAIN Kerinci

Dewi Juita[1*], Yusmaridi M[2]

[1] Kerinci State Islamic Institute, Kerinci, 37112, Indonesia
[2] State Islamic University of Imam Bonjol, Padang, 26223, Indonesia

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A B S T R A C T

This research is motivated by the unavailability of video recorder that serves to provide feedback on student performance in microteaching lectures. The purpose of this study was to obtain a description of student responses to the use of google classroom with youtube media in microteaching lectures and how the role of google classroom accompanied by youtube media in improving the quality of microteaching lectures. The researcher recorded the student's performance, uploaded it to the youtube channel, and displayed it via google classroom. The method used is descriptive methods. The results showed that 94% of students agreed that the use of Google Classroom along with YouTube media could provide constructive feedback to students, 100% of students agreed with the use that could be an introspection material for students' teaching skills, and 90.6% of students agreed that through the use of it can improve the quality of microteaching lectures, which is characterized by an increase in students' teaching skills. The intended teaching skills are opening lessons, explaining material, questioning, giving reinforcement, making variation, using media, class management, and closing lessons. The improvement of the quality of microteaching lectures is in the medium category with $<$N-Gain$>$ value of students by 0.54.

1. Introduction

Mictroteaching is a compulsory subject course taken by prospective teacher students in the Department of Biology, Faculty of Tarbiyah and Teacher Training (FTIK) IAIN Kerinci. This subject must be taken by students in semester 7 with a weight of 2 credits. Students can practice all their teaching skills in the course,

this is in line with the opinion of Reddy (2019) who states "Microteaching is a teacher training technique for learning teaching skills". Microteaching is a teacher's training technique to practice teaching skills that will be used in schools or educational units later. Furthermore, Juita (2019) also stated "Microteaching is a controlled exercise focused on behavior in teaching and to train prospective educators in clear supervision". The teacher must carry out the teaching and learning process well so that the learning objectives can be achieved by the students (Marina, 2019). Ginanjar (2019) also explained "Teachers as the spearhead of education who are directly at the forefront of dealing with students are required to have adequate competence". The importance of microteaching class must be taught to prospective teacher students.

Microteaching lectures are held with the stages of teaching, giving criticism, and teaching again. This is in line with the opinion of Reddy (2019) who states that "Microteaching provides medical teachers an opportunity to build their confidence and improve both content and methods of teaching and develop specific teaching skills through a" teach, critique, re-teach "model". Methods of developing students' teaching skills through microteaching lectures in the form of teaching, criticism, and re-teaching as a form of improvement over previous teaching performances. The time given for one performance is 5 to 20 minutes and the number of students in a microteaching lecture may not exceed 20 students in one class. This is reinforced by Kulahci in Saban (2013) asserting that "In microteaching practice, lesson duration is short (5-20 minutes) and the number of students is few (not more than 20)". In the duration of the time students are required to be able to practice all of their teaching skills ranging from opening skills to closing skills.

Junita (2018) argues that "teaching and learning on campus is an activity that must be supported, either from learning media, places, lecturers, and students. Microteaching is one of the courses on campus for prospective educator campuses. In microteaching lectures needed the help of an audio visual media which will later help smooth microteaching lectures. Haryoko (2009) argues that "Audio-visual technology-based learning can be used as an alternative tool in optimizing the learning process, because several aspects include: a) easily packaged in the learning process, b) more interesting for learning, and c) can be used -edit (corrected) at any time. Reddy (2019) also added that activities in micro teaching lectures, one of which is "Proper use of audio-visual aids - The increased awareness of audiovisual aids and other equipment is important for this skill". The use of appropriate audio visual aids greatly influences success in microteaching lectures. One of the media or tools in question is video recording. According to Reddy (2019), the presence of video recording can help in the process of providing feedback, and the student automatically evaluates his own appearance.

The microteaching lecture cycle described by Saban (2013) begins with the planning stages which consist of making lesson plans or learning implementation plans in advance. Furthermore, students are given the opportunity to display their teaching skills to teach students in the real world that they will encounter. Along with the students performing, the lecturer in microteaching courses recorded a

video of the students' performances. Furthermore, the lecturer together with students watch and listen together the results of the video recording. Furthermore, it enters the stage of criticism, where lecturers and students make a show of the appearance of the students who appear.

The importance of the video recording of student performance appearances in microteaching lectures as an effort to provide feedback on student performances as well as providing joint criticism between microteaching lecturers and their fellow students. However, the facts on the field that occur in the Department of Biology in FTIK IAIN Kerinci are the unavailability of maximum infrastructure in microteaching lectures. Video recording is not accompanied in the microteaching room. The room is not suitable for use as a microteaching room. The microteaching room in the department is just a commonly used lecture room which is very uncomfortable to use for a microteaching lecture room. This is due to the number of disturbances from outside the classroom. The number of students who should ideally not exceed 20 students cannot be realized. The number of students in 7B microteaching class is 24 students, and the number of 7C microteaching students is 29 students. This is very far from the ideal conditions in microteaching lectures.

Based on the imbalance between ideal conditions and the reality that researchers see, it causes the desire of researchers to find solutions as a form of improvement efforts made by researchers as lecturers in microteaching courses. The problem of classrooms, researchers are not likely to make improvements because it is the authority of the campus in providing adequate facilities and infrastructure for their students. From the number of students, lecturers also do not have a solution other than talking about it at the department level but again it cannot be broken down into several classes because of the limitations of the existing lecture room in the biology department of IAIN Kerinci FTIK. Furthermore, for video recording, lecturers and researchers have a solution to overcome this in the form of the use of Google classroom along with YouTube media in microteaching lectures in order to improve the quality of microteaching lectures in the Biology Department of IAIN Kerinci. The quality of the microteaching lecture referred to is the quality of the microteaching lecture process which should use video recordings used to review student teaching performances can be fulfilled by presence of google classroom accompanied by the youtube media.

Gunawan (2018) explained that "Google classroom (or in the Indonesian language, Google's classroom) is a porch of learning that can be devoted to every scope of education ....". Google classroom can be accessed via computer and student android. This is in line with the opinion of Gunawan (2018) who explained that "Utilization of Google Classroom can be via multiplatform, that is, it can be via a computer and can be through a device". The use of google classroom is also free of charge which will burden students.

Google classroom is also presented to bring meaningful learning and make it easier for educators to manage learning. This was confirmed by Gunawan (2018) who explained that "Through the Google Classroom application it is assumed that

learning objectives will be more easily realized and full of meaningfulness". Therefore, the use of Google Classroom actually makes it easier for teachers to manage learning and convey information precisely and accurately to students (Hardiyana, 2015). Gunawan (2018) also added that "Teachers can take advantage of various features found in Google Classroom such as assignments, grading, communication, time-cost, archive courses, mobile applications, and privacy".

Through the use of google classroom, educators can monitor student progress through digital footprints that can be seen from several tools such as Docs, Drive, Presentations, YouTube (Bondarenko, 2019). Youtube contains useful videos that can be published publicly or privately. This is in line with the opinion of Khan (2017) which states that "YouTube is a go-to resource for viewing videos". The video referred to in this study is a video of students during teaching appearances in microteaching lectures that are uploaded on YouTube and can be watched by students and lecturers through their respective android / devices. With the hope to be able to replace or overcome the inadequacy of facilities and infrastructure that is available in the Department of Biology, FTIK IAIN Kerinci in the form of a video recorder. So that, the quality of microteaching lectures will improve with the use of google classroom along with the youtube media because of the availability of microteaching lectures with their presence.

Based on the description above, researchers are interested in examining the role of Google classroom with you tube media in an effort to improve the quality of microteaching lectures in the Biology Department of IAIN Kerinci. Improving the quality of microteaching lectures will later be obtained from the opinions of students by distributing student questionnaires to the role of Google classroom along with YouTube media in addressing the unavailability of video recorders to support microteaching lectures which will eventually lead to providing feedback on student performance. Whatever the purpose of this study is to find out how students' responses to the use of google classroom accompanied by youtube media in microteaching lectures and how the role of google classroom accompanied by youtube media in improving the quality of microteaching lectures is characterized by increased student teaching skills over time. The benefits of this research are aimed at lecturers or other instructors who have the same obstacles in terms of facilities and infrastructure in supporting sub-optimal learning activities that can use the solutions offered by researchers and through this paper the researcher also hopes that the institution can pay more attention to facilities and infrastructure that feasible in supporting the microteaching lecture process in the Biology Department of IAIN Kerinci.

2. Methodology

Types of research

The approach used to achieve the objectives of this study is through quantitative research approaches using descriptive methods. Fraenkel (1993) explains "Quantitative Research is usually based on their work on beliefs that facts and

feelings can be separated, that the world is a single reality made up of facts that can be discovered". Research that uses a quantitative approach believes that facts and feelings can be separated. Everything that is seen and observed and reported is based on facts and not the subjectivity of human feelings. Furthermore, Putra (2010) also argues that "research with a quantitative approach that is research carried out to explain, test the relationships between variables, determine the casuality of variables, test theories and look for generalizations that have predictive value (to predict a phenomenon)". Researchers choose research using a quantitative approach because later researchers will explain the results of research in the form of numbers and try to explain the relationship variables that have been raised in this study.

Furthermore, the method used by researchers is a descriptive research method. Descriptive research method is a research that has the purpose of describing a symptom, event, and event at a certain time (Yanti, 2006). This is also in line with the opinion of Priyono (2008) in his book entitled Quantitative Research Methods which argues that "descriptive research is carried out to provide a more detailed picture of a phenomenon or phenomenon". Questions in descriptive research are identical to using the question "how" in developing existing information (Priyono, 2008). The researcher chose to use the descriptive method because the researcher wanted to describe clearly how the students' responses during using Google classroom accompanied YouTube media during the microteaching lecture process took place and provided a clear picture related to the role of Google classroom along with YouTube media in improving the quality of microteaching lectures.

Data collection techniques that researchers used in this study were questionnaires, interviews, and assessment sheets. The research instrument used refers to the data collection techniques used in the form of student questionnaire responses sheets, interview sheets, teaching skills assessment sheets, and photo documentation. The assessment sheet contains 8 (eight) components of teaching skills that will be assessed in the form of a) skills to open lessons consisting of 5 (five) components in the form of attracting students' attention, motivating students to involve themselves, conveying learning objectives, conveying material, and apperception, b) skills in delivering / explaining material consisting of 5 (five) components including clarity of explanation, examples and illustrations, organization of material, emphasis on important points, and feedback, c) questioning skills that have 5 (five) indicators in the form of clear and concise questions , reference questions, turn distribution to answer questions, think time allocation, and interaction of answers to each question, d) skills provide reinforcement which has 5 (five) indicators in the form of verbal reinforcement, non-verbal reinforcement, use of reinforcement, and the principle of giving reinforcement, and variations of reinforcement , e) the skills to do variations that have 3 (three) components e variation in teaching styles, variations in interaction patterns, and variations in media use, f) media use skills which consist of 3 (three) components in the form of media performance and clarity of writing on the media, compatibility of the media with objectives and materials, and the ability to use media, g) classroom management skills consisting of 6 (six) components which include arranging seats according to the strategies used, organizing students so students are actively involved in teaching activities, organizing and utilizing learning facilities, responsive to the learning situation, giving timely reprimands and

regarding the objectives, and returning the conditions of learning to optimal conditions, and h) skills to close the lesson which includes 3 (three) components in the form of concluding lessons, carrying out an assessment of both the process and results, and providing follow-up. Improvement of teaching skills seen from the appearance of students at the first meeting until a tenth meeting.

Research results from these instruments will be analyzed using descriptive statistics. Furqon (2011) explains that "Descriptive statistics work only to get a description (description) or measurements about the data in hand". The size of the data in question can be in the form of average values, media, mode, standard deviations, and can also be displayed in the form of graphs, diagrams, etc. This is reinforced by Putra (2010) who argues that the results of data analysis using descriptive statistics can be categorical data including bar charts, pie charts, pareto and also can be in the form of numerical data including graphic lines, scater diagrams, order ray, steam and leaf , and continuity table.

Population is the whole element or elements that we will examine (Putra, 2010). The population that is the object of this research is 7th semester students consisting of classes 7A, 7B, 7C, and 7D. The sampling technique used in this study is cluster random sampling where the population has homogeneous group characteristics (Priyono, 2008). The sample used in this study was students in class 7B, amounting to 24 students and class 7C, amounting to 29 students.

To find out the improvement in the quality of microteaching lectures, which was marked by an increase in student teaching skills through the use of google classroom accompanied by youtube media, researchers used <N-Gain> with the categories in Table 1.

Tabel 1. <N-Gain> Category

Number.	Interval	Average Improvement Category
1.	$\langle\text{N-Gain}\rangle \geq 0.7$	High
2.	$0.3 \leq \langle\text{N-Gain}\rangle < 0.7$	Medium
3.	$\langle\text{N-Gain}\rangle < 0.3$	Low

3. Results and Discussion

The use of google classroom that is used in microteaching lectures is included in classes 7B and 7C. Display google classroom that researcher use can be seen in Figure 1 and 2.
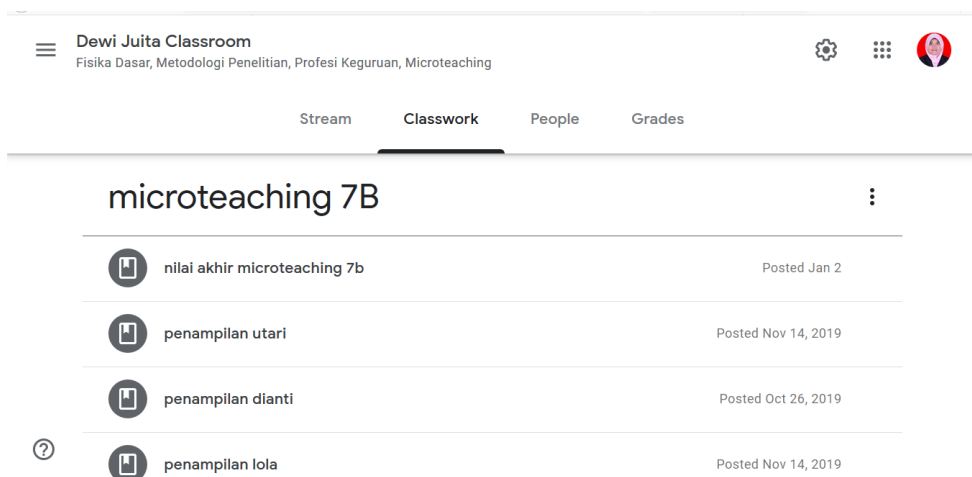
Figure 1. The Display of Google Classroom Platform in Microteaching Class 7B
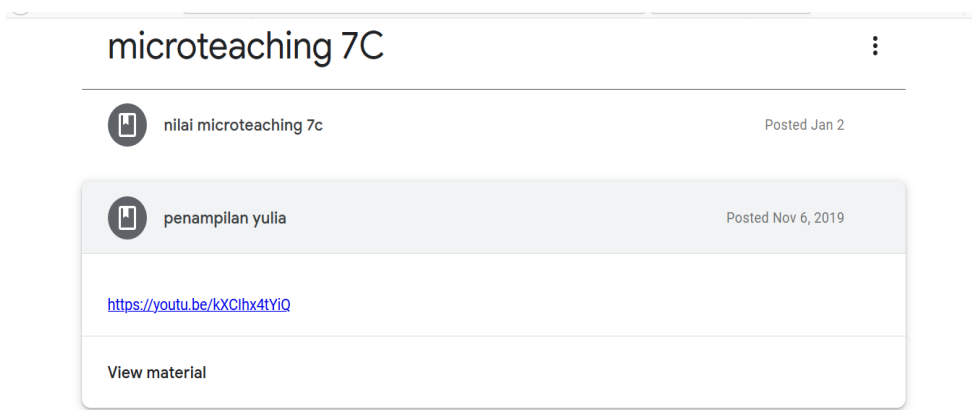

Figure 2. The Display of Google Classroom Platform in Microteaching Class 7C

Figures 1 and 2 explain the teaching display of all students uploaded via youtube and displayed through google classroom. Students can jointly watch their performance directly and know the strengths and weaknesses in each teaching skill that is trained.

Based on the research objectives stated previously, there are two things that researchers will explain in detail in this section. First, to answer the formulation of research problems or research objectives related to how students' responses to the use of Google classroom along with YouTube media in microteaching lectures used instruments in the form of student response questionnaires. Based on the results of the questionnaire responses obtained 94% of students stated that they get constructive feedback using google classroom along with youtube media, 100% of students think that through the use of google classroom accompanied by youtube media can motivate them to always introspect themselves to make improvements to their abilities in teaching and evaluating independently of their performances, and 90.6% of students who stated that using google classroom along with YouTube can improve the quality of microteaching lectures.

Feedback is given by lecturers and colleagues in turn, feedback is provided via online via google classroom and in face-to-face sessions in microteaching lectures. Feedback is used by students to inspect their performances from time to time. Students can watch performances together and give feedback together and introspect performances from time to time. Students can watch their performances repeatedly and can see peers' performances as a comparison material, so students want to always improve their teaching skills.

Second, to answer the problem formulation or research objectives related to the role of Google classroom along with YouTube media in improving the quality of lectures as seen from the improvement in the values of students' teaching skills assessed by lecturers and colleagues through the microteaching assessment sheet instrument. Based on the 8 (eight) teaching skills obtained the following table.

Table 2. Teaching Skills Class 7B

Teaching Skills	Value of Students' Teaching Skills (Class 7B)	
	First Meeting	Tenth Meeting
Opening Lessons	5,4	8,2
Delivering / Explaining Material	5,4	7,2
Asking	5,6	8,4
Give Strength	6,8	8
Perform Variations	5,7	8,3
Using Media	5	7,3
Perform Class Management	5,3	7,7
Closing Lesson	6	9

Table 3. Teaching Skills Class 7C

Teaching Skills	Value of Students' Teaching Skills (Class 7C)	
	First Meeting	Tenth Meeting
Opening Lessons	5,2	7,4
Delivering / Explaining Material	5	7
Asking	5,6	8,2
Give Strength	7	8,2
Perform Variations	5,3	8,3
Using Media	5	7,7
Perform Class Management	5,2	7,7
Closing Lesson	5,3	8,7

Based on the table, we can see that there is improvement in student's teaching skills in two classes. The Highest value of this assessment is 10 (ten) and the lowest is 5 (five). From this graph, the value of <N-Gain> can be calculated to see how much improvement in students' teaching skills from the first meeting to the tenth meeting. The results of the <N-Gain> value are shown in table 4.

Table 4. Value of <N-Gain> Teaching Skills

Teaching Skills	<N-Gain> Class 7B	<N-Gain> Class 7C
Opening Lessons	0.6 (medium)	0.46 (medium)
Delivering / Explaining Material	0.4 (medium)	0.4 (medium)
Asking	0.64 (medium)	0.6 (medium)
Give Strength	0.38 (medium)	0.4 (medium)
Perform Variations	0.6 (medium)	0.64 (medium)
Using Media	0.46 (medium)	0.54 (medium)
Perform Class Management	0.51(medium)	0.52 (medium)
Closing Lesson	0.75 (high)	0.72 (high)
Average	0.54 (medium)	0,54 (medium)

The average increase in students' teaching skills is in the medium category. However, there is one component of students' teaching skills that is in the high category, namely the closing skills. Furthermore, after interviews with several students obtained some opinions from students related to the role of google classroom accompanied by youtube media in microteaching lectures. The interview results obtained are summarized into 3 (three) main points of review in the form of:

1. Students find it helpful to monitor their performance during repeated microteaching lectures,
2. Students can access easily and can anytime access the progress of their teaching skills from time to time
3. Students can easily access the appearance of their peers and make comparisons with themselves so that students are always motivated to always make improvements to their teaching skills so that microteaching lectures can be carried out properly.

Based on the results of the interview, it is clear the role of Google classroom along with YouTube media is very helpful for students in improving teaching skills which at the same time will provide an increase in the quality of microteaching lectures. Lecturers feel helped in carrying out classroom management. Lecturers can significantly re-display where each student's appearance lacks. The information will certainly be on target and real. Supporting lecturers are able to monitor student progress with a digital footprint that can be proven and accounted for.

4. Conclusion

The use of google classroom along with YouTube media provides space for students to get feedback, self-introspection, and improve teaching skills. Through the use of the porch of the student, students can see repeatedly their appearance and can easily access the appearance of other colleagues so that it raises the desire of students to always make improvements. The use of google classroom along with YouTube media also helps improve the quality of the lecture process through

video recording uploaded through YouTube media that can solve the problems of inadequate facilities and infrastructure in supporting the smooth process of microteaching lectures.

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