CHAPTER III

METHODOLOGY OF THE RESAERCH

A. Methodology of Research

A method is procedure or way that is used in achieving a certain purpose. We have to remember that the method use should be in accordance with the purpose of the research.

In this research, the researcher uses experimental research to know the real data that got from the respondent. Experiment is a procedure for testing a hypothesis by setting up a situation in which the strength of the relationship between variables can be tested.¹

In this research the researcher uses quasi experimental in which the researcher give certain treatment to the students to find assessment of how is the effect of poster in teaching vocabulary mastery. Quasi experimental has both pre- test and post- test, and experiment control group but no random assignment of subject.

¹ David Nunan, *Research Methods in Language Learning*, (New York : Cambrige University Press, 1992), p.230

The researcher uses a quasi-experimental method with nonequivalent control group design. This design is represented as follow:

R1 01 X1 02

R2 : 01 X2 02

R1 : Experiment Group

R2 : Control Group

01 : Pretest

02 : Posttest

X1 : Treatment poster media

X2 : Treatment non poster media

---- : The groups are not randomly found

To get a sure basic on guessing the influence on subject's research, teacher can replace the learning design. Usually, the design use treatment + evaluation and become pretest + treatment + posttest design.

This design is almost similar with pretest-posttest control group. In this nonequivalent control group design, both of

experiment and control class the research subjects are not chosen randomly.

B. The Population and The Sample

1. Population

Nunan says that "Population is all cases, situation or individuals who share one or more characteristics of interest can be widely depending on the research question and the purpose of the research"². The population of this research is the second grade of MTs N 3 Pandeglang, consisted of four classes (VIII A, VIII B, VIII C and VIII D). The total population is 128 students. MTs N 3 Pandeglang is one of school located at Cibaliung Pandeglang-Banten.

On quasi experiment nonequivalent control group design we can't choose the subjects of research randomly. The technique on choosing the sample is purposive sample. The purposive sample technique is decision in making a sample that considered to

² David Nunan, *Research Methods in Language Learning*, (New York : Cambrige University Press, 1992), p. 70

researcher's certain purpose and goal, and the researcher to be responsible to the research.

2. Sample

On a quasi-experiment nonequivalent control group design we can't choose the subjects of research randomly. The technique on choosing the sample is purposive sample. The purposive sample technique is decision in making a sample that considered to researcher's certain purpose and goal, and the researcher to be responsible to the research. The second grade of students' junior high school MTs N 3 Padeglang are 4 classes. Each class there are 32 students. Each class consist of 32 students which later to know how is The Influence Of Poster On The English Vocabulary Mastery.

The researchers choose two classes. The first class (VIII C) as experiment class and (VIII A) as control class because the real fact of the situation at the School. The researcher choose class VIII C as experiment Class because students has a difficulty in expressing their ideas, and students have many problem about vocabulary mastery and this class needs a good media and it is

the teachers responsibility to develop their potency and students to learn how to think critically and creatively than class VIII A as control class. One group called experiment class (VIII C) and other groups called control class(VIII A).

C. Place and Time Research

Place is needed as locating of research to get data in research. To examine The Influence Of Poster On The English Vocabulary Mastery, the researcher did the research at the second grade of MTs N 3 Pandeglang as the subject or place of the research based on some reasons, firstly the school located at near my home. Secondly, there is fact and several of the students are cleverer and very active while the other have low achievement in English especially on vocabulary. They are also passive in the teaching learning process.

D. Data Instrument

The research used pretest and posttest instrument, Pretest and posttest are research instruments that use as a device to know the result from two different classes which use poster and the traditional one. Pretest is questions to evaluate the subject that using the traditional method in teaching to both of class. And posttest is questions to evaluate the subject that using poster on experiment class and traditional method on control class. The researcher will to use poster in class (VIII C) while in control class uses traditional method no media used in this class (VIII A). Both of class will have four meeting each.

E. The Technique of Data Collecting

The technique of data collecting as follow:

Test

Testis one of material that important for the research. In this paper researcher use pretest and posttest.

a. Pre test

The pretest was administered at beginning of the course in order to find the initial between experiment class and control class. The type of pre test is a multiple choice as much 20 items.

b. Instrument for Treatment

After the researcher got data from pretest, the researcher determine between two classes which will become control class and experiment class. This instrument of treatment compared teaching vocabulary using poster which applied to students' learning process.

In this experiment the researcher providing vocabulary mastery using poster media, the first the researcher explain the definition and type of poster in general, the researcher explain to the students' how to learn vocabulary mastery using poster and the advantage of learning vocabulary mastery using poster for students'. The second, after all of students' understood the teaching vocabulary mastery using poster, the researcher ask students' to recite the vocabulary in the poster and then write it on the board to find out how many words and vocabulary are known by students. Finally, the researcher posed some question orally as interactive in the class.

c. Post test

Posttest carried out in order to check the different between two classes (experiment class and control class) after the researcher gave the treatment for experiment class and traditional method to control class. The type of post test is 15 multiple choice and 5 essay.

F. The Data Collecting Procedure

The data are collecting procedure through the following steps:

- a. Give a pretest to both groups.
- b. Give a treatment for learning the subject using poster in teaching vocabulary mastery
- c. Give a non-media poster to control class when teaching.
- d. Evaluate student's ability after learning process.
- e. Give a posttest to both groups.
- f. Process the result from pretest and posttest.

G. The Technique of Data Analyzing

The technique on a quasi-experiment nonequivalent control group design is comparing the student's result from pretest and posttest. The researcher used the steps as follow:

The researcher gets two data. The first data is the result of pre-test and the second data is the result of post-test.

After getting the data from pre-test and post-test, the researcher uses formula "t" test. "t" test one of statistic test that used to test the validity of null of hypothesis that in the between two means of simple that randomly taken from the same population, there is significance different or no. "t" is test that usually used for experimental method.

Level according to frequency, which used is 15% significance for test formula, which used:

 Determine mean of score experiment class (MX), with formula:

$$\mathbf{M}\mathbf{X} = \frac{\sum X}{N}$$

2. Determine mean of score control class (MY), with formula:

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

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

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

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

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

5. Calculates T- test

To calculate t-test, the researcher used to formula stated by SuharsimiArikunto as follows:

Determine the Degree of Freedom, with formula:

$$Df = Nx + Ny - 2$$

Notes:

MX = Mean of experiment class

MY = Mean of control class

 $\sum X^2$ = The total square of error of experiment

class

 $\sum X^2$ = The total square of error of control class

N = The numbers of subject

Df = Degree of freedom.