

THE USE OF GOOGLE DOCS TO IMPROVE STUDENTS' WRITING ABILITY

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Abstract

The objective of this research was to find out whether or not the use of Google Docs improved the students' writing skill and to find out the students' interest in learning writing by using Google Docs. This research applied a quasi-experimental design with an experimental class and a control class. The procedure of collecting data involved administering a pre- test, treatments and a post- test. The sample consisted of 54 students who were chosen by using cluster random sampling. The instruments of this research were writing text and questionnaire. The result of the data analysis showed that the mean score of experimental class was higher than that of control class and the result of hypothesis testing using independent T-Test in SPSS 16 showed that t value is greater than t table, so H_1 was accepted. It can be concluded that the use of Google Docs significantly improves the students' writing skill and It also found that students were interested in learning writing by using Google Docs that is proved from their questionnaire result.

Keywords: *Google Docs, Students' Interest, Writing Ability*

Introduction

The important issue in teaching and learning process that always being discussed is students' interest. It is considered as one of the main factors in leading students to be successful in learning. Many strategies, methods, techniques, and media are involved to assist both teachers and students. A large number of researches is conducted to prove which one of the methods, techniques, strategies or media will be the most ideal to attract and motivate students in learning.

In this era of technology, the most ideal choice for assisting the teaching and learning process must be ICT tools. Especially in teaching English, many innovative teaching media can be involved in the process of teaching. A teacher has to find the media which can build students' interest in learning first, and then the interest is expected to be able to drive students in increasing their achievement in learning.

The use of computer program and online media as innovative media is always being the most popular one. It is because novel stimuli are likely to attract attention (Bergin, 1999).

In English, writing is considered very complex and difficult. It has any criteria to be fulfilled in order to produce ideal writing. It must be good in content, organization, vocabulary, language use and mechanics (Heaton, 1988). Writing in English for Indonesian students is always complicated even for English Department students. Writing skill is a productive skill and expressive activity (Tarigan, 2008). It is the way of the writers formulates their own thoughts, organize them and create a written record of them using the conventions of spelling and grammar (Graham & Perin, 2007).

Considering the complexity of writing, it becomes difficult when students have to produce good writing with limited knowledge from classroom meeting. Based on the writer's observation, most teachers use writing product approach which requires students to complete their writing in an hour. It is not a problem since the teachers give any responses or feedbacks to students writing, but the fact is most of the teachers give score but not responses or feedback to students' writing. It makes students did not know the mistakes or weaknesses of their writing. The result is, the writing ability of the students is stagnant.

The writer carried out an informal observation and found some problems in students' writing achievement. The English teacher explained that the students cannot focus to write and difficult to express their idea, they looked like not confident about their writing and the result was the score of students in writing is poor. Therefore, the writer needed to build the confidence and interest of the students in teaching and learning process to increase their achievement in writing.

Considering the problem faced by students and teacher in teaching and learning writing, Collaborative learning, in this case, peer review, can be one of the solutions. By engaging in a collaborative activity, students utilize each other perspectives and experiences to solve problems and develop a shared understanding of meaning (Rutherford, 2014). Peer review enables students to read, review and learn their peers' work. Peer review can be done by using paper, but by considering the more efficiency and attractiveness of ICT tool, the writer prefers to use Google Docs

Google Docs provides a new experience in learning English. The students can upload their writing from the entire Microsoft Office suite or create it from scratch (Covili, 2012). They can share it with other students and their teacher and let them to be the collaborators. The collaborators must have a Google Account Wagner (2012). They are allowed to give comments, questions or corrections to make the writing better. The students then can revise and reinput the final project from home or from anywhere as the internet connection is available.

Finally, the writer formulated the main problem into the research questions as follows: Does the use of Google Docs improve students' writing ability? and Are the students interested in writing through

Google Docs? The result of this research is expected to be the theory development in learning writing and also to be valuable input in teaching learning process of English. Theoretically, the research is expected to be an additional reference for the next writer who is interested in teaching media. Practically, the research is expected to give useful information and to give contribution to the teaching and learning of English especially for teachers and students who are involved in writing class.

Method

This research used quasi-experimental method. It employed the pre-test, treatment and post-test design for experimental class and control class. First of all, the writer gave writing test as pre-test in order to know the students' prior achievement in writing before giving treatment in both of class. Next, treatment was done for 4 meeting by using Google Docs to improve writing ability in Experimental class and lecturing method in control class. Last, the writer gave post-test to find out the students' achievement in writing after treated by using Google Docs and without Google Docs.

The subject of the study was the students of class AP I and AP II of SMKN 2 Majene. Each class consists of 27 students. In determining sample, the writer applied cluster random sampling technique.

The writer used a writing test. The test required the students to compose recount text and the topic was about their past experience. The other instrument was questionnaire. It consists of 9 positive statements and 6 negative statements.

After the writer obtained the data from pre-test, post-test score and questionnaire, the writer then analyzed the data in order to get the empirical evidence of the research. The writer analyzed the data quantitatively. For the first research question, the writer used t-test to answer whether the alternative hypothesis (H_1) can be accepted or rejected. Then, the writer calculated the t-test to find out the t-value by using t-formula. For the second research question, the writer calculated the data from questionnaire with likert scale.

Findings

The result of data analysis showed that Google Docs can improve the students' writing ability. It is proved by the students' pre-test, post-test, mean, and t-test of students' gained score in both of class.

The following table is the calculation of the students' pretest and posttest score

Table 1: The classification of the students' pre-test and post-test score in experimental class

| NO. | CLASSIFICATION | PRE-TEST | POST-TEST |
|-----|----------------|----------|-----------|
|-----|----------------|----------|-----------|

| | | F | P (%) | F | P(%) |
|-------|-----------|----|-------|----|-------|
| 1. | Very Good | 0 | 0.00 | 1 | 3.70 |
| 2. | Good | 4 | 14.81 | 12 | 44.44 |
| 3. | Fair | 5 | 18.52 | 10 | 37.04 |
| 4. | Poor | 10 | 37.04 | 4 | 14.81 |
| 5. | Very Poor | 8 | 29.63 | 0 | 0.00 |
| Total | | 27 | 100 | 27 | 100 |

Table 1 shows that before the treatment, 4 students (14.81%) get “Good”, 5 students (18.52%) get “Fair”, 10 students (37.04%) students get “poor” and 8 students (29.63%) get “very poor” whereas after the treatment, 1 student(3.70%) gets “Very Good”, 12 students (44.44%) get “Good”, 10 students (37.04%) get “fair” and 4 students (14.81%) get “poor”. Based on the table above, it can be seen that The rate percentage and frequency of the students’ in “very good”, “good ” and “fair” classification in post-test is higher than that in pre-test.

Table 2 The classification of the students’ pre-test and post-test score in control class

| NO. | CLASSIFICATION | PRE-TEST | | POST-TEST | |
|-------|----------------|----------|-------|-----------|-------|
| | | F | P(%) | F | P(%) |
| 1. | Very Good | 0 | 0.00 | 0 | 0.00 |
| 2. | Good | 4 | 14.81 | 10 | 37.04 |
| 3. | Fair | 9 | 33.33 | 9 | 33.33 |
| 4. | Poor | 10 | 37.04 | 8 | 29.63 |
| 5. | Very Poor | 4 | 14.81 | 0 | 0.00 |
| Total | | 27 | 100 | 27 | 100 |

Table 2 indicates that in pre-test, 4 students (14.81%) get “Good”, 9 students (33.33%) get “Fair”, 10 students (37.04%) get “Poor” and 4 students get “Very Poor”. Whereas in Post-test result, 10 students (37.04%) get “Good”, 9 students (33.33%) get “Fair” and 8 students (29.63%) get “poor”. Based on the the tabel above, it can be seen that The percentage and frequency of the students in “good” and “very good” classification in post test is higher than that in pre-test.

Table 3: The Mean Score of Students in all Writing Components

| No. | Writing Components | Experimental | Difference | Control | Difference |
|-----|--------------------|--------------|------------|------------|------------|
| | | Mean Score | | Mean Score | |

| | | Pre- test | Post- test | | Pre- test | Post- test | |
|----|--------------|--------------|---------------|------|--------------|---------------|------|
| 1. | Content | 17 | 21 | 4 | 18.11 | 20 | 1.89 |
| 2. | Organization | 11.1 | 15 | 3.9 | 11.56 | 13.3 | 1.74 |
| 3. | Vocabulary | 10 | 14 | 4 | 10.9 | 13 | 2.1 |
| 4. | Language Use | 9.2 | 17 | 7.8 | 12.1 | 14.3 | 2.2 |
| 5. | Mechanics | 2.6 | 3.3 | 0.7 | 2.6 | 3 | 0.4 |
| | Total | 49.9 | 70.3 | 20.4 | 55.27 | 63.6 | 8.73 |

Based on the table 3 above, the average score of the five components of writing in experimental class increases 20.4 points while in control class only increases 8.73 points. In experimental class, score of Language use has the highest increase than other components. It increases 7.8 points. Similarly in control class. Language use is also the highest increase component. It increases 2.2 points.

a. The Mean Score and Standard Deviation of the Pre-Test Score of Experimental and Control Class

After calculating the data of both classes. the mean score and standard deviation of both classes are presented the following table.

Table 4: The Mean Score and Standard Deviation of the Pre-test Score

| Class | Mean Score | Standard Deviation |
|--------------|------------|--------------------|
| Experimental | 49.9 | 14.2 |
| Control | 55.26 | 12.8 |

Table 4 shows the mean score in the experimental class is 49.9 and the standard deviation was 14.2, while in the control class, the mean score is 55.26 and the standard deviation is 12.8.

b. The Mean Score and Standard Deviation of the Post-test Score of Experimental and Control Class

After calculating the data of both classes, the mean score and standard deviation of both classes are presented the following table.

Table 5: The Mean Score and Standard Deviation of the Post-test Score

| Class | Mean Score | Standard Deviation |
|--------------|------------|--------------------|
| Experimental | 70.56 | 13.7 |
| Control | 63.6 | 10.96 |

Table 5 shows the mean score in the experimental class is 70.56 and standard deviation is 13.7, while in the control class, the mean score is 63.6 and the standard deviation is 10.96. Both the mean scores and standard deviations are different.

c. The T- test Value of Students' Pre-test and Post Test

In order to know whether or not the mean score is different from the two variables at the level of significance 0.05 with degrees of freedom ($df = n_1 + n_2 - 2$), t-test for independent sample was employed.

The following table shows the result of the calculation.

Table 6: Table t-test of the Students' Pre-Test

| Variable | T-test | T-table |
|----------|--------|---------|
| Pre-test | -1.471 | 2.007 |

Table 6 shows that the value of the t-table (2.007) is greater than the value of the t-test (-1.471). Based on this finding, it can be concluded that there is no significant difference between the mean score of the students' pre-test from both classes.

Table 7: The t-test of the Students' Post-test

| Variable | T-test | T-table |
|-----------|--------|---------|
| Post-test | 2.343 | 2.007 |

From the data in table 7, it shows that the t-table value (2.007) is smaller than the t-test value (2.343). Based on these findings, it can be inferred that the difference between the post-test score of both classes is significant, which means that the use of Google Docs significantly improves the students' writing ability.

d. The Gain Score of the Students in experimental class and control class

In order to know whether mean score has different significantly after pretest and posttest were done between experimental class and control class, Gain score is presented

Table 8: The Gain score of the students

| Group | mean score | Standard deviation |
|--------------|------------|--------------------|
| Experimental | 20.63 | 9.9 |
| Control | 8.34 | 6.58 |

Table 8 shows that the gain score of experimental group is 20.63 and standard deviation is 9.9 while the gain score of control group is 8.33 and standard deviation is 6.58. Both the mean score and standard deviation are different. The writer uses the data above to determine the significant difference of improvement of writing ability between experimental and control group students.

e. The interest of students in learning Writing by using Google Docs.

After giving questionnaire, the result of students' answers can be seen on the table below;

Table 9: The rate percentage and frequencies of students' interest score

| No | Classification | Score | Score Result | |
|-------|-------------------|-------|--------------|------------|
| | | | Frequency | Percentage |
| 1 | Very interested | 64-75 | 7 | 25.93% |
| 2 | Interested | 52-63 | 14 | 51.85% |
| 3 | Undecided | 40-51 | 2 | 7.41% |
| 4 | Uninterested | 28-39 | 4 | 14.81% |
| 5 | Very uninterested | 15-27 | 0 | 0.00% |
| TOTAL | | | 27 | 100% |

This table shows that 7 (25.93%) students of the total sample are very interested. 14 (51.85%) students are interested. 2 (7.41%) students are in undecided level, 4 (14.81%) students in uninterested level and 0 (0.00%) students in very uninterested level. It means that most of students are interested in learning writing by using Google Docs.

f. Hypothesis testing

Based on the research objective stated in the chapter I, it was to investigate the achievement and the interest of the students in writing by using Google Docs. The writer used the t-test formula to find out the significant difference of pretest and posttest score. By comparing the students' mean score in pretest and posttest both in experimental group and control group, it can be concluded that the use of Google Docs can improve students' writing achievement if there is a significant difference of the students' score in doing the tests. The writer in this research used the formula Independent t-test on SPSS for Windows 16

at the significant level $\alpha = 0.05$. The analysis showed that t- test value 5.37 was greater than t-table 2.007 while the significance (2-tailed) obtained 0.000 was smaller than $\alpha = 0.05$. Thus, H_1 is accepted. This means there is significant difference of improvement in writing ability between the students who were taught by using Google Docs and without Google Docs.

Discussion

The improvement of students writing ability by using Google Docs can be seen in the result of pre-test and post test from both of experimental and control class. The gain score of Experimental class was higher than control class.

As the writer explained, there were six meetings that had been done. In first meeting, the writer gave the pre-test and the result showed that the students' writing scores both experimental and control class were poor. It was proven by rate percentage of the total score of pre-test. In experimental class, students who classified into "good" level were 4 students, "fair" level were 5 students, "poor" level were 10 students and "very poor" level were 8 students while in control class, there were 4 students in "good" level, 9 students in "fair" level, 10 students in "poor" level and 4 students in "very poor" level. The pre-test score of two classes did not have significant difference. It means that before treatment, both experimental and control class had an equal writing ability.

In the second meeting, first treatment was done. The students seemed confused to do peer review in Google Docs, so the writer gave the guidance how to review students' work. In the third meeting, the writer gave chance to the students who did not revise their own works yet, revising theirs. Beside that, the writer also gave more explanation about the material and then asked to students to re-read their peer work and give more reviews. In fourth and fifth meeting, the students did same activities and seemed more fluent to write and review in Google docs.

However, there was significant improvement before treatment and after treatment in both experimental and control class. It was proven through the rate percentage of the total score of post-test. In experimental class, there was 1 student classified into "very good" level, 12 students in "good" level, 10 students in "fair", 4 students in "poor" level and there was no students in "very poor" level. In control class, there was 10 students in "good" level, 9 students in "fair" level, 8 students in "poor" level and no student in "very poor" level.

In spite of the result of post test showed that the two of classes had improvement, the gain score of each class indicated that the difference score of students in experimental class before and after treatment was higher than in control class. The gain score of experimental class obtained 557 while the gain score of control class was only 225. In addition, t-test value of gain score of both experimental class and control

class was 5.37. It was greater than t-table 2.007 and the significance (2-tailed) obtained 0.000 was smaller than $\alpha = 0.05$. Thus, H_1 is accepted. It means that there is significant difference of improvement in writing ability between the students who were taught by using Google Docs and without Google Docs.

Those findings were supported by Cottrell (2012), she stated that using technology, such as Google docs, can be a vastly more efficient way for students to assist one another in the peer review process, and effectively share opinions with one another in regards to the writing process.

The interest of students using Google Docs in writing was also scored by using questionnaire with Likert scale. The mean score obtained 56.48. It indicated that most of students were in interested level. Related to the findings, Cottrell (2012) said that Google docs dramatically improves student's attitudes towards writing and revision, it becomes more of a fun process for them.

Despite all of the findings, there were limitations of this research. First, the time allocation was not enough in order to improving students' writing ability. It was proven in table 1 and 2 that showed there were students still in poor level. The second limitation was about the control. The writer could not control all of the students to finish their work optimally so that, there were still some students not doing the review or revise their own work from their home.

Conclusion

Based on the findings and discussion of this study, the writer concluded that using Google Docs can improve the students writing ability. It was proved by the gain of the mean score which the experimental group got higher score than control group ($20.63 > 8.33$) and the result of t-test of gain score, which the t-test value is greater than t-table ($5.37 > 2.007$), it means that there is a significant improvement of students' writing ability who was taught by using Google Docs. Besides that, the analysis of questionnaire showed that students were interested in writing by using Google Docs.

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