CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the methodology used in the research. They are the method of research, variable of the research, instruments, the testing of research instruments, validity test, reliability test the index of difficulty and index of discrimination, procedure of data analysis, the technique of data analysis, respondents, and research site.

3.1 Method of the Research

Research methodology is needed in any research to find out how the correlation between two variables. In this study the two variables are the rewriting of the story in film (variable X) and vocabulary mastery (variable Y). Research methodology is a guide in our investigation since it deals with the ways to conduct the research.

The technique used in this research is correlation analysis technique. This technique is used to find out the correlation degree between the independent variable (students' rewriting of the story) and the dependent variable (vocabulary mastery). This technique is used to find out the correlation degrees between the investigated variables. This technique will describe how far the variants in one variable influence other variable.

3.2 Variable of the Research

Variable can be classified as dependent and independent variables (Hatch and Farhady, 1982). In this research, there are two research variables, namely:

1. Independent variable (x), represent the rewriting of the story in film

2. Dependent variable (y), represent vocabulary mastery

3.3 Population and Sample

The population of this research is second grade students of MTS Nurul Falah. In this research the technique used to collect the sample was simple random sampling technique. Thirty students were collected randomly from 6 classes, from VII A until VII F. As Roscoe, cited in Sugiyono (2007) stated that for a research the number of sample between 30 until 50 is representative enough. This technique was used in order to get a good generalization of the research.

3.4 Instruments

The instruments in this research are:

1. **Writing test**

   This test is used to find out students' rewriting of the story in film test. The test will be conducted by asking the students to rewrite the story in the film, which titled Charlie and the Chocolate Factory. There will be five criteria to be scored; they are content, vocabulary, spelling, generic structure, and grammar, which adapted from Brown (1994: 356-358) and Klara (2007). The description can be seen in the following table.

Table 3.1

Scoring Criteria of Writing

	Aspect	Score	Criteria
1.	Content	1	The content is not indeed relevant with the topic at all.
		2	There are many confusing things; many contents are not relevant with the topics so that meaning cannot be easily comprehended.
		3	The content that is not relevant still exists but it is understandable and it is not too bad.
		4	There are several words that are used irrelevantly but do not influence the intended meaning much.
		5	The topic and the content is very relevant.
2.	Vocabulary	1	Poor and irrelevant words; they do not fit the sentence meaning related to the topic and the situation given.
		2	There are still lots of words used in appropriately.
		3	The words have already been related with the topic and situation; however, they do not have any variation yet.
		4	The words are generally relevant with the situation and have enough variation, but sometimes there are inappropriate words, which do not change the meaning of the sentence.
		5	The words uses are selected and have

			variations; they are relevant with the situation and condition so the meaning makes sense.
3.	Spelling	1	Very poor; there are many errors in spelling; the words that cannot be understood at all.
		2	Poor; there are many errors in spelling; and the meaning is confusing.
		3	There are some errors in the spelling but the meaning is understandable.
		4	There are only few errors in the spelling.
		5	Perfect; there are no errors in spelling the words.
4.	Generic Structure	1	The generic structure of the content is very bad and it often does not consist of orientation and resolution.
		2	So many disorderliness are found in the con tent of the writing, but do not make the readers confused yet.
		3	The generic structure of the writing is neither too good nor too bad.
		4	The generic structure of the writing is not in good, but this is actually not too principal.
		5	Every part of the writing is in good order, either in orientation, complication or resolution.
5.	Grammar	1	There are many irrelevant uses of descriptive languages, many errors in using verb, tense, and linking words.

		2	There are some irrelevant uses of descriptive languages, some errors in using verb, tense, and linking words.
		3	There are a little bit irrelevant but do not change the whole meaning. Generally, it still accepted.
		4	Generally accurate the use of descriptive languages, verb, tense, and linking words.
		5	No errors on the use of descriptive languages, verb, tense, and linking words.

2. Vocabulary Mastery test

This test given is an objective test in multiple-choice questions with four possible answers (a,b,c,d), completion, puzzle, and matching form to measure the students vocabulary mastery. The vocabulary questions are based on the vocabulary used in the film.

3.5 Data Collection

In order to collect the data, the instruments of the research should be tested to measure the validity and reliability.

3.5.1 Validity test

Validity test is used to test whether the questions are valid or not. According to Hatch&Farhady (1982:250) validity refers to the extent to which the results of the procedure serve the uses for which they were intended.

In this research content validity is used to check the validity of writing test. Pearson Bi-serial formula that calculated using Microsoft Excel for Windows is used to test the validity of vocabulary test.

The validity test of students' rewriting of the story in film, which was using writing test, was valid since the content of writing test was based on the film watched. The validity test of each questions of vocabulary test was proved that all questions, from number 1 until 50, were valid. (see appendix 2).

3.5.2 Reliability test

Reliability test is used in order to check the research instrument whether it is reliable or not. There were two formulas used to test the reliability of the instruments, they are Cronbach's Alpha and Spearman-Brown formulas. Cronbach's Alpha formula was used to test the reliability of rewriting of the story in film test, while the Spearman-Brown formula was used to test the reliability of vocabulary mastery test. Both of the formulas were calculated using SPSS 15.0

After the instruments have been tested, the result of computation is consulted in the table below in order to the degree of its validity and reliability as quoted from Sugiyono (2007:231)

Tabel 3.2
The interpretation of r - value

The r - value	Interpretation
0,000-0,199	Very low
0,200-0,399	Low
0,400-0,599	Fair
0,600-0,799	High
0,800-1,000	Very High

The counting of reliability from the reliability test result of students'
rewriting of the story in film (X) equals to 0.910 (see appendix 3), while the
reliability result of vocabulary mastery (Y) equals to 0.546 (see appendix 3). It
can be concluded that the reliability of students' rewriting of the story in film (X)
was very high and vocabulary mastery (Y) was fair.

3.6 The Index of Difficulty (Felicity Value) and Index of Discrimination (D)

The counting of index of difficulty and index of discrimination were used in
order to find out the degree of difficulty and differences of each questions in a test
instrument.

According to Arikunto, cited in Palapah 2004, the criteria of index of
difficulty (FV) are as follow.

FV 0.00 – 0.30	difficult
FV 0.30 – 0.70	medium
FV 0.70 – 1.00	easy

The result of Index of Discrimination (FV) shows that there were four
questions at the easy level; one question at the difficult level and forty-five
questions were at the medium level. Since most the questions were at the
medium level, the questions were considered appropriate to be used for the test.

Arikunto, cited in Palapah 2004, states that the criteria of Index of
discrimination (D) are:

D	: 0.00 – 0.20	: poor
D	: 0.20 – 0.40	: satisfactory

D   : 0.40 – 0.70   : good

D   : 0.70 – 1.00   : very good

The result of Index of Discrimination (D) shows that most of the questions were considered satisfactory while the rest were considered very good, good, and poor.

The counting of index of difficulty and index of discrimination for whole fifty questions of Vocabulary Mastery (Y) can be seen in the appendices.

3.7 Data Analysis

The steps to carry out this study are as follows:

1. Normality analysis was used to examine the distribution score of the two variables tested in this research. The normality analysis was examined using SPSS 15.0, the interpretation is that if *sig. > 0.05*, then Ho is accepted or the distribution of the data is normal.

2. Correlation analysis

   a. The Distribution scores of the two variables; students' rewriting of the story in film variable (X) and the vocabulary mastery variable (Y).

   b. The significant examination of students' rewriting of the story in film to vocabulary mastery. To determine correlation coefficient this research was used the Pearson formula, which calculated using SPSS 15.0. Next the result of correlation coefficient will be tested for significant by comparing the $r_{counted}$ and r_{table}. The correlation is significant if $r_{counted} > r_{table}$.

3. Direction of correlation coefficient between students' rewriting of the story in film variable (X) and the vocabulary mastery variable (Y).

3.8 Research Site

This research was conducted in MTs Nurul Falah Junior High School for second grade students. The school is located in Leuwigajah Street, Cimahi. Time of research is done trough one month in second semester.