CHAPTER III

THE METHODOLOGY OF THE RESEARCH

A. The Method of The Study

The method of the research in this study is experimental research. Experimental reseach is a procedure for testing a hypothesis by setting up the situation in which the strength of the relationship between variabels can be stated. There are three kind of experimental method namely pre experimen, true experiment and quasi experiment. Pre experiment may have pre and post treatment test, but luck a control group, true experiment has both pre and post tests experiment and control group, and random the assignment of the subject. Quasi experiment has both pre and post tests experiment and control groups, out no random assignment of the subjects.[1]

In this research, the writer used experimental. Danil Muijs explain that experimental degins are sometime knows as 'the secientific method' due to their popularity inscientific research where they originated.[2]

Finally, the writer give certain treatment to the students to find assessment of how is the effectiveness using small group discussion in teaching analytical exposition text with quasi experiment research. In quasi experimental divided in two classes, there are experimental class and control class. The

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[1] *David Nunan,Reseach Method in Language Learning, 41*
[2] *David Muijs,Doing quantitative research in education with SPPS. Sage , 2010,13*

sample is conducted do not have randomly and the result is decided from the pre-test and post-test of experiment and control class.

B. The Place and Time of the Research

In research activity, the writer took the place for the reseach at scond grade of Daar El-Ishlah junior haigh school lebak banten. This school selected as the research setting because of two major reason. Firstly, it's location is near for reseacher to conduct the research. Secondly, the reseacher observed and asked to the english teacher at scond grade Daar El-Ishlah junior haigh school and the reseacher knows in second grade of Daar El-Ishlah junior haigh school. Some problems that happen with students in english skills especially in reading text. The writer was started the experiment on July 2018 until finish.

C. The Objective of the Research

As mentioned in the first chapter, that the objective of the study is to find the empirical evidence whether there is any significance different in reading achievement of between the students are taught by using Small Group discussion in experimental class. The students are tought by scientific approach in control class in learning reading analytical exposition text.

D. The Population and Sample

The population of this study is 79 students from the second grade of "SMP" Daar El-Ishlah. The second grade

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consists of two classes number of VIII[1] is 40 students and VIII[2] class is 39 students. The grade of VIII[1] as the experimental class was taught using small group discussion and the grade of VIII[2] as the control class taught using scientific approach.

E. The Technique of Data Collecting

The writer used test to collect the data. The data was collected from the pre-test and post-test. The pre-test administered before the treatments and post-test administered after the treatments.

a. Test

In collecting the data, the research used reading test in form of multiple choice and essay. The purpose of this test is to know the result in teaching by using samall group discussion.

Qualification of data: multiple choice and essay. Pre-test, multiple choice consists of 10 question. the data correct answer is given score two and incoret answer is given zero. So the total item 10 question.

Post-test consists of 10 essay the correct is given score two and incoret answer is given zero. So, the total item is 10 question.

Table 3.1

Form of pre-test and post-test

Series Number Of Item	Form Of Test	Total Of Item	Score Of Correct Answer
10	Multiple	10	20

	choice		
10	Essay	10	20
Jumlah			40

Students final score = $\dfrac{\text{Students score}}{\text{Ideal Maximum (40)}}$ x 100

1. Pre-test

   The pre-test conducted one only to experiment and control class, it conduct in the first meeting in order to know basic of the students reading analytical exposition text before the treatment. The test is consist 10 item in multiple choice.

2. Post-test

   After the treatment completed, both experiment and control class was given a post test. Post-test was conducted to see effectiveness of the treatment based on the score. The post-test used 10 essay item.

F. The Technique of Data Analysis

In analyzing the data, the writer used Bivariat Comparational Analysis Technique. The technique is used to test the hypotheses whether there is a significant difference between two variables which are tested. Before the writer analyzes the data, it is necessary to calculate the data into the statistic calculation. The writer use t_{test} formula to calculate the data is used t_{test} to find whether there is a significant difference between the score of students achievement in learning reading analytical exposition text by using Small Group Discussion in experimental

class. And the students achievement in learning reading analytical exposition text by using scientific approach in control class. The experiment class is X variable and the control class is Y variable.[3]

The formula of t_{test} is Expressed as follow.

$$= \frac{I_x - M_y}{E\ M_x - M_y}$$
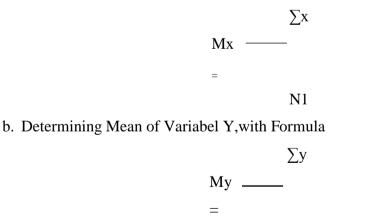
Note :

M_X =Mean of Variabel X

M_Y =Mean of Variabel Y

SE   =Standar Error

Prior Calculation of t_{tes} there are several procedure to be taken.There are as follow.

a. Determining Mean of Variabel X,with Formula

$$Mx = \frac{\sum x}{N1}$$

b. Determining Mean of Variabel Y,with Formula

$$My = \frac{\sum y}{}$$

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c. Determining Standar of Deviation Score of Variabel X,with formula

$$= \sqrt{\frac{\Sigma\ 2}{N1}}$$

d. Determining Standard of Deviation Score of Variable Y, with formula:

$$\Sigma y\, 2 = \sqrt{\frac{\Sigma y\, 2}{N2}}$$

e. Determining Standard Error of Mean of Variable X, with formula:

$$SE_{my} = \frac{SD_X}{\sqrt{N1-1}}$$

f. Determining Standard Error of Mean of Variable Y, with formula:

$$SE_{Mx} = \frac{SD_y}{\sqrt{N1-1}}$$

g. Determining Standar error Different of mean of Variabel X and

Variabel Y with Formula :

$$\text{SE}_{mx-my} = \sqrt{SEmx^2 + SEmy^2}$$

h. Determining t_o with formula:

$$t_o = \frac{M_x - M_y}{SE_{Mx-My}}$$

i. The testing of hyphotesis:

Ha : There is a significant difference mean between variable X and variable Y.

Ho : There is no a significant difference mean between variable X and variable Y.

j. Determing t_{table} in significance level with degrees of freedom. (df):

Df = (N1 + N2) − 2

G. The Procedure of the Research

a. The writer observed the location and population were carried out. The research was done in two classes (experiment class and control class). Before treating the students using Small Group Discussion in experimental class and scientific approach in Control class, the writer administered the pre-test to the students in both classes with the same instrument to know the homogeneity of student's reading analytical exposition text.

b. The treatment was the application of small group discussion in VIII[1] class as the experiment class and control class in VIII[2]. The

presentation of the lesson was done by the writer.

c. Post-test was administered after finishing the treatment. The writer used the same format of test for both of classes. Even though the test instrument was same, students did not realize that would be examined again later. Finally, the writer made a calculation of the result from both of the tests. The further explanation will discuss later.