

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **A. The Method of Research**

This research is an experimental research that consist of two variable. They are independent variable (X) that refers to the use of sticky notes, and (Y) refers to students' writing skill as dependent variable. Experimental resreach is a research method that the hypotesis which has the form of cause and effect relations by manipulating dependent variable during manipulating time, the writer has to control extraneous variables, perhaps the traditional that occured really as an effect of manipulating which is not caused by other variable. There are three types of experiments, such as pre-experiment, quasi-experiment and true experiment.

1. Pre-experiment, the characteristic is may have pre and post-treatment tests, but lacks a control group;
2. Quasi-experiment, the characteristic is has both pre- and post tests and experimental and control groups but no random assigment of subjects;
3. True-experiment the characteristic is has both pre- and post-tests, experiments and control-groups, and random assignment of subject.

This research was designed as a quasi-experimental research which was intended to find out the effectiveness of sticky notes in descriptive text toward students' writing skill.

## **B. The Time and Place of Research**

The writer takes the place of research in MTs Daar Et-Taqwa Petir, Serang. It is located at Jl. Raya Pamarayan Km. 01 Kp. Cigodeg, Ds. Tambiluk, Kec. Petir Kab.Serang,Banten. This research was conducted on 2016. The writer has some reason why chosen MTs Daar Et-Taqwa Petir, Serang as place this research, as follows: students of eight grade junior high school learn descriptive text and MTs Daar Et-Taqwa Petir, Serang is the place that writer conducted her PPL program. So, the writer takes a place MTs Daar Et-Taqwa Petir, Serang to conduct the research.

## **C. Population and Sample**

### **1. Population**

Some scientists give opinion about population. According to Irawan in Hanafi, he says that, “Population is all of element explained by researcher in the research.” While according to Suharsimi Arikunto in Hanafi too, “Population is totality of research subject.”

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Population is all cases, situations, or individuals who share one and more characteristics. The population of this research is the students of MTs Daar Et-Taqwa Petir, Serang especially eight grade students, from cross major. It is 100 students’ population.

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<sup>27</sup>Suharsimi Arikunto, *Prosedur Penelitian* (Jakarta: Rineka Cipta Press, 2010). P.99-100.

Looking at the number of population, its enables, and the writer does not take all of them as a respondent, because whether the writer takes all of them, it will take long time and much cost for finishing this study. So the writer takes two classes as a sample of this research.

## 2. Sample

The sample of the research is eight grade students that consist of 60 students. This sample chosen is based on the cluster sampling technique. According to Hanafi in Metodologi Penelitian Bahasa, sample is partly of population will be source of data and it can be representative the number of population. Dealing with this research , the writer determine research sample by using clustering purposive sample by taing students of eight A nd B class as the sample which groups, with 25 students each. One group of eight A as a control class and eight B as an experiment class. Because, score of class eight A bigger than class eight B. So, the writer want to improve the score of class eight B with this research

## **D. The technique of Data Collecting**

The researcher used some techniques to collect the data, they are:

### 1. Observation

The first to get information or the data, the researcher have to do observation. It was conduct on 2016. She observed

teaching-learning activities. She made list of observation aspect two indicators as follow:

- a. The teacher's activities
  - 1) Check the readiness of students
  - 2) Open teaching learning process
  - 3) Apperception
  - 4) Explain the material clearly
  - 5) Make a group
  - 6) Control students' activities
  - 7) The teacher encourage the students to be active
  - 8) Give a clear information/ answer when students ask question
  - 9) Close teaching learning process
- b. The Students' activities
  - 1) The students concern on teacher's explanation
  - 2) Do the task that given by the teacher
  - 3) The students' activeness in asking and answering the question

## 2. Test

Test is question or practice of knowledge skill measure, intelligency ability, or the trace for an individual or group. According to Arikunto, test is instrument or procedure in order measuring a structure and measuring.<sup>28</sup>

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<sup>28</sup>Suharsimi Arikunto, *Prosedur Penelitian* (Jakarta: Rineka Cipta Press, 2010),. P.272.

a. Pre-test

Pre-test was used to collect the data about students' writing skill before getting treatment for experimental class and before getting no treatment for control class. The test was administered to the eight grade students at MTs Daar Et-Taqwa petir.

b. Post-test

Post-test was used to collect the data about students' writing skill after getting treatment for experimental class and after getting no treatment for control class. The test was administered to the eight grade students at MTs Daar Et-Taqwa petir. Then, the writer took the total score from the result of the writing descriptive text.

### E. The Technique of Data Analyzing

In this research, the data of the reserach were picked from students' pre-test and post-test score of quasi-experimental reserach. The writer analysis the data by using t-test. To know whether the result of the reserach was statistically significant.

According to Brown, there are five aspect of writing scoring:<sup>29</sup>

Categories	Maximal score
Content	30
Organization	20
Vocabulary	20

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<sup>29</sup>H. Douglas Brown, Language Assessment Principle and Classroom Practice, (San Francisco: Logman, 2004). P.246

Syntax	25
Mechanics	5
<b>Total</b>	<b>100</b>

The data were analyzed by using formula as follow:

- Investigate students' worksheet, give and describe score in table
- Determine mean of variable X with formula:

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

- Determine mean of variable Y with formula:

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

- Determine how big percentage of the average score increase variable X by formula:

$$\% = \frac{MX}{MX + MY} \times 100\%$$

- Determine how big percentage of the average score increase variable Y by formula:

$$\% = \frac{MY}{MY + MX} \times 100\%$$

- Determine standard deviation X

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

- Determine standard deviation Y

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

h. Analyze the result by using the calculation of the t test

$$t_o = \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2}\right)\left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

Where:

$$t_o = t_{observation}$$

$Mx$  = the main of the experiment class

$My$  = the main of the control class

$\sum X^2$  = sum of square deviation of experiment class

$\sum Y^2$  = sum of square deviation of control class

$Nx$  = samples of students of experiment class

$Ny$  = samples of students of control class

$N$  = the number of cases

After computing  $t_{test}$ , it is necessary to obtain the degree of freedom that is used to determine whether  $t_{table}$  is significant or not. The  $t_{observed}$  value is consulted with the value of  $t_{table}$  by using degree of freedom. The formula of degree of freedom is as follow:

$$df = (N_x + N_y) - 2$$

Where:

df: degree of freedom

$N_x$ : the number of students in experimental group

$N_y$ : the number of students in control group