

CHAPTER III

METHODOLOGY OF RESEARCH

A. Place and time research

To collect the data for the paper, the writer conducted a study at the second grade of on MTs Misbahus Sudur. The school is located on Kp. Babakan Mander Ds. Mander, Kec. Bandung, Kab. Serang-Banten. The observation and research are since the researcher gets recommendation from the faculty of education department until this research finish. The researcher has done the research since 05 February Up to 06 March 2014.

The time of research has implemented three times, with detailed as follow:

1. The first week of February 2014, it is determine of population and prepare of the instrument data.
2. The second week of February 2014, that is holding a research in the classroom which gives the lesson plan, making some groups of discussion and the test.
3. The third week of February 2014, it is analyze data and prepare report.

B. The method of the research

In this study the writer used experiment methods. Experimental research is the researcher manipulates the independent variable, that is the researcher design and

set up the experimental and control treatments.¹ Experimental research is a research method to test the hypothesis that has the form of cause and effect relationships by manipulating the dependent variable. Experimental study can be interpreted as a study objective, systematic, and controlled to predict or control the phenomenon. Experimental study aimed to investigate the causal relationship (cause and effect relationship), by exposing one or more of the experimental group and one or more experimental conditions. The results were compared with one or more groups that are not subject to the control treatment.

Researcher conducted six meetings, three meetings for control class, three meetings for the experiment class.

1. Control Class: The first meeting for the introduction and pre-test, second meeting students are given the material about reading text using usual technique, the three meetings students are instructed to answer the post-test to determine the significance of the reading comprehension of students who are taught without the use of paired reading technique ,
2. Experiment Class: The first meeting for the introduction and pre-test, second meeting students were given the text reading materials using paired reading technique, the three meetings students are instructed to answer the post-test to determine the significance of the reading comprehension of students who were taught using the paired reading technique ,

¹Donna M Johnson, *Approaches To Research In Second Language Learning*, (Longman University Of Arizona, 1992) p.165.

In general the procedure of the research can be describe as follow:

1. Preparing the appropriate materials of reading for teaching and learning process during the treatment
2. Preparing the appropriate materials of reading in conducting pre-test
3. Preparing the appropriate materials of reading in conducting post-test
4. Analyzing the try out data in in order to find out the validity
5. Administering the pre-test to find out the initial abilities of student
6. Administering the post-test to find out the significance change after giving the treatment
7. Analyzing the data collected from pre-test and post-test
8. Drawing the interpretation based on the result of the data collected analysis, and reporting the conclusion of the result and propose some suggestions that will contribute for the further study

C. Population and Sample

Population is all number of objects that will be researched, while sample is a part of population that is stated”.²The population in this research are population that will be researched. Meanwhile, according to Donna “population is the entire group of entities or person to which the result of study is intended to apply”³The numbers of population of second grade aton MTs MisbahusSudurare 615

²Arikunto, s. *ProsedurPenelitianSuatuPendekatanPraktik*, (Jakarta : PT. RinekaCipta, 2002), p. 130

³ Donna M. Johnson, *Approach To Research In Second Language Learning*, (Longman: University of Arizona, 1992), p.110

students. It divides into seven teen (17) classes, and each class consists of 35 students.

Sampling is sub set of individuals or cases within population.⁴ The numbers of population of second grade at on MTs MisbahusSudurare302 students. It divides into 8 (eight) classes, and each class consists of 35 students. In this research take 19,9% for sample, $302 \times 19,9\% = 60$ students which is spread into two classes; 30 students in class VIII-B as experimental group and 30 students in class VIII-C as control one as sample, it is selected by classical sampling.

D. Technique of data collecting

The function of data collection is determining the result of the research. The techniques of collecting data used in this research are;

1) Observation

The writer observed responded activities and the way of their learning during the research held. Observation is implemented by direct survey of research is consisting of total students, teacher and facilities. The purpose of observation is to raise and close the fact of the research object. It is accordance with was said by surachmand “observation is an investigation that implemented by observing the indicator of research subject directly of indirectly”.

2). Instrument and Treatment

⁴ David Nunan, *Research Methods In Language Learning*, (Cambridge University Press, 1992), p.232

The writer takes a test as a technique to get valid data and objective information. Test is any series of questions or exercises or others means of measuring the skill, knowledge, intelligence, capacities of aptitudes or an individual group. In order to know the effect of paired reading technique on teaching reading comprehension, the research uses pre-test and post-test. Forms of test are multiple choice and true or false. The pre-test is given before the lesson begun and the post-test is given after the lesson finished. The writer gives treatment between pre-test and post-test. According WayanNurkancana and P.P.N. Sumartana in the book *evaluasi pendidikan*, they said that the test is one of way to make the value.⁵

E. Technique of Data Analyzing

This research is down at two group. They are experimental group and control group which is being treated in conventional technique. Then, he got two data, the first data is the result of pretest and the second one is the result of posttest.

Because the writer wants to compare result of the research between experiment class and control class students, she took step as follow:

1. Quantification of the data

The data from result of the test is qualified:

- a. Pretest consists of three texts which are divided by multiple choice, true or false. For all items, the correct answer is given score 10 (ten) and the

⁵ (Watannurkancana, and P.P.N Sumartana, *Evaluasi Pendidikan*, (Surabaya: Penerbit Usaha Nasional, 1998), P.25

incorrect answer is given 0 (zero) for each points. So, the total score test are 100 (hundred) from 10 (ten) questions and divided by 5 (five).

- b. Posttest consist of three texts which are divided by multiple choice, true or falls. For all items, the correct answer is given score 10 (ten) and incorrect answer is given 0(zero) for each points. So, the total score test are 100 (hundred) from 10 (ten) questions and divided by 5(five).

Table 3.1

From of pretest and posttest

Form of test	Series numberof items	Total of items	Total score
Multiple choice	1,2,3,4,5	5	50
True or false	5-10	5	50
total			100

2. Make frequency distribution of each variable
3. Determine mean of variable M_1 with formula:

$$M_1 = \frac{\sum x_1}{N_1}$$

4. Determine of variable M_2 with formula :

$$M_2 = \frac{\sum x_2}{N_2}$$

5. Determine deviation score variable X_1 with formula:

$$X_1 = X_1 - M_1$$

6. Determine deviation score variable X_2 with formula:

$$X_2 = X_2 - M_2$$

7. Analyzing the result by using calculation of the t-test as follow

$$t = \frac{M_1 - M_2}{\sqrt{\left\{ \frac{\sum X_{12} + \sum X_{22}}{N_2 + N_2 - 2} \mid \frac{N_1 + N_2}{N_1 + N_2} \right\}}}$$

Note:

t = t- tes

M_1 = the average score of experiment class

M_2 = the average score of control class

X_1 = Sum of the squared deviation score of experiment class

X_2 = Sum of the squared deviation score of control class

N_1 = the numbers of students of experiment class

N_2 = the numbers of students of control class

2 = Constant number.