

## **CHAPTER III**

### **RESEARCH METHODELOGY**

#### **A. Time and Location of the Study**

This research was conducted from April 26<sup>th</sup> until Mei 17<sup>th</sup>, 2017. The researcher did the research on using of Jumble sentences game in teaching students' writing recount text in the second grade of SMP Khaerul Huda, Kota Serang. It is located on Jl. Kh. Jamhari No. 17 Kaloran, Lontar Baru, Kota Serang. There is the reason why the researcher choosen SMP Khaerul Huda because the researcher knows about students and condition of study in that school. And then, this school appropriate to conduct the technique of learning from the writer.

#### **B. Research Method and Design**

The method of this research is an experimental research. Then the researcher will applying experimental research with pre experimental design on one group pre test and post test design. According to Sugiyono, experimental design is divided into four, namely; pre- experimental design, true experimental design,

factorial experimental design and quasi experimental design.<sup>1</sup> Pre experimental design is the quantitative research design most closely associated with action or applied research. This research used one group pretest posttest design. Pre experimental was conducted to identify if there is any significant difference of students' writing score. The differences could be known by comparing results of pretest and post-test, not comparing the result between two different groups. Then, the writer would find out whether or not Jumble sentences game is influence to teach writing recount text. If students' score in post-test higher than students' score in pre-test, it means that Jumble sentences game is good to be implemented in teaching writing recount text. The class is given pre-test; second, the treatment, student practice with jumble sentences game, and third, students are given pretest to measure the treatment is influence or not.

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<sup>1</sup> Sugiyono. *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D 13 edition)*. (Alfabeta : 2011), 108-109.

## C. Population and Sample

### 1. Population

Population is all totality to research object. “According to Suharsimi Arikunto, quote from encyclopedia education evolution”. A population is a set (or collection) of all elements possessing one or more attributes of interest.<sup>2</sup> The population in this research is all of students’ of SMP KHAERUL HUDA Kota Serang in 2016/2017 academic year that consists of 122 students.

### 2. Sample

According to Nunan : A sample is subset individuals or cases from within population.<sup>3</sup> Sample in this research, the researcher take the VIII grade students of SMP KHAERUL HUDA Kota Serang. The total numbers of VIII grade students in this school are 30 students’. I took this sample by using purposive sampling.

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<sup>2</sup> Suharsimi Arikunto, *Prosedure Penelitian Suatu Pendekatan Praktik*. cet. 15, (Jakarta: PT Rineka Cipta, 2013), 173.

<sup>3</sup> David Nunan, *Research Method in Language Learning*, (New York: Cambrige University press, 1992), p.232

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

Test was used to see the result of students' writing in teaching recount text. The test was distributed to the one group pretest and posttest design.

##### **1. Pre-test**

Pre-test is conducted before the implementation of Jumble sentences game to find out the average score of writing ability of the class which observed. Students make a recount text individually, each students has the different story. Students should write with minimum 150 words. Then, students had to identify the element of recount text such as orientation, sequence events, and re-orientation from the text which they had written. The test was carried out in form of written test.

##### **2. Post-test**

Post-test was used to find out if Jumble sentences game is effective to teach students' writing ability of recount text. The post-test was conducted after the implementation of Jumble sentences game teaching to see the improvement in that the students made after the treatment given. The test used was same as the test used in the pre-test which consists of a

narrative essay with minimum 150 words to be written by the students, but the theme which was given in pre-test and post-test was different.

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

Technique of data analysis used in the study is statistical analysis with t-test. T-test was used to test the difference between pre-test and post-test. Moreover, Sudjiono said that t-test was used to examine the truth of null hypothesis which stated there is no significant difference between two variables. The formula is as followed:<sup>4</sup>

$$t_o = \frac{MD}{SE_{MD}}$$

The process of t-test was as follows:

1. Determining D (difference) between the score result of variable X(Pre-test) and variable Y (Post-test), with formula:

$$D = X - Y$$

2. Add D and getting  $\Sigma D$  (Total score between X and Y)
3. Determining mean from differences (MD), with formula:

$$MD = \frac{\Sigma D}{N}$$

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<sup>4</sup> Anas Sudjiono, *Pengantar Statistik Pendidikan*, (Jakarta: PT. Raja Grafindo, 2008), 305.

$N$  = Number of students (experiment class)

4. Determining standard of deviation from difference of variable X and Y ( $SD_D$ ), with formula:

$$SD_D = \sqrt{\frac{\sum D^2}{N} - \frac{[\sum D]^2}{N}}$$

5. Determining the degree of freedom (df), with formula:

$$df = N - 1$$

6. Determining the standard of deviation from the mean of D

$$SE_{MD} = \frac{SD_D}{\sqrt{N - 1}}$$

7. Determining  $t_o$  (t Observation), with formula:

$$t_o = \frac{MD}{SE_{MD}}$$

## F. Hypothesis

The researcher needs to propose hypothesis of this research.

The statistical hypothesis of this research was as follow:

$$H_o : \mu_1 = \mu_2$$

$$H_a : \mu_1 \neq \mu_2$$

$H_a$  : there is significant influence using Jumble sentences game in teaching writing recount text.

$H_0$  : there is no significant influence using Jumble sentences game in teaching writing recount text.

Then, the criteria used as follows:

1. If t-test ( $t_o$ ) > t-table ( $t_t$ ) in significant degree of 0.05,  $H_0$  (null hypothesis) is rejected. It means that the rates of mean score of the post-test are higher than the pre-test. The using of Jumble sentences game is influence to teach students' writing recount text.
2. If t-test ( $t_o$ ) < t-table ( $t_t$ ) in significant degree of 0.05,  $H_0$  (the null hypothesis) is accepted. It means that the rates of the means score of the post-test are same as or lower than the pre-test. The using of jumble sentences is not influence to teach students' writing recount text.