

## **CHAPTER III**

### **RESEARCH METHOD**

This chapter elaborates the method of the research, which has been briefly introduced in Chapter I. the discussion of this chapter covers the research method, variables, subject of the research, instruments, data collection procedure and data analysis. Furthermore, this chapter also provides the preparation, tabulation, and implementation stages in analyzing the data.

#### **3.1 The Research Method**

In line with the objective of this research, to find out the effectiveness of Word Processor in improving students' writing skills, the design used in this research is quasi-experimental design. This design is used because the treatment is not random assignment of participants to groups (Creswell, 2008:313). It means that there is no selection in the population. In other words, a group can be experimental or control group. According to Hatch and Farhady (1982:23), this design is a realistic one conducted in social sciences in general.

The quasi-experimental design can be applied to experimental and control group with pretest and posttest in the design (Creswell, 2000:314). Based on the theory, the first design will be applied in this research. The groups are divided into experimental and control groups with pretest and posttest to identify the effectiveness of the treatment.

The design used in the experimental method is a pre-test and post-test design, as follows:

Figure 3.1 The Quasi-Experimental Design

Experimental	$O_1$	$X$	$O_2$
Control	$O_1$		$O_2$

From the figure 3.1,  $O$  symbol refers to the process observation or measurement, and  $X$  symbol represents the exposure of a group to an experimental variable (the treatment). In order to examine whether or not the treatment has an effect on the performance of the experimental group, the differences between  $O_1$  and  $O_2$  in the two groups are further compared.

Like a control class pretest-posttest design, this research is also engaged with control class and experimental class, in which those classes were given a pretest and a posttest. Here, the pre-test was given to capture students' initial ability from the experimental and control classes before the treatment was delivered to the experimental class, while the post-test was given after the treatment in order to find out the significant improvement in the experimental class.

Based on the above figure 3.1, further, the research design can be simplified into the following table.

Table 3.1 Research Design

Class Category	Pre-Test	Treatment	Post-Test
Experimental Class	$T_1$	$X$	$T_2$
Control Class	$T_1$	-	$T_2$

According to table 3.1,  $T_1$  refers to the pre-test given to both experimental and control groups. Further, X refers to the treatment of using Microsoft Word given to the experimental class, while  $T_2$  refers to the post-test given to both experimental and control classes. Finally, the result can be recognized by comparing the differences between  $T_1$  and  $T_2$ .

### **3.2 The Research Variables**

A variable is defined as an object of the research that varies (Arikunto, 2006: 116). Besides, based on Hatch and Farhady (1982: 12), a variable is defined as an attribute of a person or of an object which varies from person to person or from object to object. Furthermore, in general, variables are divided into quantitative and qualitative variables.

However, in order to assess the influence of a treatment research, variables can be defined as independent and dependent variables. According to Hatch and Farhady (1982: 15), the independent variable is the major variable that a researcher hopes to investigate, and the dependent variable is the variable that the researcher observes and measures to determine the effect of the independent variable. Also, in this research, the independent variable was known as the treatment variable. Thus, the independent variable of this research was the effectiveness of Microsoft Word in improving students' writing skills, and the dependent variable was the students' writing skills.

### 3.3 The Subjects of the Research

Based on Arikunto (2006: 129), the subject where the data are gained is called the source of data in a research. Further, based on the subject where the data are placed, Arikunto (2006: 129) identifies the source of data into three levels of *P*, which are *person*, *place* and *paper*. Besides, he also classifies the source of data based on the areas made as the subject of the research. In this case, those sources that many researchers usually use are population and sample.

#### 3.4.1. The Population

Population is defined as a set (or collection) of all elements processing one or more attributes of interest (Arikunto 2006: 129). Moreover, Coolidge (2000: 24) states that population is most often a theoretical group of all possible scores with the same trait or traits. Simply, a population is the whole subject of a research.

Referring to the above definition, the population of this research was the second grade students of a Madrasah in Garut enrolled in academic year 2008/2009 spreading into four classes, VIII Putra-A, VIII Putra-B, VIII Putri-A and VIII Putri-B.

The writer conducted the research to the second grade students due to the following reasons: the writer thought that the second grade students of a Madrasah in Garut were appropriate to be engaged in this research; it is assumed that the second grade students have learned the Microsoft Word when they were in the first grade. Besides, based on writer's experience when he conducted an English

course there, the second grade students still had difficulties and made some mistakes in writing.

### **3.4.2. The Sample**

Based on Arikunto (2006: 131), sample is a half or the representative of the examined population, in addition, Coolidge (2000: 24) states that sample is a smaller group of scores selected from the population of scores. Further, sample should be chosen with a certain techniques in order to get a sample that describes the real population.

Since a research needs a technique to get the sample, Setiyadi (2006) exposes two models of sampling procedure, which are probability sampling and non-probability sampling, in a quantitative research. Moreover, he states that a kind of probability sampling is cluster sample, which is defined as procedure of taking sample in a population involving some different classes that are in the same stratum. Therefore, by considering the above definitions and that the students of a Madrasah in Garut consist of four classes relatively having same characteristics, the writer chooses two classes (VIII Putri-A and VIII Putri-B) as the sample.

After samples were selected, those two classes were determined to be the experimental class and the control class. Hereafter, class VIII Putri-A became the experimental class, while class VIII Putri-B became the control class. Further, both experimental and control classes would fulfill out the pre-test and post-test. In this case, both

classes have different treatment in the process of writing. The experimental class would treat by using Microsoft Word and the control class by using their handwriting and paper in writing texts.

Table 3.2 Subject of the research

Class Category	Class	Number of Students
Control Class	VIII-A	30 Students
Experimental Class	VIII-B	30 Students
Total		60 Students

### 3.4 The Research Instruments

The next step in this chapter is aimed at choosing and organizing the instruments. According to Arikunto (2006:149), instrument is a medium of collecting the data used when the research is delivered by using a certain method. In other words, this research must gain some information and data about the tropic of this research before the data were analyzed. Furthermore, Arikunto (2006) notes that instruments can be in the form of test, questionnaire, checklist, interview guide, documentation guide, and check-list.

For the purpose of collecting data, the instruments of this research were writing-test and questionnaires. In this case, the test was specifically categorized as an achievement test. Additionally, Arikunto (2006: 151) states that achievement test is a test used to measure the students' achievement after those students learn something. Since this research was aimed at finding out the effectiveness of using Microsoft Word to improve students' writing skills,



the tests used as instrument in this research were in the form of writing test, which were divided into pre-test and post-test.

Firstly, the pre-test was designed to measure the initial ability of the students from both classes before the experimental class received the treatment of using Microsoft Word in writing texts. Secondly, the post-test was further managed after the treatment had been completed. The test used for both was in the form of free composition. Here, the writer created the worksheet himself and chose the descriptive text as the appropriate genre for the second grade students. At last, this research used questionnaires as the instrument to get more information from the respondents in term of their individual report (Arikunto, 2006: 151).

### **3.5 Data Collection Procedure**

Collecting data is one important work in a research. Therefore, in collecting the data, this research applied some procedures. Firstly, the writer prepared the research by observing on the spot and preparing the teaching material for the instruments. Secondly, the writer searched many literary works related to the research from the library and network in order to gather the theoretical foundation supporting this research. Thirdly, the writer delivered a try-out test to the second grade students of a Madrasah in Garut. Next, the subject of this research took the pre-test. Furthermore, the experimental class received a treatment that was writing texts by utilizing Microsoft Word, yet the control class learned to write texts by using their own handwriting and paper. After receiving the treatment, the experimental

and control classes were given the post-test. Finally, the experimental class would also fill out the questionnaires related to the treatment of using Microsoft Word in improving their writing skills. Briefly, the writer will explain those procedures in the following details.

### **3.6.1. The Research Preparation**

In preparing this research, the writer observed the spot of the research. After that, the preparation was focused on the teaching material and instruments. Besides, the writer needed to arrange the time allocation of the research.

Firstly, the term 'material' or often 'lesson' is defined as a unified set of activities that cover a period of classroom time (Brown, 2001: 149). Since this research is engaged with the second grade students of Madrasah Tsanawiyah or Junior High School, the classroom time ranged from forty to eighty minutes. Moreover, for the materials, the writer was adapted with English syllabus, textbooks, and certain topics learned by the second grade students of a Madrasah in Garut. Here, the books used by students were *Writing to Learn* by Spaventa & Spaventa and *BKS PILA Bahasa Inggris* by Emed Hidayat et al. Besides, the writer also searched and added the materials from network or other sources, and he focused the material on writing skill by relating it to one or the other two of other skills.

Secondly, to accomplish every event of this research needed to be planned in a well-organized time schedule. In this case, this research



was held for about one month from May to June 2009. Thus, the treatments' schedule of the treatment of the research is presented below.

Table 3.3 Schedule of Teaching

No	Date	Material	
		Experimental Class	Control Class
1	May, 4 <sup>th</sup> 2009	Pre-Test	Pre-Test
2	May, 6 <sup>th</sup> 2009	Lesson 1 : Text composition	Lesson 1 : Text composition
3	May, 11 <sup>th</sup> 2009	Lesson 2 : Descriptive text	Lesson 2 : Descriptive text
4	May, 13 <sup>th</sup> 2009	Lesson 3 : Recount text	Lesson 3 : Recount text
5	May, 18 <sup>th</sup> 2009	Lesson 4 : Daily activity	Lesson 4 : Daily activity
6	May, 20 <sup>th</sup> 2009	Lesson 5 : Language focus (grammar)	Lesson 5 : Language focus (grammar)
7	May, 25 <sup>th</sup> 2009	Lesson 7 : Text revision 1 (Individual)	Lesson 7 : Text revision 1 (Individual)
8	May, 27 <sup>th</sup> 2009	Lesson 8 : Text revision 2 (Peer)	Lesson 8 : Text revision 2 (Peer)
9	June, 2 <sup>nd</sup> 2009	Lesson 6 : Text revision 3 (Final)	Lesson 6 : Text revision 3 (Final)
10	June, 4 <sup>th</sup> 2009	Post-test and Questionnaire	Post-test

### **3.6.2. The Research Implementation**

#### **3.6.2.1. The Library research**

Library research is one of the procedures in collecting data to gather the theoretical foundation that support the research. For the purpose of completing the theories related to writing skill, teaching writing, and the use of Microsoft Word in teaching writing, the writer read a number of research papers, books, journals, articles, and other literatures related to the research. To find those literatures, the writer mostly searched the data and information in the library and network.

#### **3.6.2.2. Try-out test**

Based on Heaton (1995), a good test must be valid, and practicable. Besides, Arikunto (2006: 168) states that a good instrument must achieve at least two important requirements, which are valid and reliable. For that reason, in this research, the writer tries out the instrument to another class in the same grade before the pre-test was administered.

Moreover, the writer first consulted the instrument to the supervisor of this research before the instrument was tested to the students. This try-out test was conducted in one meeting of two hours instruction (2 x 40 minutes), and this test only involved 30 students. In this research, the students were asked to compose a free text consisting at least 100 – 150 words.

#### **3.6.2.3. Pre-Test**

According to the teaching schedule, the pre-test was the first writing test. Administered to both experimental and control classes at the beginning of the research. The pre-test was intended for gaining the data of the students' initial writing ability. Besides, this test was administered to ensure that the students of both group had the same English background and proficiency before the experimental class received the treatment. In addition, this pre-test was carried out to find out the equivalence of experimental and control classes.

#### **3.6.2.4. Treatment**

In this research, the Microsoft Word was used for implementing the treatment in teaching writing to the experimental class, yet the control class was treated by using their own handwriting and writing in writing texts. Here, both of the experimental and control class were asked to write and revise some compositions based on the certain genre and adapted to the English syllabus of the second grade of Junior High School by using different tools to write.

The purposes of the treatment were preceded firstly by asking the students to compose a certain text based on their own ideas. The second step was changing each work to other students

(peer-correction activities) in order to revise and to give comment on the work. The next step was editing the revised work by each student. Finally, those students had to collect the works to be further assessed by the writer.

#### **3.6.2.5. Post-Test**

Similar to the procedures of doing pre-test, post-test was the second writing test delivered to both experimental and control classes. At the end of the research, the writer administered post-test in order to find out the result of the treatment. The aim of this test was at finding whether or not there are some significant differences between students' scores of the experimental and control classes after the treatment was conducted to the experimental class. In other words, the post-test was carried out in order to investigate the effectiveness of Microsoft Word in improving students' writing skills to the second grade students of a Madrasah in Garut.

#### **3.6.2.6. Questionnaire**

In this research, the questionnaire was applied as the additional instrument to find out the students' response towards the treatment of using Microsoft Word in teaching and learning to write texts and factors contributing to the success of this method in improving writing texts. This questionnaire was only

distributed to the experimental class because this class received the treatment. Here, the questionnaire was created by using Bahasa Indonesia after the writer considered the English level of the second grade students of Junior High School. Besides, this questionnaire was delivered in the form of open-ended and close-ended questionnaires.

### **3.6 Data Analysis**

The data gained from the first test to the questionnaires had to be calculated and analyzed in order to find out the result of the research. Since this research was basically intended to investigate the effectiveness of using Microsoft Word in improving students' writing skills in a Madrasah in Garut, the data obtained from the research would be analyzed using Microsoft Excel 2007 and the certain statistical formula by following some certain procedures.

As Arikunto (2006: 235) states that in analyzing the data, generally requires three stages: preparation, tabulation, and implementation. Briefly, the writer will explain those procedures in the following details.

#### **3.7.1. Data Preparation**

In this preparation stage, the writer made some analyses in order to check and arrange the data for the next stage. Firstly, after the writer delivered all instruments to the students, the writer checked the completeness of the students' identity, the completeness of the data, and the students' answer in each instrument.

Further, since the main data were gained in the form of written achievement tests, the writer needed to assess the score of those writing test before he analyzed the result of those test in the next stage. Therefore, in this research, the scoring system of the students' written works was based on ESL Composition Profile created by Jacobs et al. (1981 cited in Weigle, 2007: 116), and the scoring standard of ESL Composition Profile is described in table 3.4.

Table 3.4 ESL Composition Profile

Aspects of Writing	Score	Level	Criteria
Content	30-27	Excellent to very good	Knowledgeable • substantive • thorough development of thesis • relevant to assigned topic
	26-22	Good to average	Some knowledge of subject • adequate range • limited development of thesis • mostly relevant to topic, but lack of detail.
	21-17	Fair to poor	Limited knowledge of subject • little substance • inadequate development of topic
	16-13	Very poor	Does not show knowledge of subject • non-substantive • not pertinent • not enough to evaluate
Organization	20-18	Excellent to very good	Fluent expression • ideas clearly stated/supported • succinct • well-organized • logical sequencing • cohesive
	17-14	Good to average	Somewhat choppy • loosely organized but main idea stand out • limited support • logical but incomplete sequencing
	13-10	Fair to poor	Not fluent • ideas confused or disconnected • lack logical sequencing and development
	9-7	Very poor	Does not communicate • no organization • not enough to evaluate
Vocabulary	20-18	Excellent to very good	Sophisticated range • effective word/idiom choice and usage • word from mastery • appropriate register
	17-14	Good to average	Adequate range • occasional error of word/idiom form, choice and usage but meaning not obscured



	13-10	Fair to poor	Limited range • frequent error of word/idiom form, choice and usage • meaning confused or obscured
	9-7	Very poor	Essentially translation • little knowledge of English vocabulary, idiom, word form • not enough to evaluate
Language Use	25-22	Excellent to very good	Effective complex construction • few of errors of agreement, tense, number, word order/function, articles, pronouns, and preposition
	21-18	Good to average	Effective but simple construction • minor problems in complex construction • several of errors of agreement, tense, number, word order/function, articles, pronouns, and preposition but meaning seldom obscured
	17-11	Fair to poor	Major problems in simple/complex construction • frequent errors of negation , agreement, tense, number, word order/function, articles, pronouns, and preposition and/or fragment, runs-on, deletion, meaning confused or obscured
	10-5	Very poor	Virtually no mastery of sentence construction rules • dominated by errors • does not communicate • not enough to evaluate
Mechanics	5	Excellent to very good	Affective demonstrates mastery of convention • few error of spelling, punctuation, capitalization and paragraphing
	4	Good to average	Occasional error of spelling, punctuation, capitalization and paragraphing but meaning seldom obscured
	3	Fair to poor	Frequent error of spelling, punctuation, capitalization and paragraphing • poor handwriting • meaning confused or obscured
	2	Very poor	No mastery of convention • dominated of by error of spelling, punctuation, capitalization and paragraphing • handwriting illegible • not enough to evaluate

### **3.7.2. Data Tabulation**

In this second stage, after the writer described and classified the scoring standard of the writing test based on the ESL Composition Profile created by Jacobs et al. (1981 cited in Weigle, 2007: 116), the writer and two other judges firstly scored the students' writing tests. Furthermore, the scoring standard involves content, organization, vocabulary, language use, and mechanics.

### **3.7.3. The Data Implementation**

#### **3.7.3.1. The Test Instrument Analysis**

As Hatch and Farhady (1982: 243) states that there are three basic characteristics of test involve reliability, validity, and practically. Thus, in this research, the writer first tried out the instrument to another class in the same grade before the pre-test was administered. This try out test was carried out in order to measure the reliability, validity, and practically of the instrument. To gain the result of the try-out test, those three characteristics will be analyzed in the following details by using the certain statistical formula.

##### **3.7.3.1.1 Reliability Analysis**

Reliability is a crucial characteristic of a good test. A test must be reliable as a measuring instrument before the test is administered in a research. Based on Hatch and Farhady (1982: 244), reliability is the excellence to which a test

produces consistent result when administered under similar condition. For that purpose, in administering the try-out test, the students should do the test within specified time period, and they were not allowed to take the test at home.

Since the main instrument of this research was in the form of essay test, firstly, the writer assessed students' composition by using the analytic scales in ESL (Jacob et al., 1981 cited in Weigle, 2007: 116). Furthermore, the writer analyzed the instrument reliability by using Alpha Cronbach formula (Arikunto, 2006: 196), and the procedures are:

- a. Determining the variance of item ( $s_i^2$ )

$$s_i^2 = \frac{JK_i}{n} - \frac{JK_s}{n^2}$$

Where

$JK_i$  = Sum of square of item,

$JK_s$  = Sum of square of subject,

$n$  = Number of sample

- b. Determining the variance of total score ( $s_t^2$ )

$$s_t^2 = \frac{\sum x_t^2}{n} - \frac{(\sum x_t)^2}{n^2}$$

- c. Determining the instrument reliability ( $r$ ) with the Alpha formula;

$$r = \left( \frac{k}{k-1} \right) \left( 1 - \frac{\sum s_i^2}{s_t^2} \right)$$

Where

$k$  = Number of item

- d. Checking the finding with the criteria of reliability.

Table 3.5 Criteria of Reliability

Criteria	Category
0.00 – 0.199	Very Low
0.20 – 0.399	Low
0.40 – 0.599	Moderate
0.60 – 0.799	High
0.80 – 1.000	Very High

(Riduwan, 2005 cited in Sintiani, 2006: 31)

#### 3.7.3.1.2 Validity

Validity is also one of the crucial characteristics that a good test must have. Based on Heaton (1995: 159), the validity of a test is the extent to which it measures what it is supposed to measure. Therefore, in this research, the instruments would be valid if those instruments were able to measure the students writing ability.

Furthermore, Hatch and Farhady (1982) classifies three basic types of validity: content validity, criterion-related validity, and construct validity. Since the main instrument of this research was in the form of written achievement test, the content validity was used for analyzing the instrument validity. Based on Hatch and Farhady (1982: 251), a content validity is defined as the extent to which the test measures a representative sample of the subject matter content.

In order to analyze the content validity of this instrument, the writer used the formula of determining the

discrimination power proposed by Arikunto (2006) and was helped by using Microsoft Excel 2007, and the procedures are as follows;

- a. Determining the high and the low scores;
- b. Taking 27% of the highest score and the lowest score;
- c. Preparing the table in order to calculate easily;

Table 3.6  
Calculation Form of the Lowest and Highest Score

Highest Score	Lowest Score
$\bar{x}_1 = \dots$	$\bar{x}_2 = \dots$
$s_1 = \dots$	$s_2 = \dots$
$s_1^2 = \dots$	$s_2^2 = \dots$

- d. Calculating the discrimination power by using the  $t$  test formula;

$$t = \frac{\bar{x}_1 - \bar{x}_2}{s_{total} \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Where

$$s_{total} = \sqrt{\frac{(n_1 - 1) s_1^2 + (n_2 - 1) s_2^2}{(n_1 + n_2) - 2}}$$

- e. Determining the degree of freedom ( $df$ );

$$Df = n_1 + n_2 - 2 \quad \text{at the level of significant} = 5\%$$

- f. Comparing the derived  $t$  ( $t_{observe}$ ) to the critical  $t$  ( $t_{table}$ );
- g. Reporting the finding: if the  $t$  ( $t_{observe}$ )  $>$   $t$  ( $t_{table}$ ) meaning that the discrimination is significant; the instrument is considered as a valid instrument.

#### **3.7.3.1.3 Practicality Analysis**

After the reliability and validity of the instrument were investigated, the practicality of the instrument should also be analyzed. As Heaton (1995: 167) states that a test must be practicable. In addition, Hatch and Farhady (1982: 254) states that some practical consideration as follows: the test should be easy to administer, the test should be as inexpensive as possible, the test should be easily scored, and the score should be easy to interpret. For the purpose of practicality, the writer conducted the try-out test by considering those rules.

#### **3.7.3.2 Pre-Test Data Analysis**

Pre-test was the first writing test delivered to the experimental and control groups in order to find out the data of the students' initial writing ability. Since this research engaged two classes of participants, the experimental design and procedure were statistically analyzed by the formula of Independent-Sample *t test* for calculating data.

According to Coolidge (2000: 143), to use the *t test* appropriately, there are several specific assumptions that must be met as follows: the participants must be different in each group (independent group), the dependent variable values come from a population of values that is normally distributed, and the variances of the two groups about the respective means will be equal or approximately equal



(homogenous). For that purpose, the writer will be analyzed those assumptions can be noticed in the following details.

#### 3.7.3.2.1 Testing the Normality of Distribution

The aim of testing the normality of distribution is for finding out whether or not the samples are from a population of values that is normally distributed. In this research Chi Square formula is used in testing the normality of distribution, and the procedures are as follows:

- a. Stating the hypotheses in sentence and setting the level of significance at 0.05 (two-tailed test of significance)

$H_o$  : The scores of the experimental and control groups are not normally distributed

- b. Calculating the normality of distribution;
- c. Comparing  $X^2_{observe}$  to  $X^2_{table}$  with the level of significance at 0.05 for testing the hypothesis and reporting the findings: " $H_o$  is rejected if  $X^2_{observe} < X^2_{table}$  with the level of significance at 0.05.

#### 3.7.3.2.2 Testing the Homogeneity of Variance

After the result of testing normality of distribution was found, the writer must also test the homogeneity of variance. The procedures are as follows:

- a. Stating the hypotheses in sentence and setting the level of significance at 0.05 (two-tailed test of significance)

$H_o$  : The scores of the experimental and control groups are not homogenous.

- b. Calculating the homogeneity of variance;
- c. Comparing  $F_{observe}$  to  $F_{table}$  with the level of significance at 0.05 for testing the hypothesis and reporting the findings: " $H_o$  is rejected if  $F_{observe} < F_{table}$  with the level of significance at 0.05.

#### 3.7.3.2.3 Testing the Independent-Sample $t$ Test

If the data of this research were proved as normal and homogenous data, the next step was to test the hypothesis of the research. For that purpose, the writer decided to use the independent-samples  $t$  test.

- a. Stating the hypotheses in sentence and setting the level of significance at 0.05 (two-tailed test of significance)

$H_o$  : There is no significant difference between the pre-test means for experimental group and control group.

- b. Calculating the Independent-Samples  $t$  Test;
- c. Comparing the  $t_{observe}$  to the  $t_{table}$  with the level of significance at 0.05 for testing the hypothesis and

reporting the findings: “ $H_0$  is rejected if  $t_{observe} > t_{table}$  with the level of significance at 0.05”.

#### **3.7.3.3 Post-Test Data Analysis**

Post-test was delivered in order to find out whether or not there is significant difference between students' scores of the experimental and control classes after the treatment was conducted to the experimental class. Since this test was similar to pre-test, the procedures of analyzing data of the post-test were also similar to the procedures of analyzing data of the pre-test.

#### **3.7.3.4 Questionnaire Data Analysis**

The questionnaire was analyzed to get a clearer evidence of the effectiveness of using Microsoft Word in improving students' writing skills in a Madrasah in Garut and to find out the students' responses towards the use of Microsoft Word in writing class. After the students took the post-test, they were given list of simple questions to be answered based on the students' opinions. In this research, the questionnaire was in the form of open-ended and close-ended questionnaire which consist of 10 questions.

For that purpose, the questionnaire consisted of these three aspects:

1. Do the students think that Microsoft Word is helpful to them?
2. If Microsoft Word is helpful in their writing, why do the students think this method is helpful to them (in term of the advantages of this method)?
3. What are significant factors contributing to the success of writing that uses Microsoft Word in improving their writing skills?

The data were analyzed quantitatively by using the formula of percentage and considering the criteria of percentage as follow:

$$P = \frac{F \times 100}{N}$$

Where

$P$  = Percentage

$F$  = Frequency

$N$  = Response

$100$  = Constant

Table 3.7 Criteria of Percentage Categories

No	Percentage of Respondent	Criteria
1	1 – 25%	Small number of students
2	25 – 49%	Nearly half of the students
3	50%	Half of the students
4	51 – 75%	More than half of the students
5	76 – 99%	Almost all of the students
6	100%	All of the students