

CHAPTER III

METHOD OF THE RESEARCH

A. Research Method

Research can define as an effort to get result within scientific method objectively.¹ The research design in the research is experimental method. According to David Nunan, “experiment is a procedure for testing a hypothesis by setting up a situation in which the strength of the relationship between variable can be tested.”² The goal of experimental research is to know about the effect the variable X and variable Y. There are three kinds of experimental research, first true experiment consist of control an experiment groups to which subjects have been randomly assignment, and in which all subject are tested before or after the intervention or treatment under investigation had been administered to the experiment group. Second a pre-experiment may have pre- and post-treatment test, but lacks a control group. And the third a quasi-experiment has both pre-test and post-test, experiment and control group, but no random assignment of subject. This research uses the quantitative design with quasi-experimental method but no random assignment of subject.

¹ David Nunan, *Research Method In Language Learning*. (New York: Cambridge University Press, 1992), 2

² David Nunan, *Research Method In Language Learning*, 230

In this research the writer uses pre-test and post-test design. The aim of the test as an instrument used by writer is to know the students' reading comprehension. The test that is used in this research are multiple choice and true or false questions. The researcher giving a pre-test before treatment and post-test after treatment. Is to find whether or not significant changes in teaching reading comprehension using previewing.

Research design:

Controlled Group	Pre-Test	No Special Treatment	Post-Test
Experiment Group	Pre-Test	Experimental Treatment	Post Test

B. The Place and Time of The Research

The place and time of the research will conducted at SMPN 3 Kota Serang which located at Jl. Ki Sahal No.3 Lopang Cilik Serang 42113. The reason of choosing this school is the school will support researcher easy in taking data and the researcher want give contribution to this school. The researcher will hold this research on 20th of March 2017 until this research finished.

C. Population and Sample

1. Population

“Population is people or other things discussed in the research. Furthermore he states that population is the total number of subject of an investigation.”³ According to David Nunan “population is all cases, situation, or individuals who share one more characteristic.”⁴ The total of population of the research is the students at SMPN 3 Kota Serang are 60 students consist of 2 classes.

2. Sample

“Sample is the representative of the population being studied.”⁵ A sample according to Nunan “is a subset of individuals or cases within population.”⁶ Based on statement before, the writer takes two classes of eight grade of SMPN 3 Kota Serang, consist of 60 students it is divided into 2 groups: Class (VIII C) as an experimental group 30 students and (VIII B) as control group 30 students.

³ Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktek*, (Jakarta: PT. Rineka Cipta, 2013, p.173.

⁴ David Nunan, *Research Method in Learning*, (Cambridge University Press. 1992), p.231.

⁵ Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktek*, 174.

⁶ David Nunan, *Research Method in Learning*, 232.

D. The Technique of Data Collecting

In this experimental research, the researcher used test of instrument in gathering data. Tests are the series of questions or exercises and other tools which are used for measure skills, knowledge of intelligence, ability or talent which is owned by individual or group.⁷ In this research, the writer gives two tests for the students. Test consists of pre-test and post-test.

1. Pre-test

The pre-test will conduct one only to experiment and control class, which is conduct in the first meeting on order to know basic of students reading comprehension. The test will consist of 20 items in multiple choices with option a, b, c and d the correct answer get 5 points, so that the highest score is 100.

2. Post-test

Post-test also will conduct once to experiment and control class. The post test will give after treatment. The post-test also consist of 10 items in multiple choice form and 10 items in true or false questions.

⁷ Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik*, 266.

E. The Method of Data Analysing

To analyse the data, the writer applies the following techniques:

1. Preparing the key answers
2. Correcting and scoring the students answers sheet
3. Computing the students correct answers on the test
4. The students score is used to determine the level of their reading comprehension particular.

After collecting data, the writer analysed to compare the result of research between experimental class and control class, the writer uses steps as follow:

1. Quantification of data from pre-test and post-test.
2. Determining mean of variable X_1 with formula:

$$M_1 = \frac{\sum X_1}{N_1}$$

3. Determining derivation score variable X_2 with formula:

$$M_2 = \frac{\sum X_2}{N_2}$$

4. Make a graphic
5. Determining derivation score variable X_1 with formula:

$$X_1 = X_1 - M_1$$

6. Determining deviation score variable X_2 with formula:

$$X_2 = X_2 - M_2$$

7. Determining the result by using calculating of the t-test with formula:

$$t_o = \frac{M_1 - M_2}{\sqrt{\left\{ \frac{X_1^2 + X_2^2}{N_1 + N_2 - 2} \right\} \left\{ \frac{N_1 + N_2}{N_1 \times N_2} \right\}}}$$

Where:

M_1 : The average score of post-test of experimental class

M_2 : The average of post-test of control class

ΣX_1^2 : Sum of squared deviation score in the control class

ΣX_2^2 : Sum of squared deviation score in the experimental class

N_1 : Number of student's experimental class

N_2 : Number of students control class

2 : Constant number