

CHAPTER III

METHODOLOGY OF RESEARCH

A. The Method of The Research

There are many methods on the research. They are experimental method, Ethnography, Case study, and observation research. Here the writer decides to use experimental research as method in this study.

David Nunan describes it in the following table:

Type	Characteristics
Pre-experiment	May have pre and post treatment test, but lack of a control group.
Quasi-experiment	Has both a pre and post test and experimental and control group, but not random assignment of subject.
True experiment	Has both pre and post tests, experimental and control group, and random assignment of subject. ¹

In This research the writer uses experimental research. Quasi experimental design is practical compromises between true experimental and the nature of human language behavior which wish to investigate. By using quasi experimental designer control as many variables as we can and also limit the kind's interpretation we make

¹David Nunan, *Research Methods in Language Learning*, (New York: Cambridge University Press,1992), 27

about cause effect relationship and hedge the power of our generalization²

Schwartz said that “an experiment ‘is controlled observations of the effect of a manipulated independent variable on some dependent variable’.”³

This writer is intended to know whether story mapping strategy well give significant influence on student’s Reading ability or not, therefore the writer takes quasi experiment because it has good design that has control class as compare experiment class.

B. Research Procedures

In general, the procedures of the research can be described as follows:

1. Preparing an experimental research
2. Preparing the needed permission for conducting the research
3. Observation in research field
4. Organizing the research instrument
5. Preparing the appropriate materials in conducting pre-test
6. Preparing the materials for teaching and learning process during the treatment
7. Preparing the appropriate materials in conducting post-test
8. Analyzing and interpreting the data collected from pre-test and post-test

² Evely Hatch,et.al., *Research Design and Statistic for Applied Linguistics* (Rowely Newbury House Publisher, Inc)

³ Mark Balnaves and Peter Caputi, *Introduction to Quantitative Research Method*, (Sage Publications, 2001), 68

9. Drawing the interpretation based on the result of the data collected analysis, and reporting the conclusion of the result and propose some suggestions what will contribute for the further study.

C. Place and Time

The study conduct to second year in MTs Al-Fath Cilegon Banten. The school is located on link Kubang Menyawak, Kecamatan Citangkil, Kota Cilegon. The writer was on Februari 2017. The writer uses one strategy is using story mapping to improve reading comprehension skill.

D. The Population and Sample

1. Populations

The population in this research is the second grade of students junior high school MTs Al-Fath Cilegon. There are 90 students divided into 4 class.

2. Sample

In taking samples, the writer doesn't use the random sampling method to get data from two classes at the second grade of junior high school. The total students who took part of the research was 40 students at the second grade in MTs Al-Fath from VIII B and VIII C as control class, it consist of each class 20 students.

In this research the writer uses quasi-experiment. In other word in taking sample no randomly and choose class VIII B as experiment class and student from VIII C as control class, it is amount of each class are 20 students.

E. Technique of data collecting

To get information about the respondent, the writer will use the technique of data collection as follow :

1. Observation

In this research, the writer observer as way to get data as follows:

- a. The English teacher of MTs Al-Fath
- b. The situation of the teaching and learning and learning process of English subject.
- c. The condition of MTs Al-Fath Cilegon

2. Test

In this research, the writer does pre test and post test.

a. Pre test

The pre test was administered at bigining of the course in order to find out initial between control group and experiment group.

The writer using pre test before story mapping strategy to knows students reading skill. In this step, the writer gave pre-test items were 5 questions those essay.

b. Post test

Post test carry out in order to check the different between two groups (control group and experiment group) after the writer give the treatment for experiment group and traditional method to control group. The result of post test is used to know that there is significant different of two groups.

F. The scoring System

Score	Level of Score	Indikator	Level of quality	Number Of question
Main idea	1 – 7	Can identify Sentence but does not tell the main idea, but does have some detail from the passage.	Lack	Pre-test (4), post test (4)
	8– 16	Can identify Sentence tells the main idea, but uses no detail from passage.	Good enough	
	17 - 25	Sentence tells main idea and uses more than one supporting detail from the passage	Perfect very good	
Vocabulari es Use	3	Unable to identify the meaning of words and its used based on the context	Lark	Pre test (5) Post test (5)
	4	Can identify the meaning of words and its use	Good enough	

	5	<p>according to the context with fairly precise and accurate.</p> <p>Can identify the meaning of words and its use according to their context with a very precise and accurate</p>	Perfect very good	
Author's Intention/ purpose	5- 9	Can't identify the style and the author's intent in presenting ideas in written discourse.	Lark	Pre-test (3) Post test (3)
	10 – 15	Can identify the style and the author's intent in presenting ideas in written discourse with precise and accurate enough	Good enough	
	16 - 20	Can identify the style and author's intent in	Perfect very good	

		presenting ideas in written discourse with very precise and accurate		
Explicit Question	5 – 11	Can't identify the specific information that is stated in the passage.	Lark	Pre test (4) Post test (1)
	12 – 18	Can identify the specific information that is stated in the passage with fairly precise and accurate.	Good enough	
	18 – 25	Can identify the specific information that is stated in the passage with very precise and accurate.	Perfect very good	
Implicit Question	5– 11	Can't identify the implicit information in the passage.	Lark	Pre-test (2) Post test (2)
	12 – 17	Can identify the implicit information	Good enough	

	18 - 25	in the passage with fairly precise and accurate Can identify the implicit information in the passage with very precise and accurate	Perfect very good	
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G. Instrument of the research

In this research, the writer gives the students two test. These are pre test and post test. Pre test was given before the writer observed the class, and post test was given after the writer finishing taking the observed in the class. So the writer know whether there are differences before and after observation or not.

H. The Technique of Data Analyzing

The writer uses quantitative to analyze the data. Then, to get the data analysis for writing at experimental class by pre-test and post-test.

The writer analyze the data by using statistic calculation of T-Test (fisher's formula) with the degree if significance is 5% and 1% is as follow:

1. Determine mean of experimental class, with formula:

$$Mx = \frac{\sum X}{N}$$

2. Determine mean control class, with formula:

$$My = \frac{\sum Y}{N}$$

3. Determine the total square of error experiment class (X), with formula:

$$\sum x^2 = \sum x^2 - \frac{(\sum x)^2}{N}$$

4. Determine the total square of error of control class (Y), with formula:

$$\sum y^2 = \sum y^2 - \frac{(\sum y)^2}{N}$$

5. Analyze the result by using calculation of the test as follow: the formula of t-test use fisher's formula: ⁴

$$t_o = \frac{M_x - M_y}{\sqrt{\left\{ \frac{\sum x^2 + \sum y^2}{N^1 + N^2 - 2} \right\} \left\{ \frac{1}{N_x} + \frac{1}{N_y} \right\}}}$$

6. Determine the degree of freedom, with formula:

$$Df = N_x + N_y - 2$$

Note :

t = t-test

M_x = the mean score of experimental group

M_y = the mean of control group

$\sum x$ = the total of deviation of experimental group

$\sum y$ = the total of deviation of control group

N_x = the number of the students of experimental group

N_y = the number of the students of control group

Df = degree of freedom

⁴Darwan Syah. Supardi and Abd Aziz. *Pengantar Statistika Pendidikan*, (Jakarta: HAJA Mandiri, 2011), 31-106