

Implementing Flipped Classroom Model Integrated With Interactive Multimedia To Enhance Students' Writing Ability At English Tadris Program Of Uin Datokarama Palu

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Abstract: *This experimental research implemented Flipped Classroom Model (FCM) in teaching writing with interactive multimedia, aiming at exploring whether FCM can enhance the students' writing ability. The research was conducted at the second semester students of English Department Students Islamic State University of Datokarama Palu. This research assigned two groups namely experimental and control group. The sample was selected using taken by applying purposive sampling. A group of 18 students were taught by implementing flipped classroom model while in other group students were given conventional way. The Instrument of this research was writing descriptive test. The data obtained through the test were analyzed by using statistical analysis and SPSS 20.*

Based on the result of research the mean score of post-test of experimental group (84.11) was higher than control group (75.52). The result of the t-test value (7.175) was higher than t-table value (2.000). In other words, H_0 was rejected and H_1 was accepted. This means that implementing implementing flipped classroom model with interactive multimedia enhance the students' writing ability significantly of the second grade students atof English Department Students Islamic State University of Datokarama Palu

Keywords: *Flipped Classroom Model (FCM), Interactive Multimedia, Writing ability.*

INTRODUCTION

Many decades ago, TAs and IMs were focused on face to face classroom activities as a traditional lecture format. Lecturers could use a traditional way to deliver students what a thing looked like in order to engage the students in learning process. Teaching aids have been thought of as devices that can be

used such as white and blackboards with markers as teaching tools in traditional format.

Since the age of the Internet was coming, the smart teaching tools serve creative and innovative research ideas and instructions for education modification field. The educational world has moved online. As well as online Media is now an effective

and useable tool for establishing educational activities all over the world. Lectures are delivered directly via Google meets, Zoom meetings, Microsoft Meetings etc {Formatting Citation}. All subject and materials are provided digitally through technology devices. Teaching and learning process perform on a screen as a gathering of students and educators. Now, most students are very fonder and familiar with searching for further and depth information and materials to improve their knowledge through the Internet. Most prominently, students use Wikipedia, professional YouTube channels (asking questions, finding sources, discussing), and additional independent content offered by courses such as British councils and many others online courses. As the fact that many students run their blogs to show what they learn such as making creative videos, v-logs and run podcasts. These are all self-motivated alternatives to the use of TAs and IMs. These work because millennial and gen Z students prefer autonomy and as a control in how they learn the new thing. They are primarily motivated because they have the choice to choose how they get the material and learn about it. Many students can now take the opportunity to look for information because they are good at ICT. According to Erben, there are five principles for creating effective language learning environment, such as giving opportunities to use English, drawing the thoughtfulness of its forms, providing time use English, discerning their errors and revising English, and constructing to interact each other in English (Erben, 2019:16). Lecturers can be a facilitator and organizer for this part and tap into this autonomy. Lecturers can also develop and provide many resources for students based on their preferences and learning goals to be reached.

The primary goal of education is for students to learn and acquire new thing. Most lecturers hope that their students can be reform, passive learners to be active one. The passive learning model is lecturer-centered, should be change to be active learning model as the students-centered. It is related to Yang who compared the traditional classroom and interactive classroom such as student-to-student talk is discouraged, students' comprehension during the class is not watched as monitoring phase, etc (Eison,2010:6). Active learning is a process whereby students engage in classroom activities, such as reading, writing, discussion, or problem solving that promote analysis, synthesis, and evaluation of class content. In order to capitalize on the learning process of the students, lecturers should be creative to provide an interesting and innovative teaching and learning process, especially what the active students' need, including making instructions are relevant and meaningful and providing flexibility in distributing and scheduling the subject. The teaching goal of active learning is to replace the passive teaching method to be active teaching method. Traditional education format reflects the passive transfer of knowledge and capability from lecturers as educators to students as learners in the classroom.

An inconceivable amount of learning takes place during pandemic era. That's why lecturers have redesigned & repurposed their content for online delivery. Multimedia is considered as an Instructional material because information is embedded in it and it needs planning for educational use (Djamas et al., 20). This arrangement is eventually integrated into the coursework as a learning activity. Authentic

materials can be embedded such as Video, films, songs, internet websites, business cards, pictures of road signs, radio broadcast, newspaper, TV Programs, etc (Syahputra & Maksum, 2020).

There are also a number of tools that can be used to provide information via audio and video. Online tools like canvas application, graph generators, graphic designing software, coding platforms, podcast notes, etc. are alternative digital TAs. Online content sources (audio & video), discussion threads, and e-books, are possibilities to Instructional materials (Long et al., 2014). Interactive multimedia is also one of the interesting modern teaching media, to show directly and apprehend clearly what is being taught, which increases interest and motivation by the student (Ramadhani & Muhtadi, 20). In addition, by applying abstract ideas into real-world situations, students can understand multifarious concepts, which will then develop their skills. By adding technology into the classroom, lecturers can utilize this technology to differentiate instruction, motivate students, and include all skill levels.

Flipped Classroom is a verbal preparation space as a incitement to students, more to the preparation of students before entering the subject and their active participation in the class. The interesting alternative derives from Bergmann who flipped his class as a transition to the deep learning model (Aziz et al., 2019). In such setups, the lecturer prepares appropriate video lectures to provoke students to watch, understand and engage in online discussion among themselves regarding the video lesson. In order to retain students' attention, the lecturers select short video lectures from free websites such as Khan Academy, TED-Ed or

YouTube. The flipped classroom model is an emerging creative and active learning trend that is likely to enter mainstream higher education within the next five years (Kim & Jeong, 2016). The flipped learning creativity has accelerated the adoption of higher education technology because of ubiquitous social media and the integration of online, hybrid and collaborative learning (Chen Hsieh et al., 2017). In addition, if using video students can access learning materials flexibly. Through videos, students are expected to be interested in English learning, practicing and develop the ability so that students' problem solving ability can be enhanced. The purpose of this research is to develop interactive multimedia with flipped classroom models (Hwang & Chen, 2019). A complete teaching and learning multimedia contains concepts, examples of questions and discussions, and exercises for students to be understood. Through flipped classroom with interactive multimedia, students are interested in English learning process to develop their writing ability.

Base on the background above, the researchers are going to examine that the implementation of Flipped Classroom Model integrated with interactive multimedia give a significant development on the students' writing ability

REVIEW LITERATURE

Flipped Classrom Model

The students in this 21s century is characterized as Millennial students generation. It comes from Strauss and How theory of generation which Millennialism were born between 1982 and 2005. The millennial generation is considered irreplaceable

and as fonder in consuming technology such as computers, laptop, mobile phone, and internet and other devices. They do not use this technology as a tools, but rather as central parts of their lives (Merritt & Neville, 2002). It means the use of technology, characteristic and learning styles of this generation makes lecturing classroom teaching is no longer effective. (Phillips & Trainor, 2014) From this classroom teaching problem towards the millennial students, in 2007, Bergmann and Sams tried the model of learning interaction to solve their problems. At the beginning, they still used lecturing model in teaching students (math and sciences subject) in remote area which typically millennial students. He delivered the video recording of enlightenment and students could watch and repeat where ever they are. The next day, students do homework and exercises in the classroom with assisted by the teacher. According to Bergmann and Sams, the initial concept of this model which is homework traditionally done at home inverts to be done in the classroom, then it is called as The Flipped Classroom Model (Bergmann, 2017). Furthermore, Overmyer stated the flipped classroom model is the whole classroom or homework paradigm is flipped through instilling the technology, thus, the interaction in the classroom could be maximized (Hamdan et al., 2013). It shuffles how time is spent both in and out class to shift the learning that should be learned. Moreover, the flipped classroom inverts teaching methods, delivering instruction online outside of class and moving homework into the classroom. Characteristics of Flipped Classroom

1. There is a switch from the teacher-centered to students-centered. Converting from a

lecture-based class into an activity based (Subramaniam, 2016).

2. Providing exposure prior to class.
3. A classroom where the teacher is not the “sage on the stage”, but the “guide on the side (King, 1993).

The Advantages of the Flipped Classroom

- a. More Interactive in Discussion
- b. Increased engagement in the material
- c. Increased Interaction between Students and Teacher
- d. The Procedures of Teaching Writing by Using Flipped Classroom Model with Interactive Multimedia

This procedure is adapted from (Suranakkharin, 2017) research with some modifications in applying The Flipped Classroom Model in Indonesia context. There are four phases in this procedure as follows:

1. Introduction Phase
2. Learning Materials Phase
3. Process Phase
4. Evaluation Phase

Interactive multimedia serves as an alternative medium of instruction to the current way of learning (Belinda & Tse, 2007). This emphasizes that multimedia bears an interactivity and discovery among the students. It allows the learners to explore more explanations and information about their lessons on their own due to the interactivity the multimedia it offers. The researchers added that multimedia shapes the higher order thinking skills of the students.

Multimedia is also recommended to promote interactivity among the students and teachers that could also foster deep learning about different concepts and lessons (Evans & Gibbons, 2007). The usage of multimedia learning on students' achievements can be observed through the students' active participation in class.

Writing is defined by Nurdin (2012:3) as a way in carrying writers' idea through written form to be understood by readers easily. In agreement with Brian Cox in Brindley (2005:151) explain that written form works many enthusiasms both for individual and for society as a whole

According to Hughes (2008: 103) point out that in analytic scale, it has five components in writing namely:

- a) Content
- b) Organization
- c) Vocabulary
- d) Language use
- e) Mechanics

Donald Graves in Jonson (2008:179) also has the five-phase writing process, they are prewriting, drafting, revising, editing and publishing.

RESEARCH METHOD

The researchers applied quasi-experimental method to answer the research questions. This

method includes two groups of English Tadris department students, the experimental and the control group. The experimental group will be given treatment Flipped classroom model integrated with interactive multimedia and control group will be treated conventionally, assigned some tasks to do at home.

The subject of this research was the third semester students of English Department students especially on writing subject. They will be determined by some steps. The steps are investigating them by checking their writing ability through the pretest to posttest.

FINDINGS

- 1. Students' Score on Pre-test and Post-test in Experimental group and control group**
 - a. Students' overall score on pre- and post-test in experimental group**

Distribution of overall score and score classification in the experimental group on the pre-test and post-test are shown in Table 1. and Chart 1. The vertical Y-axis of the chart shows the percentage of scores. The horizontal X-axis shows the score's classification.

Table 1.The Distribution of overall score in pre-test and post-test

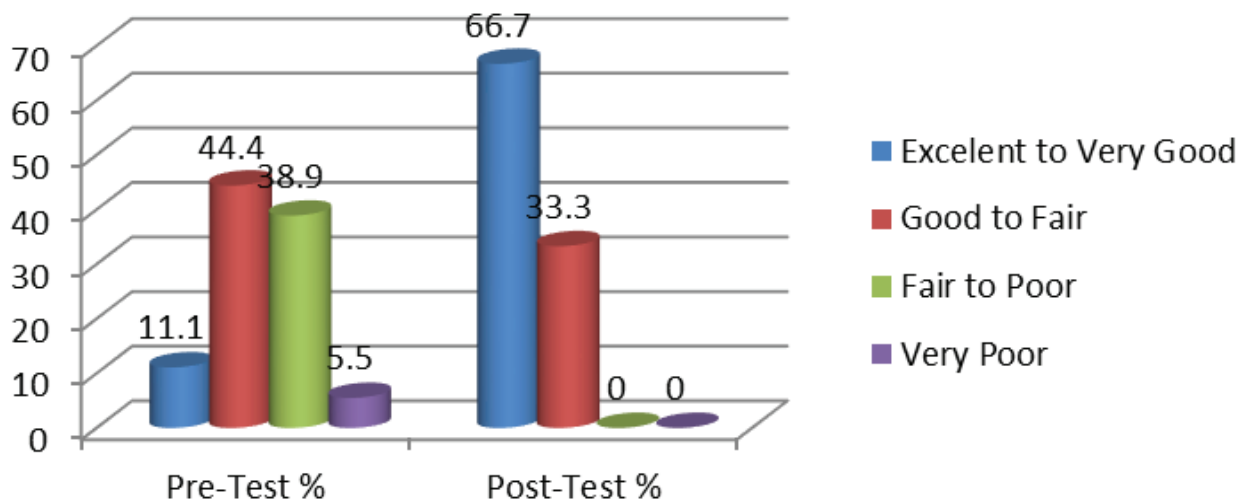
Pre-test			Post-test		
Score	Frequency	Percentage	Score	Frequency	Percentage
51.00	1	5.5	69.00	1	5.5
59.00	3	16.7	76.00	1	5.5
60.00	1	5.5	77.00	1	5.5
67.00	2	11.1	79.00	1	5.5
68.00	1	5.5	80.00	1	5.5
69.00	1	5.5	82.00	1	5.5
70.00	1	5.5	83.00	2	11.1
71.00	1	5.5	84.00	1	5.5
72.00	1	5.5	85.00	1	5.5
73.00	2	11.1	87.00	1	5.5
74.00	1	5.5	88.00	2	11.1
75.00	1	5.5	89.00	2	11.1
90.00	1	5.5	91.00	1	5.5
94.00	1	5.5	92.00	2	11.1
Total	18	100%	Total	18	100%

The distribution table above indicated that the overall score significantly increased. It can be seen that the lowest score from pre-test to post-test increased considerably (53 vs. 69). Even though there was a change of the highest scores from pre-test to post-test (94 down to 92), but many other high scores in post-test categorized as high score for instance the score 83 with frequency 2 out of 18 students, 84 with frequency 2 out of 18 students, 85 with frequency 1 out of 18 students, 87 with frequency 2 out of 18 students, 88 with frequency 4 out of 18 students, 89 with frequency 5 out of 18

students, 91 with frequency 1 out of 18 students, and 92 with frequency 3 out of 18 students. Therefore, the total frequencies of high score in post-test were 20 students with percentage 66.6%.

Nevertheless, in pre-test, there were only 3 kind scores classified on high categorization. Each of score only gained one frequency. Score 83 with frequency 1 out of 18 students, 90 with frequency 1 out of 18 students, and 94 with frequency 1 out of 18 students. Hence, the total frequencies of high score in pre-test were 3 students with 11.7%.

Chart 1. Overall score classification in pre-test and post-test



The classification chart confirms the significant circumstances. It can be seen that the percentages of fair to poor ability from pre-test to post-test were dramatically plummeted, 38.9% dropped sharply become 0% respectively. Furthermore, 100% of the students were classified as having very poor in pre-test and post-test and more student were categorized as having good to fair in pre-test (44.4%) but decrease become 33.3% in post-test. Nonetheless, 10.7% students classified as having excellent to very good jumped enormously 66.7% on post-test. To sum up, the classification of chart above indicated that the

score students' writing significantly increased from pre-test to post-test.

b. Students' overall score on pre- and post-test in control group

Distribution of overall score and score classification in the experimental group on the pre-test and post-test are shown in Table 2. and Chart 2. The vertical Y-axis of the chart shows the percentage of scores. The horizontal X-axis shows the score's classification.

Table 2. The Distribution of overall score in pre-test and post-test

in control group

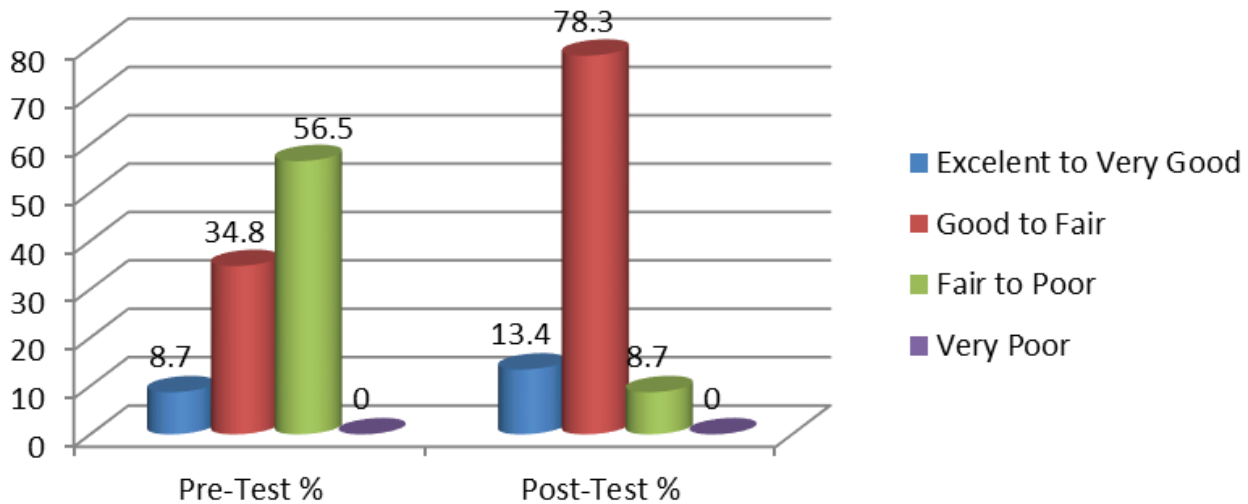
Score	Pre-test		Score	Post-test	
	Frequency	Percentage		Frequency	Percentage
54.00	1	3.6	66.00	1	3.6
55.00	3	10.7	67.00	1	3.6
56.00	1	3.6	70.00	1	3.6

Pre-test			Post-test		
Score	Frequency	Percentage	Score	Frequency	Percentage
59.00	1	3.6	71.00	1	3.6
60.00	1	3.6	72.00	3	14.3
61.00	1	3.6	73.00	1	3.6
62.00	2	10.7	74.00	1	3.6
65.00	1	3.6	75.00	3	17.9
67.00	1	3.6	76.00	2	14.3
68.00	1	7.1	77.00	1	3.6
69.00	1	7.1	78.00	2	7.1
70.00	1	3.6	79.00	2	7.1
71.00	1	7.1	82.00	1	3.6
72.00	1	3.6	83.00	2	7.1
75.00	1	7.1	84.00	1	3.6
76.00	1	3.6			
77.00	1	3.6			
80.00	1	3.6			
83.00	1	3.6			
84.00	1	3.6			
Total	23	100%	Total	23	100%

The distribution table of overall score in pre-test and post-test of control group above indicated that the score gradually increased. It can be seen that the lowest score in pre-test was 54 with frequency 1 out of students meanwhile the lowest score in post-test was

66 with frequency 1 out of 23 students. Moreover, the highest scores from pre-test to post-test remained roughly the same i.e. 84 with frequency 1 out of 23 students.

Chart 2. Overall score classification in pre-test and post-test in control group



The classification chart confirmed considerably increased. It can be seen that the percentages of excellent to very good ability from pre-test 8.7% up to 13.4% in post-test. Likewise, 34.8% students were classified as having good to fair in pre-test and 78.3% students were classified as having good to fair in post-test. Furthermore, 56.5% students were categorized as having fair to poor and decrease become 8.7% in post-test. As a final point, the percentage of score as categorized as very poor for both pre-test and post-test remained roughly same 0%.

2. The Mean Score and Standard Deviation of Students' Pre-test Scores on Experimental and Control group

In analyzing the mean score and standard deviation of students in this study, the scores were taken from the result of students' pre-test both in experimental and control group.

a. Mean Score and Standard Deviation of Students' Pre-test Scores on Experimental and Control group

The result of the student's writing scores of pre-test for experimental and control group were presented in the following table:

Table 3. The mean score and standard deviation of the students' pretest

Group	Mean Score	Standard Deviation
Experimental	69.94	8.67
Control	67.17	8.70

The data presented above indicated that the mean score of student's pre-test of experimental group 69.94 categorized as fair classification and control group 67 was also categorized as fair classification.

Considering on the performance table above, it can be assumed that the student's mean score both in experimental and control group was low.

b. Mean Score and Standard Deviation of Students' Post-Test Scores on Experimental and Control group

The result of the student's scores of post-test for experimental and control group presented that the students' English writing ability have the different ability in the experimental and control group. It is showed in table below:

Table 4. The mean score and standard deviation of the students' post-test

Group	Mean Score	Standard Deviation
Experimental	84.11	5.53
Control	75.52	4.66

The data presented above indicated that the mean score of student's post-test of experimental group 84.11 was categorized as very good classification and control group 75.52 was also categorized as good classification. Consequently, on the performance table above, it can be presumed that the student's mean score in experimental and control group was good.

2. Test Significant

The hypothesis was tested by using inferential analysis. In this case, the researchers used t-test (testing of significance) for independent sample test, which is a test to know the significance different between the result of student's mean score in pre-test and post-test in experimental and control group.

The following table is the table that shows the result of calculating the t-test of the students' pre-test.

Table 5. The result of t-test of the students' pre-test

Variable	t-test value	t-table
Pre-test	1.184	2.000

The table above shows that t-table (1.184) was smaller than t-test value of the students' pre-test (2.000). This means that H_0 was accepted and H_1 was rejected on level of significant α (0.05). Those experimental and control group have the equal ability in writing before treatment.

The following table is the table that shows the result of calculating the t-test of the students' post-test.

Table 6. The result of t-test of the students' post-test

Variable	t-test value	t-table
Post-test	7.175	2.000

The table above indicated that statistical hypothesis is based on statistic test in t-table value (2.000), the researcher presumed that the t-table value was smaller than t-test value. It means that H_1 was acceptable and the statistical hypothesis of H_0 was rejected. There was significance different between the students who were taught writing subject by implementing Flipped classroom with interactive multimedia .

DISCUSSION

There was only one main research problem in conducting this experimental research. The research problem was to determine out whether there was

significant development on the writing skill at the second semester students of English Education department UIN Datokarama Palu. In this part, the researcher used descriptive, inferential analysis and SPSS 20 to analyze the data. The data acquired in the post-test in the form of scores, just like the data that had been acquired in pre-test.

The means scores were acquired from the final result writing in pre-test in both groups experimental and control group. The mean scores of students' writing in pre-test for experimental group was 69.94 while in control group was 67, equal fair classification. The mean score of post-test in experimental group was 84.11 and 75.52 in control group.

Pre-test and post-test for each group were then compared. This analysis was aimed to investigate the effect of Flipped classroom that was implemented. To have a final judgment in data analysis, the researcher used t-test to compare between the experimental groups. A comparison between pre-test and post-test score of experimental group resulted t-test value in pre-test was 1.184 and in post-test was 7.175. With the t-test value 7.175, it means that H1 was acceptable and the statistical hypothesis of Ho was rejected.

Moreover, the researcher compared the result of pre-test and post-test in experimental group and found that the students' writing score significantly increased from pre-test to post-test. From 18 total students, there were 9 students gained score very good in post-test compared with 2 students gained score very good in pre-test, 7 students gained score good and in pre-test were 1 students. There were 10

students gained score fair in pre-test and 1 student gained score fair post-test.

Nevertheless, in pre-test, there were only 2 kind scores classified on high categorization. Each of score only gained one frequency. Score 90 with frequency 1 out of 18 students, and 94 with frequency 1 out of 18 students. Hence, the total frequencies of high score in pre-test were 2 students with 11.7%.

Therefore, entirely, the result of this research study proved that the implementation of Flipped class room model with authentic multimedia could improve significantly the students' writing ability at Second semester students of English Education Department UIN Datokarama Palu.

CONCLUSION

Considering on the finding and discussion in the previous chapter, the researcher comes to the conclusion that the implementation of Flipped Classroom Model integrated with interactive multimedia in teaching writing was effective in improving the writing of the second semester students of English department students UIN Datokarama Palu. The mean score of experimental group in post-test and control group were significantly different. The mean score of post-test in experimental group is higher than the control group ($84.11 > 69.94$). As the result, it was concluded that the implementation of Flipped Classroom Model integrated with interactive multimedia in teaching writing is effective to improve the students' writing ability of second semester students at second semester students of English department students UIN Datokarama Palu.

Flipped Classroom Model (FCM) integrated with interactive multimedia is complex. It addresses different aspects of writing, content, organization, vocabulary, language use and mechanics. From those aspects of writing mentioned, it is reported that there was a significant improvement of the students' writing ability by implementing the Flipped Classroom Model (FCM) integrated with interactive multimedia at the second semester students of the English department.

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