

The Effectiveness Of English Interactive Media In Teaching Writing
(An Experimental Study Conducted For Eleventh Graders
In Sma N1 Sedayu, Bantul Yogyakarta)

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Abstract

The objectives of the study are to find out the ability of the students in writing descriptive text both before and after the treatment either at control group or experiment group; to find out the effectiveness of *Interactive Media* for teaching writing descriptive text; to find out what writing elements that received significant improvement after being taught by *Interactive Media*. This research was conducted using experimental study to overcome students' problem in learning English especially writing skill. The researcher used two classes as the subject: XI MIPA-1 as the experiment group and XI MIPA-4 as control group. Those MIPA classes belong to Argo Mulyo High School /SMA N 1 Sedayu, Argomulyo, Bantul. The experimental class was taught the descriptive text by using *Interactive Media* in the form of *Macromedia Flash* while control group was taught by using non-computer based lessons. Total sample of both classes were 60 students. The research was conducted within *quasi-experiment study* which used *pre-post* tests design of experiment and control groups. The researcher used this method in order to find out whether computer-based instruction/*Interactive Media* could make significant improvement on the students' descriptive writing skill. Such effectiveness was seen from difference of means between *pre-post* of both control and experiment groups and its *t*-test score at the degree of significance. The *t*-test was higher than the *t*-table, *Interactive Media* then was proved significance in improving the students' writing descriptive text skill. The students' writing was analyzed and scored based on rubrics postulated by Brown and Bailey including paragraph organization, its content, language structure, vocabulary and mechanics. The experiment shows that the *t*-test was (3.16) which is higher than *t*-table (2.000). The aspects of writing that has significant improvement were content, organization, structure, vocabulary - means *pre*-test of experimental group = 76.5 and control group = 70.8 increased into, experimental group = 87.22 and control group = 78.8 during *post* test with standard deviation of experimental group = 7.7 and control group = 9.97. Since there was a significant improvement of students' writing skill by using *Interactive Media*, this research then confirms that *Interactive Media* is effective for teaching writing at SMA level.

Key words: *Macromedia Flash Player, Descriptive Text, Writing Skill, Quasi Experimental Research.*

Introduction

The need of obtaining an effective teaching method for improving writing skill of Senior High School students in Indonesia is very important because their English writing ability is still low. It was revealed from a research done by Managing Basic Education of USAID in 2005 that writing ability of the Indonesian students is still insufficient. They only possess 15% of the writing techniques, 15% of the use of correct spelling, 15% of the correct writing devices, and 35% of the text's quality. Among four language skills: listening, speaking, writing and reading, writing skill is the most difficult one as it involves specific skills, such as: the choice of vocabulary, use of punctuation, structure of the sentence, organization of paragraph, the use of cohesive items, etc. Moreover, English as a foreign language for Indonesian students makes writing subject become more difficult for them. Students need to learn writing in order to be able to express their ideas, thoughts, and feelings in written language. In writing, the students will always deal with the process of expressing ideas into word, then into sentences, paragraph until they can create piece of writing (Prajayanti, 2012, p. 4).

I was interested to analyze register found on students' writings. So

far I found that students disliked to write. This was due to the difficulties they found in its process (Maulina, n.d.). According to Harmer (2007: 265), speaking and writing are productive skill in which the students actually have to produce language on their own. It means that in writing a text, the students should be able to express their own ideas into word and sentence that grammatically correct and into a good essay format. Before writing their ideas, the students need to gather much information either by listening to other people, making conversation with others, or reading some books. Thus writing requires many language learning skills.

Such kinds of problems also happened at SMA N 1 Sedayu, Bantul, Yogyakarta. Those information were gathered by the researcher during her Classroom Teaching Practice (PPL) at SMA N 1 Sedayu, Bantul, Yogyakarta from July 09 to August 29, 2015. The researcher identified that the students' writing skill was still low, such as in the choosing of vocabulary, using of punctuation, structure of the sentence, organization of paragraph, the use of cohesive items, etc. Also their score was far from the targeted score/minimal criteria of the 2006 curriculum (it is called *Kriteria Ketuntasan Minimal* (KKM) with the minimal grade 75). The previous average score of sixty- four

students of tenth grade at SMA N 1 Sedayu is 51, 22, so they could not reach the target score of 75.

The researcher assumed that there were many causes of the writing skill weaknesses. It can be the detail instruction in the 2013 curriculum which did not mention the techniques of teaching writing skill. It can also be caused by learning tools or media for improving students' writing by other factors such as the innovation of the teacher, teaching facilities, or teaching media.

Realizing the complexity of writing skill problem, the researcher takes an action to implement new strategy in teaching writing skill because the researcher does not have any right to revise the curriculum, to train the teacher or to provide school facilities. Besides the reasons above, the researcher chooses "*Interactive Media*" as the learning and teaching media since the researcher believes that technology can motivate the students, help the teacher to animate the lesson materials, increase students' interest, and it has not been used by the teacher yet. It is also based on the library reviews that computer based media has been proved effective in teaching listening, reading, vocabulary, students' motivation, and grammar. (Nagata, 1998; Thorson,

2000; Liu and Reed, 1995; McNeil, 2000; Leppen).

Based on the background of the study above, the researcher formulates the statement of the problem as follows: (1) Does the use of *Interactive Media* improve the students' descriptive writing skill?; (2) What are the results of students' descriptive writing with and without *Interactive Media*?; (3) By referring to Brown (2000:369) writing rubrics, what writing elements do receive the most significant improvement?

Writing is the production of communication, linking ideas, and information development, or giving arguments to a particular reader or a group of readers (Hedge, 2005, p.10). Writing skill is very important to be learnt by students, because it requires good English structure, an ample of vocabularies, precise paragraph structure, types of text, etc. The students' writing can be in four types: descriptive, narrative, expository, and persuasive. (Gillie, Susan, and Mumford, 2001, p.15).

The research is primarily concentrated on descriptive text of eleventh grade students' at SMA N 1 Sedayu, Bantul Yogyakarta in the academic year 2015-2016. This research involves experimental group and control group that are selected

purposively. Purposive sample means that all of the students available in the research setting were treated as the research subjects (Sugiyono, 2012, p. 124). The writing elements that are evaluated in the research consist of content, organization, vocabulary/lexical, syntax / grammar and mechanic/punctuation (Brown, 2000, p. 369). In order to reveal the improvement of the writing skill, the researcher needs also to limit the resources on the basic understanding of the writing theory, descriptive writing features, the use of media, and the effectiveness of *Interactive Media* as the teaching tool.

Research Method

This research was conducted using experimental study. According to Sugiyono (2012:107) experimental research is a kind of quantitative research which has certain characteristics such as having control and experimental groups.

The researcher used Quasi Experimental Research. This research involved experimental group and control group that were selected purposively (Purposive Sample). It means that all of the students available in the research setting were treated as the research subjects (Sugiyono, 2012, p. 124).

In this research the control group was treated writing lesson without using *Interactive Media* while the Experimental group had been taught by using *Interactive Media*. This experimental research was chosen to identify, analyze and describe about students' writing ability. *Pre-test* had been given before the students got the treatment while *post-test* had been given after the students got the treatment. Both of the *pre-test* and *post-test* results, then, were used to measure the students' ability.

Selection of the subject was very important steps in conducting a research study. There were two steps which had been discussed. The first was to determine the population and then to determine the sample.

Before collecting the data, the researcher made an instrument. Instrument was a tool or facility used by the researcher for collecting data. In this research the instruments were in the forms of questionnaire for need analysis, *proto-type* testing with *pre-testing*, and real implementation with *post-testing*.

Sampling Technique

According to Sugiyono (2012:38) variable is an attribute or activities which have specific variation. It was determined by the researcher to learn and conclude. Variable is

the point of the research. This research had two variables as follows:

Dependent Variable

Dependent variable in this research was the variable which was measured to find out the effectiveness of the other variable. That, dependent variable was “descriptive writing ability of the students”.

Independent Variable

Independent variable was a variable that its variance influenced other variable. The independent variable of this research was “the *Interactive Media*”.

Data Collecting Technique

Data Collecting Technique is systematically collect the information about target subjects or objects that involve in the research Kidder (1997). Collecting data was the most important activity in the research. There were some steps were taken by the researcher. They were as follows; (1) the researcher conducted *pre*-test; (2) the researcher gave *post*-test after three times of treatment for each group; (3) the researcher scored results of both *pre*- and *post*- tests by using Brown (2000: 369) writing rubric; (4) the results of their *pre*- and *post*-tests were compared.

Data Analysis Technique

According to Shamoo and Resnik (2003), data analysis technique is the process of systematically applying statistical technique to describe and illustrate, condense and recap, and evaluate data. In analyzing the data, the researcher used statistical analysis. By analyzing the student’s score, the researcher identified and determined the degree of student’s capability.

1. Scoring. The researcher gave score for the student’s answer writing task. Writing Rubrics. Rubric is used widely in education to evaluate learning process. In scoring the students’ writing assignment, the researcher also used the rubric postulated by Brown (2000: 369). The rubric categories the writing into four levels: excellent/very good, good/average, fair/poor, and very poor.
2. Statistical Analysis. To know how *Interactive Media* improved students’ writing ability, the researcher analyzed the data from *pre-post* by using SPSS 20.
3. Categorizing. In this step the researcher categorized the student’s score and the group them based on their achievement. The researcher

wanted to know the student's achievement before and after giving the treatment. After

getting the scores, the researcher categorized them into the following criteria:

Table 1. Categorizing

Score	Category
80-100	Excellent
66-79	Good
56-65	Fair
40-55	Poor
30-39	Very Poor

Finding the significant differences by using *t*-test

In this study *t*-test was used to know the difference in the result of teaching using *Interactive Media* to improve students' descriptive writing before and after giving the treatment (the result of *pre*-test and *post*-test).

To measure the significances of the *pre*-test and *post*-test the researcher used SPSS 20 for window with confidence interval of the difference is 95% (0.05), significant two tailed (Sig. 2-tailed), and degree of freedom of 58 ($n_{\text{control}} + n_{\text{experiment}} - 2$). Manually, the *t*-test can be calculated by referring to Urdan (2010:95). The researcher gave interpretation *t*-test by comparing to *t*-table.

Research Findings and Discussions

Need of the Students

The results of need analysis show that among 32 students, more than half or 57.6% needed to practice writing skill with interactive media and 60.8 % feel at ease when practicing writing with the aid of computer. In majority, the students really want to do some writing activities with the aid of computer because the students said that their teachers almost never use computer even the *Interactive Media* in teaching English. The students have initiated to fulfill their needs by visiting on-line resources and learned so much about writing essay or descriptive texts from free resources. They practiced their own learning strategy.

The teachers are challenged to create innovation to foster the students' writing skill in which the process of

teaching and learning should be focused more on the activities such as writing good sentence, matching topic sentence with paragraph developer, or practicing punctuation with error identification. Moreover, the teachers are demanded to use computer-based media as the source of the writing object, place, and people. The picture of animation in computer assisted instruction is more vivid and real rather than printed picture.

Research Result

Ability of the students in writing descriptive text before the treatment.

The writing ability of the students at both class XI-MIPA1 (experiment group) and XI-MIPA4 (control group) before the experiment were quite the same because the level of the vocabulary, syntax/grammar, the use of punctuation/mechanic, content, and essay organization were within the range of the same category. The ability of the students in using punctuation for example, both groups are still at the level of fair to poor since they have means score of 2.87 and 3.00. The students in this level frequently showed errors of spelling, punctuation, capitalization, paragraphing, poor handwriting, meaning confused or obscured. In the use of vocabularies, they have limited range, frequent errors word/idiom form, limited choice of

words, wrong usage but meaning not obscured. Thus, their vocabularies comprehension was at the level of average.

By referring to Brown's writing evaluation (2000), it is implied that both classes have different starting point but belong to the same category. Control class, for instance, has means of 70.83 and experiment group's means is 76.5 but they are still in the category of good (range 70-79).

Theoretically, it can be implied that the sample taken in this research (the students at class XI-MIPA 1 and XI MIPA 4) are almost homogeneous in their basic skill of writing descriptive essay. This phenomenon is not strange because they still belong to the same high school. Perhaps they have been taught by the same teacher within the same semester.

From the score of *pre-test* both control and experiment groups, it can be interpreted that they had the same difficulties in mastering vocabulary, syntax, and mechanic of good descriptive writing. Such difficulties have been also identified by previous researches (Hedge, 2005; Kellogg, 2008; Prajayanti, 2012) that writing is a major cognitive challenge because it is at once a test of memory, language, and thinking ability.

In writing descriptive text the students should be careful with the choice of words/vocabularies, correct usage of adjectives, structure, punctuation, etc. In descriptive text, the students should depict the object, person or place by using verb of perceptions such as seems, hear, taste, feel, see, smell, touch, etc. They should be able to focus on the unique qualities of a person, object, or thing (Wyrick,2011;326).

Ability of the students in writing descriptive text after the treatment.

Interactive Media as the learning and teaching media had been used for motivating the students, helping the teacher to animate the lesson materials, improve student's descriptive writing skill. It is based on the library reviews that computer based media has been proved effective in teaching listening, reading, vocabulary, students' motivation, and grammar (Nagata, 1998;

Thorson, 2000; Liu and Reed, 1995; McNeil, 2000; Leppen).

The effectiveness of *Interactive Media* in teaching descriptive text has been tested by the researcher. It is clearly seen in Table 2. that *Interactive Media* has brought different results of descriptive writing skill of the experiment group. It has higher means score (87.22) compared to *non- Interactive Media* class (control class means= 78.83). Among 30 students at the experiment class, there are 26 students reached excellent category and 4 students achieved good category. No students at the level of poor or fair. The results are so different from those of control group which has 2 students at fair level and 1 student at poor level. Control group results are not so much different from its *pre-test*.

Table 2. Results of *Post-test* Experiment and Control Groups

Descriptive statistic	Post-test Control	Post-test Experiment
Mean	78.83	87.22
Median	80.0	90
Mode	85.0	95
Mean Deviation	1.82	3.2
Std.deviation	9.97	7,7
Excellent category	17 students	26 students
Good category	10 students	4 students
Fair category	2 students	0 students
Poor category	1 student	0 student
Content	22.7 fair	25.53 good
Organization	17.3 good	18.47 excellent

Vocabulary/Lexical	16.2 good	18.10 excellent
Syntax/Grammar	19.5 good	21.70 excellent
Mechanics/Punctuation	3.1 fair	3.43 fair

Writing elements that received significant improvement after being taught by *Interactive Media*.

In term of students competence in writing good descriptive text with good organisation,corret structure,good choice of vocabularies,the experiment groups indicate very significant progress. It is seen from the mastery of syntax, vocabularies, and essay organisation. When their ability is at excellent level,it means that the students have fluency expression; ideas are clearly stated/supported, succinct, well organizes, logical sequencing, and cohesive. Their sentence structures are very good because they use complex construction, few errors of agreement, tense, number, word order/function, articles, and pronoun. Nevertheless, they still get problem with punctuation or mechanic because they are not careful with spelling, punctuation,

capitalization, paragraphing, poor handwriting, meaning confused or obscured.

Hypothesis Testing Result

From the findings and discussions above, it can be inferred that there was a significant difference between the descriptive writing of the students who were taught using *Interactive Media* and those who did not use *Interactive Media*. The first evidence can be seen from means score of *pre* and *post* test of both groups. *Post*-test means score of experiment group is 87.22 while control group is only 78.83 with mean deviation 3.2 and standard deviation of 7.7 which indicates the differences between *pre* and *post* test score. The second indicator is the value of *t*-test. From the results of SPSS output of Independent sample test, it is found that the score of *t*-test is 3.161 which is higher than the *t*-table (2.000) with 95% level of reliability or 5%

level of significance ($0.01 < 0.05$) and $df=58$ (n_1+n_2-2). It means that the significant score or sig. (2-tailed) is less than 0.05. Therefore, it can be concluded that there is a significant differences of students' progress in writing descriptive text by using *Interactive Media* or it can be said that the null hypothesis (H_0) is rejected and the working hypothesis (H_a) is accepted. The acceptance of the working hypothesis is in line with the Warschauer (1999) research results that Computer-Based teaching materials have significant contribution to the Intermediate ESL class at University of Hawaii. By using real time and internet connection, they can gain additional writing materials and exercises in class. Moreover, they can do collaboration learning.

Since there is a significant improvement of students' writing skill by using *Interactive Media*, this research then confirms the effectiveness of *Interactive Media* for teaching writing at SMA level as Muhrodi (2011), Wardani (2013), and Zarkoni (2014) had conducted similar research at SMP level.

Conclusion

Related to the above findings, it was clearly seen in Table 2. that *Interactive Media* has brought different results of descriptive writing skill of the

experiment group. It was effective in teaching writing descriptive text. It can be seen from statistical analysis of this study, the group that had been taught using *Interactive Media* get higher means score (87.22) compared to *non-Interactive Media* group (control class means=78.83). Among 30 students at the experiment class, there were 26 students reached excellent category and 4 students achieved good category. There was no students at the level of poor or fair. The results were so different from those of control group which has 2 students at fair level and 1 student at poor level. Control group results were not so much different from its *pre-test*.

Recommendation

In line with the conclusion previously stated, the researcher would like to give suggestions to:

1. English teachers

English teachers are suggested to be creative and innovative in designing the lesson materials in order to improve writing skill of the Senior High School (SMA) students. The teachers should use Computer Media or Computer Assisted Instruction/Computer Assisted Language Learning or software for designing multimedia-based /animation-based lessons. As it

has been proved from previous research and this research that *Interactive Media-based* is effective to improve descriptive writing skill of the students.

2. SMA students

The students should be happy that *Interactive Media-based* course are effective in improving descriptive writing skill but they should not keep the spoon feed habit in learning. They should play active role and increase their enquiry for getting new language learning.

3. Further researcher

The results of the study are very useful for future researcher in Teaching of English as Foreign Language (TEFL) or the Teaching of English as Second Language (TESOL) in Indonesia and Turkmenistan. The use of computer software as instrument for upgrading the students' language skill should be shared into other areas of especially such as grammar, vocabulary building, pronunciation, and animation for teaching articles, etc.

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