

A Quasi Experimental Study on google classroom mediated peer assessment at High School in Indonesia

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Abstract

This study reports a quasi experimental study on google classroom mediated peer assessment at High School in Indonesia. The data were elicited through the pre tests and other test taking by the students in forms of students' writing.

The students writing scores were compared between the pre and the post test with the significant level 0.05. The different topics were also analyzed to find out the best type of peer assessment in improving students' writing skills for this online learning model. The results showed that there was a statistically significant improvement of the students' writing ability after they were taught through Google classroom mediated peer assessment. This result also showed that free topic was the most impactful topic in students' writing. This suggests that Google Classroom mediated peer assessment facilitates the students to improve the capability of their writing ability.

1. Introduction

Peer assessment is an evaluation that requires students' giving criticism or remark (can be both) to their companions' writing product or performance based on the excellent criteria of writing or writing (Falchikov, 2007, p.132). It supplies the feedback and the assessment that are like professional practice among peers. Peer assessment, in which learners assess the work of other learners, is a form of learning that allows learners to provide feedback on each other's work. According to Peng (2008), the method of peer assessment is "usually associated with group work in which students wish to separate the assessment of individual contributions from the assessment of the groups' final products." In teaching learning process nowadays, feedback can be provided either face-to-face or through the Internet. In the teaching and learning process, teacher needs media to convey the material easily. s. Teacher-centered learning is no longer suitable for this generation so it needs to change to a more student-centered approach, especially for students who are very diverse in their abilities (Viridi. 2017). Students are expected to be more active by using method of learning given by teacher. For example, students are divided into some group to make a discussion.

They can think and share ideas to obtain new ideas. From discussion, it creates cooperative learning. There is a lot of prominence on combining technology in the classroom through innovative teaching strategies that focus on supporting students to achieve the desired learning objectives. One of the ways that can be used to do the learning process online is to use Google Classroom. Google Classroom is a mixed learning model that is used for every scope of education which aims as a solution to the difficulties in creating, sharing and grouping assignments without having to collect paperless assignments. Google Classroom is designed to facilitate the interaction of lecturers or teachers with students or students in cyberspace. This application provides an opportunity for lecturers or teachers to explore the scientific ideas they have to students or students (Rozak & Albantani, 2018). This study was aimed to find out whether there is any significant effect of students' writing skill among three different degrees of freedom in choosing a topic in peer assessment. To find out which type of peer assessment treatments is the most impactful in students writing ability.

2. Theoretical Frame Work

Google Classroom is part of the online Google Apps for Education (GAFE), suite of packed productivity applications for teachers and students in learning and online collaboration. This application is downloaded for free but it must be placed at the level of educational institutions. While GAFE contains many popular Google applications such as Gmail, Google Calendar, and Google Drive, which can be accessed by anyone, Google Classroom is only found at GAFE. This application provides a central site for communicating with students, sending feedback and providing homework. Some of the main strengths of Google classroom are time-saving and organizational features that are easy to use and very simple. Google classroom is like a virtual extension of brick-and-mortar classrooms. It starts with creating classes and adding students. Then it explores the features found in this application such as sending information, starting discussions, distributing and collecting tasks, Zang. M (2016). teachers can create

active lessons which are student-centered, collaborative, and unforgettable just through Google Classroom, because it provides easy-to-use learning features with students of all categories able to cooperate. Google Classroom is helpful to all of learner categories and including adult learners. It also has some benefits such as paperless, can be accessed anywhere and everywhere as long as there is internet connection and from any devices, to communicate between teachers and students, to give feedback to students, and personalized learning. It has a learning feature that makes teachers create and handle assignments actively and also provide feedback to students. So, Google Classroom makes it easier for teachers to handle students work.

Features of Google Classroom

We can do lots of activities with Google Classroom when the class is operated.

First, one can create announcement. Teacher can give announcements about the update of the class in this section. They can attach files and class materials as well. Secondly, create assignment. This is the most substantial feature in Google Classroom. (Iftakhar, 2016) Teacher can upload assignments for student within due time to submit. Student also can download materials that have been uploaded by teacher to finish their task. Third, create question. In this section, student can create question to be discussed with teacher or other students if allowed by teacher. Fourth, re-use post. Important post can be use by teacher in this section, such as, announcement, assignment, and question.

3. Research Design

This study is a quantitative research of which aim is to measure the significant effect of students' writing ability through Google Classroom mediating Peer Assessment. One Way Anova formula is used to analyze the data since there are four scores that should be measured. Furthermore, in order to find out the difference of students' writing skill, Scheffe test is used. Since it is a quasi-experiment, there was only one class in which the treatment learning is applied. The concept of the Google Classroom mediated peer assessment here is an online class that occurs outside the classroom.

All of the tests can be said equal but different and have the same difficulty level. It means that all of them similarly measure the same aspects of students' writing ability; however, the topics used are different. This kind of distinction in deciding the topic was used in order to avoid self-learning of the students. So, it can decrease the possibility of the students' self-learning as another variable that can interrupt the result of the test.

Furthermore, all of the treatments done by the author is online learning that in each meeting there are online class. Anova test is used to determine the first hypothesis. Furthermore, the second hypothesis in accordance with the topic choice freedom used in online class is obtained by using Scheffe test in SPSS to investigate the significant difference in the students' writing. Additionally, the qualitative data are obtained and analyzed in the

discussion. It is dealing with the most suitable topic choice freedom for the students in improving their writing ability in Google Classroom mediated peer assessment which is discovered by comparing the mean of each test.

4. Results of the study

There were four writing tests which were applied to examine students' writing achievement. Each of the writing tests was applied after certain treatments. The difference of each treatment was based on the freedom in selecting topic. During the first meeting students were 50% free selecting the topic, while the second meeting, students were not free in selecting the topic. In addition, the third meeting, students were 100% freely selecting the topic.

In order to get the frequency distribution above, the data were analyzed through class interval tables. The results of the interval table show that there are five levels of score with the average of score is between 78 – 84 which the score is above school score standard (KKM). In addition, to distinguish the students writing proficiency level, which is derived from Heathon (1991). The very low category is described as Composition skills may be flawed in two or more areas. Diction, syntax, and mechanics are excessively flawed. Fails to accomplish the goals of the assignment. While low writing proficiency is regarded as Composition skills may be flawed in either the clarity of the thesis, the development, or organization. Diction, syntax, and mechanics may seriously affect clarity. Minimally accomplishes the

majority of the goals of the assignment. However, average writing proficiency is considered Composition demonstrates competent composition skills including adequate development and organization, although the development of ideas may be trite, assumptions may be unsupported in more than one area, the thesis may not be original, and the diction and syntax may not be clear and effective. Minimally accomplishes the goals of the assignment.

In addition, the good writing proficiency is considered as Composition contains above average composition skills, including a clear, insightful thesis, although development may be insufficient in one area and diction and style may not be consistently clear and effective. Shows competence in the use of mechanics. Accomplishes the goals of the assignment with an overall effective approach. Moreover, very good writing proficiency is considered as strong composition skills including a clear and thought-provoking thesis, although development, diction, and sentence style may suffer minor flaws. Shows careful and acceptable use of mechanics. The writing effectively accomplishes the goals of the assignment. Therefore, there would be clear cut between each writing proficiency.

Here is the explanation of students' writing achievement analysis in table 1.

Table 4.1. Frequency Distribution of Students' Writing Scores

No	Score	T1	T2	T3	T4	Category
1	64 – 70	9	1	3	0	Very low
2	71 – 77	12	9	10	0	Low
3	78 – 84	2	10	7	8	Average
4	85 – 91	1	2	4	8	Good
5	92 – 99	0	1	0	8	Very Good
6	Min	64	70	69	71	
7	Max	91	94	87	96	

8	Mean	73	79	76	84	
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Based on the table above, it can be implied that the implementation of each treatment was successful. Since, students' writing score increased from T-1 and T-4. Even though some students had not been able to get the high score, none of the students experienced lower score than the pretest. However, we can imply that the second test (T3), most of the students experienced lower score than the first test (T2). Surprisingly, in the last test, all of the students could pass to the average level of writing ability.

During the writing pretest, there were 18 students who got score below the average level, while in the first test (T2), there were 10 students who were below the average level. Surprisingly in the second test (T3), although the number of the students in below level is not more than students in writing pretest, there were 13 students who were below the average level of writing achievement. It is shockingly to know that the number is bigger than the first test (T2). In other hand, during the third test (T4) the students showed better improvement, there was no students who were below the average level.

Dealing with the average level of students writing achievement, during the pretest, there were only 2 students who had average level of writing ability. it could be inferred since most of the students who were below the average level of writing achievement. In addition, during the first test (T2) the number increased, there were 10 students who were average level of writing ability. moreover, during the second test (T3) the number of students were

decreased because most of the students were below average level. However, during the third test (T4), the number of students increased, although the number is not as high as the first test (T2), there were only 8 students. Interestingly, dealing with the above average level of writing ability, there were only one student who were above average level during the writing pretest. In addition, during the first test (T2) there were 3 students who were above the average level. In addition, there were 16 students who were above the average level.

To examine the difference of students' writing achievement in each test, the data were analyzed for its normality significance. Normality significance is used to examine whether the data were normally distributed or not. Normality tests was applied to know whether the data were normally distributed or not. The data were tested by using Shapiro-Wilk (SPSS21) to test the normality of the data. The researcher concluded that the data of this research were normally distributed. Based on the result, the normality of the data test, it was found that the results were as follows: .060, .222, .194, .079, for writing pretest, Test 1, Test 2, Test 3 respectively. Since each of the significant level is higher than 0.05, it could be assumed that the data were normally distributed.

Table Tests of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Pretest	.912	24	.060
Test1	.946	24	.222
Test2	.943	24	.194
Test3	.916	24	.079

In addition, to examine the hypothesis testing, the hypotheses of the study is to examine whether there is significance difference students' writing achievement after the implementation of peer assessment through Google classroom in EFL writing classroom. One way Annova was implemented to examine the score of each test. The not working hypothesis (H0) is rejected if the significant level is higher than 0.05. On the other hand, the working hypothesis (H1) is accepted if the significant level is lower than 0.05. According to the table above, the significant level value is 0.000 which is lower than 0.05. It means that the working hypothesis (H1) is accepted. Likewise, it can be said that there is an improvement of students' writing achievement when being taught by using online learning.

ANOVA

Test	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1455.219	3	485.073	11.261	.000
Within Groups	3704.528	86	43.076		
Total	5159.747	89			

Discussion

The subchapter discusses results of the research. It includes the improvement of students' writing achievement after the implementation of peer assessment through Google classroom in EFL writing classroom as well as examining which types of peer assessments treatments that is impactful in students' writing achievement.

5. Discussion of findings

Having analyzed the result of students' writing achievement among writing tests, it is found that the implementation of the three techniques are able to improve students writing achievement. During the pretest, it was evidenced that most of the students were difficult to express their idea due to several problem such as lack of vocabulary and grammatical error also difficult to maintain and explore the ideas. In short, students who were required to compose writing based on the set ideas or topic will find it difficult to explore the ideas. Hence, this condition resulted in low writing achievement. In addition, during the pretest, most of the students were repeating the similar vocabularies and repeating the ideas. Moreover, this condition will trigger students' error.

However, after the implementation of peer assessment through google classroom, students showed better writing achievement. The implementation of google classroom as a media aid students' obstacles in producing writing products (Iftakhar, 2016). In addition, those benefits are considered as a comprehensible input that can aid students' writing achievement (Mitchell, 2014) where students can evaluate their peers' work. In addition the result is inline with several previous researches. One of which is Janzen (2014) that evaluate the use Google classroom in everyday life. It is found out that the use google classroom is effective to connect each student to share ideas. Moreover, Iftakhar (2016) applied Google classroom in the research, it is

found out that the use of google class room is able to motivate students and to promote the collaborative learning. In addition, the use of Google classroom itself is able to reach a wider audience (MacArthur, 2009). Besides that, each student is able to check each other works (Mitchell, 2014). In addition, Fauzan (2019); Nurlaili (2010), adds that the use of Google classroom as the teaching media can enhance students' enthusiasm in following the class activity.

Moreover, the improvement of students writing achievement is also influenced by the technique applied, peer assessment. Peer assessment serving situation where students will take part in examining their peer's works and try to solve the problem (Kollar & Fisher, 2010). The implementation of peer assessment is not only requiring students to examine peer's works but also, implicitly, ask students to be aware of grammatically error (Jahin, 2012). It could be inferred that, after the implementation of peer assessment, each of the students are aware of the grammatically errors. It could be inferred that students' writing achievement is getting better after the writing pretest. This result is in line with several previous researches that implement peer assessment as the teaching techniques. Fauzan (2019) applied peer assessment in enhancing students' learning outcomes. The result showed that the use of peer assessment is more improvementive and certainly fun. Moreover, another researches promoted by Nurlaili (2020), the use of peer assessment triggers students to give comment and suggestion to their friends' writing. They learned much about writing just by reading

what their peers had written, as well as they learned by providing peer assessment. Moreover, the suggestion that were provided by their peers could improve their writing. Therefore, students' writing achievement improved after the implementation peer assessment mediated by Google classroom.

6. Conclusion

The implementation of Google classroom mediated peer assessment could give students chance to practice their writing skill. In addition the enormous chance of writing practices can promote students writing achievement. Moreover, the application of peer assessment will order student to be more sensitive of both minor and major errors in writing also comprehend the information to compose better writing. In addition, students also get exposed by enormous chance to develop their writing skill. Hence the implementation of Google classroom mediated peer assessment is able to improve students' writing achievement.

It is suggested to utilize Google classroom mediated peer assessment. In addition, learners are suggested to repeat and length the duration while students doing the peer assessment and discuss the error that learners make. Moreover, during the teaching learning activity, it is suggested for students to follow the instruction well and bring their dictionary.

7. References

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