

## CHAPTER III

### METHODOLOGY OF RESEARCH

#### A. Method of Research

In doing this study, the writer need a technique which is called methodology of the study. The method used is experimental method. The writer uses the experimental research to know the real data that get from the respondent. Experiment are carried out in or relationship between two variable.

In this research, the writer use quantitative method. Quantitative research is obtrusive and controlled, objective, generalisable, outcome oriented, and assumes the existence of facts which are somehow external to and independent of the observes or research.<sup>1</sup>It mean that, in research writer use quantitative method because this method more independent of the research.

In this research the writer use experimental, experimental researches are particularly concerned with the issue of external validity, and the formal experiment is specifically design to enable the researcher to extrapolate the outcomes of the research from the sample to the broader population.<sup>2</sup> It means that, experimental can specifically design to enable the researcher to extrapolate the outcomes of the research from the sample to the broader population and can help writer in researcher. Experiment divided three type and each type has the characteristics there are:

---

<sup>1</sup> David Nunan, *Research Methods in Language Learning*, (New York : Cambridge University Press, 1922 ), p.3

<sup>2</sup> Nunan, *Research Methods in Language Learning* , p. 47

1. Pre-experiment : may have pre- and post treatment test, but lack a control group.
2. Quasi-experiment : Has both pre- and post test and experimental and control groups, but no random assignment
3. True experiment : Has both and post test, experimental and control groups, and random assignment of subjects.<sup>3</sup>

From explanation above, that experiment divided three types there are: pre experiment, quasi experiment, and true experiment. And In this research the writer use quasi experiment for research in classroom, where David Nunan said “ quasi experiment is has both pre and post test and experiment and control groups, but no random assignment of subjects.<sup>4</sup>

From explanation above, the writer took this method because in this method the researcher gave certain treatment to the experimental class to find : is there the effectiveness of guided question of technique in developing student’s writing Descriptive Text?

## **B. Instrument of Research**

Instrument in this research is equipment applied to obtain data or information relates to independent variable which has been specified covering instrument of test and non test, the instruments that will be used by the writer in this research are tests. The tests consists pre-test and post-test.

---

<sup>3</sup> Nunan, *Research Methods in Language Learning*, p.41

<sup>4</sup> Nunan, *Research Methods in Language Learning*

### 1. Pre-Test

Pre-test is a test that given to students before treatment. This test given to know the students' ability before treatment. In this test, the writer given treatment to students in form essay.

### 2. Post-Test

Post-test is a test that given to students after treatment. This test given to know the students' ability after treatment. In this test, the writer would know the result of this research and the writer given treatment to students in form essay.

## C. The Population and Sample

### 1. Population

Population is a set or collection of all element processing one or more attributes of interest. The target population is junior high school in MTs N 2 Kota Cilegon . in this research, the writer take the population at eighth grade students which consist of six classes of VIII A, VIII B, VIII C, VIII D, VIII E, and VIII F. There are 239 students of MTs N 2 Kota Cilegon, will be taken as population.

### 2. Sample

A sample design is a define plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting item for the sample<sup>5</sup>. The writer uses part of eighth grade student of MTs N 2 Kota Cilegon as the sample of this study, there the sample. The writer takes two

---

<sup>5</sup> C.R. Kothari, *Research Methodology*, ( 2 ed Ed ), ( New Delhi: New Age International Publishers, 2004 ), p.55

classes of VIII D and VIII E the consist of 80 students hopes could help the writer to get a valid, the writers makes classification into two classes. Class VIII C as Experiment class and class VIII D as control class.

#### **D. The Place and Time of the Research**

This research will be taken from the students scores from of MTs N 2 Kota Cilegon is located at Jl.Ir. Sutami Link. Cimerak Kel. Kebonsari Kec.Citangkil Kota Cilegon-Banten..

The writers chooses this place, because this school is representative need to research and there is data needed in the research and also it is strategic locations to find that location well from the accommodation or transformation. So, that enable the writer to conduct the research.

To examine “ The Effectiveness of Guided Question of Technique in Developing Students Writing Descriptive Text.” To the students of junior high school, the writer takes place in MTs N 2 kota Cilegon. The writer will conduct this research on September 19, 2016 until this research finished.

#### **E. The Technique of Data Collecting**

The writer used some technique of data collecting. The writer took steps as follows:

##### **1. Test**

Test is a method of measuring a person’s ability, knowledge or performance in a given domain. The writer uses test to get data result about process of learning

writing skill. The test items was tried out at the eighth grade of MTs N 2 Kota Cilegon, type of test that is given to the students are pre-test and post-test. The writer gave the students two test namely pre-test and Post-test.

a. Pre-test

Pre-test is a test given before learning has occurred or is supposed to have occurred.<sup>6</sup>Post test is a test that given to students before treatment. This test given to know the student's ability before treatment.

b. Post- Test

Post test is a test given after learning has occurred or is supposed to have occurred.<sup>7</sup>Post test is a test that given to students after treatment. This test given to know the student's ability after treatment. In this test, the writer would know the result of this research.

## F. Scoring System

$$\text{Students final score} = \frac{\text{the sum of the right answer}}{\text{the sum of the item (25)}} \times 100$$

$$S = \frac{R}{N} \times 100$$

S= Students Score

R = The Sum of the Right answer

N = The sum of the items.

---

<sup>6</sup>Jack, C, Richard and Richard Schmidt, *Longman Dictionary of language teaching and applied linguistics* ( London : Pearson Education Limited, 2010 ), p. 447

<sup>7</sup> Schmidt, *Longman Dictionary of language teaching and applied linguistics*, p. 447

### G. The Technique of Data Analyzing

The last step of the research methodology is analyzing the data. Data analysis is a last aspect of the research. It is a way to find out is there the effectiveness of guided question of technique in developing students writing Descriptive text. It is suitable to the statement of David Nunan who said that “ when comparing two means,... the appropriate test is t-test, which carries out the sorts of analytical procedures we have just examined. The great disadvantage of t-test is that it can compare only two groups”.<sup>8</sup>it mean that, in analyzing the data writer used two compare that is experiment class and control class.

After collecting the data, the writer qualifies it based on its kind. To analyze data, the writer uses two approaches. Those are logical approach for qualitative data and statistical approach for quantitative data. To compare the result of research between experimental class and control class, the writer uses step as follow:

1. Determining mean of score experiment class ( MX), through formula :

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

2. Determining mean score control class ( MY ), through  $MY = \frac{\sum Y}{N}$

3. Determining total square of error of experimental class ( X ), through formula:

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

---

<sup>8</sup> Nunan, *Research Methods in Language Learning* ,p. 35

4. Determining the total square of error of control class ( y), through formula:

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

5. Calculating T-test

To calculate T-test, the researcher used the formula stated by Suharsimi

Arikunto as follows: 
$$t = \frac{MX - MY}{\sqrt{\frac{(\sum X^2 + \sum Y^2)}{N_x + N_y - 2}} \left( \frac{1}{N_x} + \frac{1}{N_y} \right)}$$

6. Determining the degree of freedom, by formula :  $Df = N_x + N_y - 2$

Notes :

MX : Mean of experiment

MY : Mean of control class

$\sum X^2$ : The total square of error of experiment class ( X )

$\sum Y^2$  : The total square of error of control class ( y )

N : The number of subject.