CHAPTER III
METHOD OF THE RESEARCH

A. Research Method

The writer uses experimental research for doing this research, especially quasi experimental design. Quasi experimental design is practical compromises between true experimental and the nature of human language behavior which wish to investigate. By using quasi experimental designer control as many variables as we can and also limit the kind's interpretation we make about cause effect relationship and hedge the power of our generalization.[1]

Experimental research is a research method that tests the hypothesis which has the form of cause and effect relation by manipulating which is not caused by other variable. True experimental will carry out in order to know the correlations between variables. Here will use two class, the first class is as experimental, and the last one is as control class. A true experiment consists of control and experiment groups to which subject has been randomly assigned, and in which all subject are tested before and after the intervention or treatment under investigation has been administered to the experiment group[2] in order the writer can see the point of there is or no the influence of usingtongue twister method. To get the data, the writer will used pre-test and post-test towards the subject of research.

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[1]Evelyn Hatch, et.al., *Research Design and Statistic for Applied Linguistics* (Rowely: Newbury House Publisher, Inc)
[2]David Nunan, *Research Methods in Language Learning*(Cambridge University Press, 1992), 230

B. Place And Time Of Research

To collect the data for this paper, the writer will take place at second grade of MTs Al-Fath Cilegon located on Link. KubangMenyawak, Cilegon**.** The writer chooses this school because she will try the effectiveness of tongue twiters technique toward students pronunciation skill. The writer will be starting the experiment at february until finish.

C. Population and Sample

1. Population

The population in this research is taken two classes from four classes of MTS Al-Fath Cilegon. In this research the population was the second grade student of MTS Al-Fath Cilegon periode 2016-2017. There were four classes in the second grade of MTS Al-Fath Cilegon.

2. Sample

In taking samples the writer takes two classes at the sample, which consists of 48 students as sample and divided into two groups, each group consist of 24 students they are class B as experimental class and class C as control class. Because the researcher want to know how far the student's skill in pronunciation.

D. The Technique of Data Collecting

The writer uses technique as followed:

a. Test

The writer gives a test. The test divided into pre-test and post-test. The type of test that is given to the students is work sheet. The writer gives oral test that made by herself. It is recorded.

1. Pre-test

Pre-test is an administrated at beginning of the course in order to find out the initial between control and experiment class. The writer preparing the short text consist of three paragraph. gives a test to student, student read the text correctly and the writer recorded it.

2. Post-test

Post-test used to check the difference between two classes, control class without a treatment and experiment class using tongue twisters technique. The text consist two paragraph.

b. Observation.

Observation was an activity to do measuring by using some instruments or questions to get the data. In this paper, the writer observed the things that relate to the research process, which can support result of the data.

E.   The Technique of Data Analysis

After conducting the pre-test and taking back the post-test, the researcher does scoring and classifying it into some categories. The scores are needed to interpret the result of the teaching and learning

process and are used to depict the students' level of achievement; they were analyzed and processed by using static calculation of T-test, T-test formula was applied to see whether there was a significant difference between a pre-test and post-test.

The writer got two data. The first data is the result of pre-test and the seconddata is the result of post-test. The technique of analyzing data, the writer used step as follow:

1. The result of post-test in experiment class is named variable (x_2)
2. The result of post-test in control class is named variable (y_2)

After getting the data from pre-test and post-test, the writer analyzes it by using statistic calculation of t-test formula with the degree of significance 5% the formula as follow:

1. Determine mean of variable X with formula:

$$M_x = \frac{x}{N_1}$$

2. Determine mean of variable X with formula:

$$M_y = \frac{y}{N2}$$

3. Determine deviation score variable X_1 with formula:

$$X_1 = x_1 - Mx_2$$

4. Determine deviation score variable Y_1 with formula:

$$Y_1 = Y_2 - My_2$$

5. Determine standard deviation variable X with formula:

$$SD_x \text{ or } SD_1 = \sqrt{\frac{x^2}{N}}$$

6. Determine standard deviation variable Y with formula:

$$SD_y \text{ or } SD_2 = \sqrt{\frac{y^2}{N}}$$

7. Determine standard error of variable X with formula:

$$\text{SE } M_x = \frac{SD_x}{N-1}$$

8. Determine standard error of variable Y with formula:

$$\text{SE } M_y = \frac{SD_y}{N-1}$$

9. Determine standard error means of differences score between variable X and variable Y, with formula:

$$SE_{mx-my} = \sqrt{SE_{mx^2} + SE_{my^2}}$$

The conclusion from this research can be seen from the result of the t_0:

$$t_0 = \frac{Mx_2 - My_2}{\sqrt{\frac{(X_1^2 + X_2^2)}{N_1+N_2-2} \frac{(N_1+N_2)}{(N_1+N_2)}}}$$

Note :

Mx : The average score of experimental class

My : The average score of control class

X1 : Sum of the squared deviation score of experiment class

Y1 : Sum of the squared deviation score of control class

N1 : The number of students of experimental class

N2 : The number of students of control class

2   : Constant Number