Instructional Media and English:
Using Macromedia Flash to Teach EFL Writing

Ponimin
A teacher of Junior High School SATAP Tanjung Jabung Timur
ponimin03@gmail.com

Hilma Suryani
A lecturer of State Islamic University of Sulthan Thaha Saifuddin Jambi
suryanihilma@gmail.com

Abstract
The objectives of this study were to find out whether or not (1) Macromedia Flash enhanced students' writing competence, and (2) there was significant difference between the students taught by using Macromedia Flash and those who were not. This study employed quasi experimental design, pretest and posttest nonequivalent groups. There were 39 students of one of junior high schools in Jambi participating in this study. They were grouped in two different classes. The experimental group consisted of 20 students while the other 19 students were in control group. The data were collected by using writing test. Students' paragraphs writing scores in pretest and posttest were analyzed through the use of paired sample and independent sample t-test statistical analysis. The findings showed that first, based on the result of paired sample t-test, there was significant improvement of the students' writing competence after the intervention. Second, with regard to the result of independent sample t test, there was significant difference of students' writing competence in experimental group and control group.

Keywords: macromedia flash; quasi experimental design; writing competence

Introduction

Writing has become one of the skills which is essential for language learners to master. It can be the parameter in determining learners' language proficiency. It is a skill that an English teacher should consider in EFL/ESL classroom. Harmer (2001) mentions the reasons for teaching writing to EFL students include reinforcement, language development, learning style and writing as a basic skill. Likewise, Kellogg (2008) states that writing helps students to reinforce the grammatical structure, enhances vocabulary and assists other language skills. Through writing, language learners are not only able to produce the language but also maximize other aspects for their academic success.

In spite of its significance in language learning, writing is a complex skill. It requires a language learner to think of ideas relevant to the topics and use the language aspects appropriately in order the product is meaningful and understandable. According to Braine and Yorozu (1998), basically the writing skill requires well-structured way of the presentation of thoughts in an organized and planned way. Hedge (2005) asserts that "effective writing requires a number of things: a high degree of accuracy so there is no ambiguity of meaning; the use of complex grammatical devices for focus and emphasis; and careful choice of vocabulary,

grammatical patterns and sentence structures to create a style which is appropriate to the subject matter and the eventual readers".

Due to its complexity, many language learners especially EFL learners in Indonesia have difficulties in writing. The problem of writing arises as they should write in various genres of the text. For instance, the students in Junior High School level, based on Curriculum 2013, they are expected to be able to write interpersonal interaction texts, transaction interaction, text, specific functional text and functional texts.

Several works have been conducted in the area of teaching writing to EFL students, relating to the difficulties of teaching writing. Rahmatunisa (2014) in her study found that there were three categories faced by Indonesia EFL learners in writing argumentative essay. The categories include linguistics problems, cognitive problems, and psychological problems. Another study conducted by Maysuroh, Maryadi, and Supiani (2017) revealed that the students have several different problems in writing, mostly grammatical problems, word choice problems, and mechanical problems.

Moreover, based on the preliminary research conducted in one of junior high schools in Jambi, we found that the students were categorized low achievers in writing. The students were not able to write for they had limited vocabularies, poor grammatical structures, and insufficient time allocation to complete writing task. From the interview data, the writers found that the teacher did not make use of the media in teaching writing. The teacher relied on the textbook and white board as she explained the lesson. The students did not pay attention to the lesson as the media used were not attractive.

A teacher can use interactive media to convey the material. One of them is Macromedia Flash. It is software which creates learning media in the form of audio and visual. Lisda, Rahman, and Atmowardoyo (2016) states that macromedia flash animation is learning system employing software and hardware that simplifies the process of data in the form of picture, video, photography, graphic and animation, in collaboration with sound, text, and voice data interactively controlled by computer. By using macromedia flash, the teacher is able to present the material more effectively through the features provided in it. In teaching descriptive writing, a teacher could present the generic structure and language features of descriptive text. The teacher can also gain students' attention and create the enjoyable teaching and learning atmosphere. The attractive designs created by the teacher in the media can boost students' interest to write.

Though most of studies implementing macromedia flash are limited to the scopes of natural science, there have been a few applying this software in ELT. Arono (2014) conducted a study to investigate the effect of interactive of multimedia on students' listening skill. He found that learning media with interactive multimedia can enhance students' critical listening skill than audio learning media. Purnama (2013) conducted a study applying macromedia flash in teaching reading. In their study, they found that there was significant difference on students' reading proficiency after the treatment. Moreover, another study applying macromedia media was carried out by Gurbangeldiyewna and Hermayati (2017). Based on the result of the study, they found that computer-based instruction/*Interactive Media* significantly improved students' descriptive writing skill. The aspects of writing that underwent improvement were content, language, structure, vocabulary and mechanics.

Based on the explanation above, we were in interested in conducting research in order to know the effect of applying macromedia flash on students' writing competence. The aims of this research were formulated as follows: 1) to figure out how the implementation of macromedia flash influenced students' writing competence 2) to find out whether or not there was significant difference on writing competence between the students having the treatment with macromedia flash and those who were taught without macromedia flash.

Literature Review

Writing

As mentioned earlier, writing is a complex skill. Henning (2005) states that writing is not to be viewed as a representation of a writer's thinking, yet as a process of thinking that uses written language and also as observable performance of what goes on in the mind of author (how the author uses knowledge for inquiry). There are five general components or areas in writing, those are: 1) language use: the ability to write correct and appropriate sentence, 2) mechanical skill: the ability to use correctly those convention peculiar to the written language, e.g. punctuation, spelling., 3) treatment of content: the ability to think creatively and develop thoughts, excluding all irrelevant information, 4) stylistic skill: the ability to manipulate sentences and paragraphs, and use language effectively, 5) judgement skills: the ability to write an appropriate manner for a particular audience in mind, together with an ability to select, organize and order relevant information. These processes have made writing to be complex and sometimes difficult to teach.

Descriptive Writing

Many types of writing are taught to junior high school students such as descriptive, argumentative, narrative, report and recount. This study focuses on the descriptive text. In descriptive writing, the writer tells and describes specific place, thing or people. Descriptive writing is a written text in which the writes describes an object through the sensory experience-how something looks, sounds and tastes. The text is written based on the experience by seeing, hearing, tasting or touching. Zemach and Rumisek (2003) explain that a descriptive paragraph can be a description of people, places, and processes.

Each types of writing has components that a writer should consider. Descriptive writing contains two components, generic structure and significant lexicogrammatical features. Generic structures include two parts, identification and description. At the first step of writing descriptive writing, a writer identifies the phenomenon to be described, describes parts, qualities and characteristics of the object. Significant lexiogrammatical features means the sensory language which shares what the writer sees, hears, smells, tastes and touches. Next, the writer pays attention to logical organization including chronological order. The use of tense, linking verbs, action verb, mental verbs, adjective and so forth must be written in accordance to their function.

Macromedia Flash

Macromedia flash is a kind of computer program that can be used to present materials more effectively. Macromedia is an application program that can be used to create simple animation to complex interactive web application, such as online store. It allows the user to make flash application media enriched with figure/image, sound and video. Flash has many features that make it powerful but easy to use such as user interface component that drag and drop.

Macromedia flash is a program to create animated and professional web applications. Not only that Macromedia Flash is also widely used to make up game, cartoon animation, and applications such as interactive multimedia product demos and interactive tutorial. Macromedia Flash is a new version which is the developing from Macromedia Flash MX 2004. The animation that is produced by Macromedia Flash is an animation movie file shaped. This movie can be can be graphic and text, voice file imported, video, and event picture file from other application. Macromedia Flash is able to make website layout and its presentation to be unique and interested, with video creative picture.

Ardiansyah (2013) states Macromedia Flash is software that can be used for adding dynamic aspect a web or for creating interactive animation film. Macromedia Flash can be used

for creating animation, presentation, simulation, games, navigating website, web application, advertisement, etc. Saputra (2013) states Macromedia Flash has some excellences technology, such as: a) Vector-based graphics: graphic images compress down extremely well, making for streamlined animation. b) Database driven content: flash front-ends can be hooked into a database into a generator and can serve dynamically-generate images and text. c) Typography: flash gives designers new control over the display and size of typographic elements on the web. d) Interactivity: flash allow for designers to create custom drop-down menus and other innovative interface elements that better organize information.

As computer software, macromedia flash can give benefits for both teacher and learners in language learning especially writing. Cunningham (2000) mentioned that the implementation of technologically advanced devices such as computers, overhead video projectors and software programs for classroom assessment can motivate students, who previously are not willing to write in L2, to become more engaged in writing. The video creative picture in macromedia flash can be used to introduce vocabulary which is one of crucial aspects in writing. Teaching through video games particularly *adobe flash* is beneficial to enhance English in several aspects such as vocabulary improvement, the students' mood energizer, entertainment, and teachers' creativity to design their teaching media (Rahman, Sulaiman, & Hafid, 2016).

Methods
Research design

This study employed quasi-experimental design non-equivalent pretest-posttest design. It involved two groups as the participants, experimental and control group. Students in experimental group were taught by using macromedia flash, while those in control group were taught by using the media used by the teacher. There were 16 meetings including pretest and posttest. The students had the treatment for 14 meetings.

Research site and participants

The study was carried out at one of Islamic Junior High Schools in Jambi. The seventh grade students participated in this study. There were 59 students distributed in three classes. We selected the samples purposively. There was no significant difference on students' English achievement of the in those classes. The three classes were taught by the same English teacher. We decided class VII B as experimental group and VIIA as control group. Class VIIB consisted of 19 students while class VIIA consisted of 20 students.

Data collection and analysis

The data were collected by using writing test. It was given before and after the treatment. The topics given in pretest were different from the topics listen in the posttest. The students were given an hour to complete the test. The paragraphs were rated by two raters selected based on their English proficiency. The rubric on assessing the students' writing used in this study was adapted from Brown (2007). The aspects involved content (topics and details), organization (identification and description), grammar (use of present tense and agreement), vocabulary, and mechanics (spelling, punctuation and capitalization).

In experimental class, we taught the students through the use of macromedia flash. We applied the scientific approach to teach the students. According to Abidin (2014), there are five steps of scientific approach such as observing, questioning, associating, experimenting and communicating. In the first step, the students were exposed to models of descriptive text in order to enable them know the list of items that they need to know. Next, the students identified items that they should know to understand and produce the descriptive text. The students asked questions based on the identified items displayed on the flash. In the third step, the students answered the question by gathering the information that was relevant to the questions. In the

fourth step, the students analyzed information to answer their questions and drew conclusions. Once they analyzed the information, the students communicated their answer or conclusion orally. The responses described the new knowledge (particularly about social function of the text, structure of the text, grammar and vocabulary). The last step is creating text. The students wrote the descriptive text based on the topics given by the researchers. Meanwhile, we taught the students in control class the same topic as in the experimental class. We explained the material by describing the objects on the white board. After the explanation was conveyed, the students wrote the descriptive text based on the topics we gave.

Before analyzing the data, we did prerequisite analysis in order to see the normality and homogeneity of the data. Normality test was used to measure whether or not the data were normal. According to Priyatno (2011) the data are normal if p-output is higher than 0.05. We applied *Shapiro Wilk* from SPSS program to check the normality. It was used since the sample of the study was less than 50. After analyzing the normality of the data, we checked the homogeneity. *Levene Statistics* was applied for this analysis. Once the data were found normal and homogeny, we analyzed the data of pretest and posttest in both experimental and control groups using paired sample t test and independent sample t test. Paired sample t test was run in order to see the effect of macromedia flash on students' writing competence. Meanwhile, we analyzed the posttest of experimental group and control group to see the difference between the two groups.

Findings

The improvement of students' writing performance after the intervention
The distribution of students' writing scores in pretest and posttest of experimental and control groups is demonstrated in the following figures.
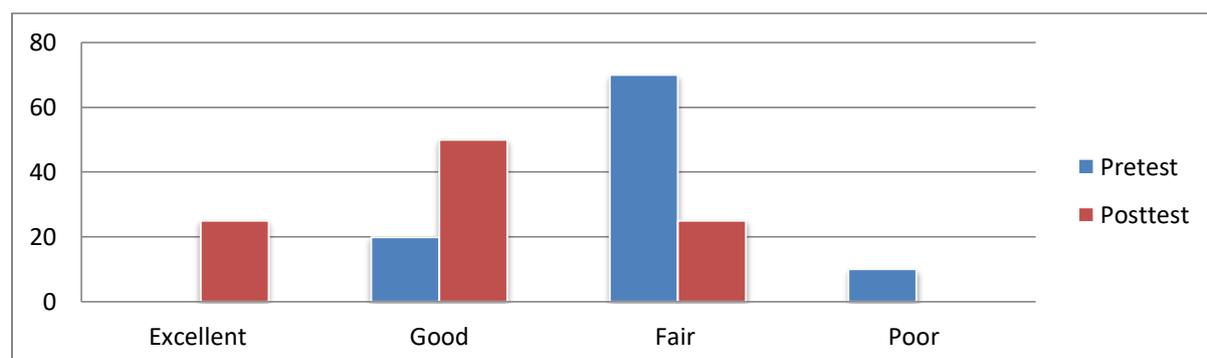

Figure 1. Students' writing scores in control group

From figure 1, it can be seen that there was no student in excellent category. There were 10% of students in poor category, 20% of students in good category, and 70% in fair category. In contrast, based on the result posttest, there were 20% of the students in control group categorized excellent, 50% of students in good category, 30% of students in fair category and none in poor category.
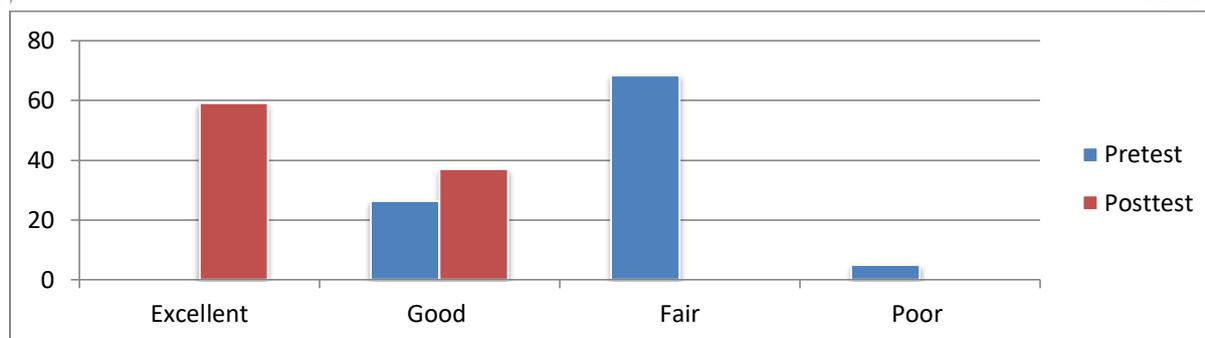
Figure 2. Students' writing scores in experimental group

Figure 2 shows that there was no student in excellent category. There were 26.3% of students in good category, 68.4% students in fair category and 5% of students in poor category. Meanwhile, the result of posttest showed that there were 60% students in excellent category. There were 40% of students in good category. None of students fall in fair and poor category.

Table 1. The result of descriptive statistics of both groups

Groups	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Control	20	5	12.5	8.1	2.27
Pretest Experimental	19	5	13.5	8.3	2.16
Posttest Control	20	8.5	17	12.4	2.1
Posttest Experimental	19	14	18.5	16.2	1.6

The result of normality test in both groups showed that all of the data were normal as p-outputs were higher than 0.05. The following table describes the result of normality test.

Table 2. The result of normality test in experimental and control group

Test	Groups	N	Shapiro Wilk Statistic	Sig.	Category
Pretest	Control	20	.922	.108	Normal
	Experimental	19	.947	.346	Normal
Posttest	Control	20	.912	.070	Normal
	Experimental	19	.904	.057	Normal

Levene statistics was employed to check homogeneity of data. As shown in table 2, p-outputs were higher than 0.05. It can be inferred that all of the data homogeneous. The result of analysis is as follows.

Table 3. The result of homogeneity test of experimental and control group

Test	Groups	N	Levene Statistic	Sig.	Category
Pretest	Control	20	.008	.928	Homogenous
	Experimental	19			
Posttest	Control	20	5.773	.021	Homogenous
	Experimental	19			

In order to find out the effect of macromedia flash on students' writing competence, paired sample t-test was applied. Meanwhile, we employed independent sample t-test to find the difference between experimental group and control group.

Table 4. The result of paired sample t test analysis in experimental group

Paired Sample T- Test		
t	df	Sig. (2-tailed
14.450	18	.000

Table 4 showed that t-value was 14.450 and p-output was 0.000. It can be assumed that the implementation of macromedia flash could enhance the students' writing competence as p-output was lower than 0.005 and t-value 14.450 was higher than t-table (df 18= 2.10092). It means null hypothesis (H0) was rejected and the alternative hypothesis (Ha) was accepted.

The difference of students' writing competence between experimental group and control group

Table 5. The result of independent sample T test analysis

Independent Sample T- Test		
t	df	Sig. (2-tailed
5.392	37	.000

The result of independent sample t-test revealed that t-value was 5.392 and p-output was 0.000. It can be inferred that there was significant difference on writing competence among the students in experimental group and control group for the p-output was lower than 0.05 and t-value was higher than t-table (df 37=2.02619).

Discussion

The findings of the study demonstrate that the implementation of macromedia flash could boost students' writing competence. The students could get better understanding on the materials as the teacher conveyed them with the interactive audio visual media. Macromedia media did not only provide the materials the students could see but also listen to the sound produced by the software as the teacher displayed the examples of the objects described. Winn (1996) states that students learn from media, construct knowledge from mediated environments and develop cognitive skills to the extent they interact with, comprehend and react to the messages media conveyed. The use of macromedia flash successfully made the students engage in the learning process. Daniel (2013) proposes the advantages of audio-visual media as follow, (1) they create interest for learning, (2) they are time-saving because they explain ideas easily and precisely, (3) they reduce the teacher's burdens, (4) they improve teacher's speaking skill, (4) they are the sources of a variety of experiences for the students, (5) they help the students to pay attention to the lesson. Using macromedia flash which is the combination between audio and visual can give benefits for both teacher and students. The result of paired sample test indicated that the students had progress on their writing achievement after the treatment. The p-output which was higher than 0.05 and t-value was higher than t-table implied that macromedia flash used by the teacher enhance the students' writing competence. The result of the present study was congruent with several studies conducted by the previous researchers. Lisda, Rahman, and Atmowardoyo (2015) investigating the use of macromedia flash on students' writing skill. They found that macromedia flash animation is interesting and effective to enhance students' writing

skill. Another study was done by Noviyanti, Rochsantiningsih, and Suparno (2014). In their study, they investigated the optimization of macromedia flash in contextual teaching and learning in students' writing skill of recount text. They found that students' enhancement in classroom climate were: 1) the students were more active during the writing class; and 2) they were actively involved in the teaching and learning process especially in asking and answering teacher's questions.

In the light of the result of independent sample t-test, the p-output was higher than 0.05 and t-value was higher than t-table indicating that experimental group students outperformed control group students. The students in experimental group felt the enjoyable atmosphere in the learning process. They participated actively in each learning phases by commenting the teachers' examples, asking and answering questions.

Conclusion and Recommendations

From the findings and interpretations mentioned, some conclusions could be drawn. First, macromedia flash could enhance the students' writing skill. The students' writing competence got improved after the treatment. Second, students in experimental group had better writing achievement compared to those in control group.

Moreover, we would like to propose some suggestions namely: 1) the teacher should use the attractive instructional media in teaching writing so the students could learn better and cope with their difficulties in writing; 2) other researchers could integrate the implementation of macromedia flash with learning approach and strategy to maximize the learning process, and 3) other researcher could implement this software in teaching another type of writing text.

References

Abidin, Y. (2014). *Desain system pembelajaran dalam konteks kurikulum 2013*. Bandung, Indonesia: PT Refika Aditama.

Ardiansyah, N. (2013). Macromedia flash profesional 8: Sebuah tutorial flash untuk pemula. Retrieved from https://icmgi.files.wordpress.com/2015/03/macro-media-flash-8-nurdin.pdf.

Arono, A. (2014). Improving students listening skills through interactive multimedia in Indonesia. *Journal of Language Teaching and Research*, *5*(1), 63-69.

Braine, G., & Yorozu, M. (1998). Local area network (LAN) computers in ESL and EFL writing classes. JALT Journal, *20*(2), 47-59.

Brown, H. D. (2007). *Teaching by principles: An interactive approach to language pedagogy. (2nd ed.).* New York, NY: Longman.

Cunningham, K. (2000). Integrating CALL into the writing curricula. *The Internet TESL Journal*, *6*(5). Retrieved from http://iteslj.org/Articles/Cunningham-CALLWriting/.

Daniel, J. (2013). Audio-visual aids in teaching of English. *International Journal of Innovative Research in Science, Engineering and Technology*, *2*(8), 3811-3814.

Gurbangeldiyewna, A. M., & Hermayawati, H. (2017). The effectiveness of English interactive media in teaching writing. *JELE:Journal of English Language and Education*, *3*(1), 17-28.

Harmer, J. (2001). *The practice of English language teaching.* New York, NY: Pearson Longman.

Hedge, T. (1998) *Writing: Resource book for teachers.* Oxford, US: Oxford University Press.

Henning, E. (2005). *Finding your way in academic writing*. Hatfield, Pretoria: Van Scaik.

Kellogg, R. T., Olive, T., & Pilot, A. (2001). Verbal, visual and spatial working memory in written language production. *ACTA Psychologica. 124*(3), 382-397.

Lisda, W., Rahman, M.A., & Atmowardoyo, H. (2016). The use of macromedia flash animation to enhance students' writing skill at the seventh grade of SMP Yapis 1 Fakfak-West Papua. *ELT Worldwide 2*(2), 45-61.

Maysuroh, S., Maryadi, L.I., & Supiani, S. Students' English writing process and problems: A case study at Hamzanwadi University. *Voices of English Language Education Society*, *1*(1), 1-10.

Noviyanti, R. S., Rochsantiningsih, D., & Suparno, S. (2014). Optimizing the application of macromedia flash in contextual teaching and learning to enhance students' writing skill of recount text. *English Education Journal*, *2*(3), 298-305.

Priyatno, D. (2011). *Paham analisa statistic data dengan SPSS*. Yogyakarta, Indonesia: Media Kom.

Purnama, E. (2013). *Teaching reading comprehension on descriptive text by using macromedia flash*. (Undergraduate thesis). Retrieved from http://jurnal.untan.ac.id/index.php/jpdpb/article/view/1318/pdf.

Rahman, P., Sulaiman, K., & Hafid, E. (2016). The effectiveness of Adobe Flash Video Games to Enhance Vocabulary Comprehension of the second grade students at SMPN 2 Takalar. *English, Teaching, Learning, and Research Journal (ETERNAL)*, *2*(2), 1-11.

Rahmatunisa, W. (2014). Problems faced by Indonesian EFL learners in writing argumentative essay. *English Review: Journal of English Education*, *3*(1), 41-49.

Saputra, H. J. A., & Tiarina, Y. (2013). Using macromedia flash 8 to help English teacher to build media toward teaching reading. *Journal of English Language Teaching*, *1*(2), 392-398.

Winn, W. D. (1996). Communication, media, and instrumentation. *International Encyclopedia of Education Technology*. Cambridge, UK :Cambridge University Press.

Zemach, D. E., & Rumisek, L. A. (2003). *College writing: From paragraph to essay*. Oxford, UK: Macmillan Publishers.