

CHAPTER III

RESEARCH METHOD

A. The method of research

Method of the research is the way to get information with collecting data and using reliable and valid procedure.¹ The researcher used quantitative method through experimental research. Experimental research is *research in which at least one independent variable is manipulated, other relevant variables are controlled, and the effect on one or more dependent variables is observed* so as to test a casual relationship.²

In an experimental, the researcher's goal is to establish a cause-and-effect relationship between to phenomena, the researcher aims to establish that one variable, the independent variable, causes changes in another variable, the dependent variable.³ The goal of experimental research is to know about the effect variable X for variable Y. The cause

¹ Sugiono, *Metode Penelitian Pendekatan Kuantitatif, Kualitatif dan R&D*, (Bandung: CV Alva Beta, 2009), cet. 8, P. 2

² Lynn Silipigni Connaway & Ronald R. Powel. *Basic research methods for librarians*, (USA: Greenwood Publishing Group, 2010), p. 78

³ Donna M Johnson, *Approaches to Research in The Second Language Learning*, (London: Longman, 1992), p. 165

got from different result between pre and post test in experimental research.

In this research, the researcher conducted Quasi-Experimental Design through Non-Equivalent Control Group Design. So, there were two classes which have equal in the ability. Sample decision is conducted do not have randomly and the result is decided from pre-test and post-test from control class and experimental class.

O_1	X	O_2
O_3		O_4

O_1 & O_3 = Pre-test of experiment and control groups

O_2 & O_4 = Post-test of experiment and control groups

X = Treatment (Teaching Narrative text by using Cornell Note Taking)

B. Time and Place of research

This research was conducted at the second grade of the SMPN 1 Bojonegara which is located on Jl. Bojonegara Km. 6 Kec. Bojonegara, Kab. Serang 42454 Banten. This research was conducted on March 6th 2017 – March 16th 2017 in the 2016/2017 academic year.

The researcher conducted the research at SMPN 1 Bojonegara. Based on the researcher's experience when she did observation for Teaching English Foreign Language subject on 5th semester, many students of junior high school still confused and difficult to comprehend the text. So, the researcher is curious and want to know how far the students' ability in learning English especially in reading skill to comprehend the text.

C. Population and Sample

Population is the totality of all grades, both in quality and quantity at a certain characteristic.⁴ The population of this research is the second grade students' of SMPN 1 BOJONEGARA which consists of 315 students. Those students are distributed into 9 classes; they are class of eight A - eight I.

Arikunto stated that sample is a subject or a part of population that research.⁵ To determine the sample the researcher used purposive sampling technique. Purposive sampling is a carefully selected sample

⁴ Abdul Halim. *Metodologi Penelitian Bahasa Untuk Penelitian, Thesis & Disertasi*. (Jakarta: Diadit Media Press, 2011) p. 99

⁵ Suharsimi Arikunto. *Prosedur Penelitian*. (Jakarta: Rineka Cipta, 2013) p.

relevant to the research design.⁶ Based on the sampling technique, the researcher took two classes as the sample. The first class is eight B as the experimental class which consists of 36 students. The second class is eight D as the control class which consists of 36 students.

D. The research instrument

Research instrument is a facility that used by researcher in collecting data. Researcher used the instrument to know the students reading comprehension. In this research, researcher use test.

Test is a method of measuring person's ability or knowledge a given domain. To get data of students' reading comprehension, the researcher carries out pre-test before giving treatment and post-test after treatment.

The test items were divided by multiple choices. The test was consists of 20 questions. The assessment format of multiple choice was 1 for right answer and 0 for wrong answer.

⁶ S. Nasution, *Metode Research (Penelitian Ilmiah)*, (Jakarta: PT. Bumi Aksara, 2003) p. 98

E. The technique of data collecting

These techniques of collecting data used in this research are:

1. Observation

Before doing the research, the researcher observes the location and population of nowhere the researcher is carried out. Observation is implemented by direct survey of research object. The purpose of observation is to raise and close the fact of the research object.

2. Test

Researcher used Test to collecting the data. In collecting the data, the researcher gave reading comprehension tests to the students. The test was given for getting the objectives data of students' achievement in reading skill by using Cornell note-Taking strategy in that class. The writer applied two tests: those are pre-test and post-test. Pre-test is given before the material was taught and post-test was given in the last meeting in that class.

F. The Technique of data analyzing

The researcher analyzed the result of the research by using t-test. The researcher uses two data. The first data is the result of pre-test and the second data is the result of post-test.

It is one of statistic test that used to test the validity of null of hypothesis that in between two means of simple that randomly taken from the same population, there is significance different or not. t-test usually used for experimental method.

There are experimental class and control class. To compare the result of the experimental class and control class, the writer uses step as follow:

1. Investigating student's worksheet gives describe score in table
2. Determine mean of score experiment class (MX), with formula:

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

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

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

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

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

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

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

6. Calculation T-test

To calculate t-test, the writer used the formula stated by Suharsimi Arikunto as follows:

$$t = \frac{MX - MY}{\sqrt{\frac{(\Sigma x^2 + \Sigma y^2)}{N_x + N_y - 2} \cdot \left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

7. Determine the Degree of Freedom, with formula:

$$Df = N_x + N_y - 2$$

Notes:

MX = Mean of experiment class.

MY = Mean of control class.

Σx^2 = The total square of error of experiment class.

Σy^2 = The total square of error of control class.

N = The numbers of subject.

Df = Degree of freedom.

G. Hypothesis

1. H_a : There is significant effect of using Cornell Note-Taking strategy toward students' reading comprehension
2. H_o : There is no significant effect of using Cornell Note-Taking strategy toward students' reading comprehension.