

CHAPTER III

METHOD OF THE RESEARCH

A. Research Method

Research is activity for getting information and data to present in report. Methodology of the research means theory of method, which is analyses and critically evaluates some problem. In addition, a research is undertaking structured ‘investigation which hopefully result in greater understanding of the chosen interest area. Ultimately, this investigation becomes accessible to the public.¹

There are three types of experiment research and its characteristics as follow :

Table. 3.1

Types of Experiment Research

<i>Types</i>	<i>Characteristic</i>
Pre-experiment	May have pre and post treatment tests, but lacks a control group.
Quasi- experiment	Has both pre and posttests and experimental and control groups, but no random assignment of subjects.
True experiment	Have both pre and posttests,

¹ David Nunan, *Research Methods in Language Learning*, (New York: Cambridge University Press, 1992), 2

experimental and control groups,
and random assignment of
subjects.²

For this research, the researcher used quasi experimental research. According to Ary, Jacob, Irvine and Walker quasi experimental designs are considered worthwhile because they permit researchers to reach reasonable conclusions even though full control is not possible.²

This research used pre-test and post-test design. The researcher take a class as an experimental class, the class is given pre-test, the treatment used diagramming technique in learning and given post-test to measure the treatment is influence or not. Then, the researcher also take second class as a control class, the class is given pre-test, treatment without using diagramming technique in learning and post-test.

B. Place and Time of Research

This research writer take the location in MTs Miftahul Huda Pasirngka, which is located at Jl. Aria Jaya Santika Rt 004/02, Pasirngka, Tigaraksa, Tangerang, Banten. The

² David Nunan, *Research Method in Language Learning* , (New York: Cambridge University Press, 1992), p. 41

³Ary, D., Jacobs, L. C., Irvine, C. K. S., & Walker, D. (2013). *Introduction to research in education*. Cengage Learning. p.316.

researcher choose this location because there are problems that fit the theme of the study and no one has done research related to the problems that researchers do. And this research will be conducted on September to October 2018.

C. Population and Sample

1. Population

The population is the whole object or subject to be studied which will be generalized to be drawn conclusions based on the data obtained. From this study, the population is a class VIII students who received English in MTs Miftahul Huda, which amounted to 131 students.

Table 3.2
Amount of Eighth Class in Mts Miftahul Huda
2018/2019

No	Class	Student
1	VIII-1	29 studnets
2	VIII-2	35 students
3	VIII-3	35 students
4	VIII-4	32 students
Total		131 students

These four classes are deemed necessary as a single population, because of the following similarities:

- a. Students who are in the population are students who are in the same class and semester of class VIII even semester.
- b. All the students received the English subject lesson material with the same syllabus.

2. Sample

The samples taken in this study are two classes. The sampling technique in this research is by cluster sampling technique that is used to select the sample which is group from several groups (groups or cluster). The sample in this study is eighth - one grade (VIII-2) as experimental class and eighth - two grade (VIII-3) as control class.

D. Research Instrument

The instrument for treatment in this research is written test that researcher will give to the students as the exercises during teaching learning process whether in experiment class or control class. In the treatment of the researcher gives instruction to the students in experimental class about the use of peer tutoring method. The researcher gives same written test for control class, but not using peer tutoring method on their learning process.

E. Data Collection and Data Analysis

1. Data Collection

This research is quantitative research, it means that the researcher collects the data by going to the place of research. For gaining the data needed, the researcher uses test technique as instrument of this research. The written test technique will be used to find out the result of students in writing skill of descriptive text material. Besides, the treatment will be given between the pre-test and the post-test. There are some procedures that will be used to collect the data in this research as follows:

a. Pre-test

The pre-test will be given before the treatment is conducted to know how far the students in writing skill of descriptive text, it will be given in the first meeting to find out the students writing in descriptive text material before giving the treatment using peer tutoring method in teaching. There will be the question is essay about descriptive texts.

b. The Treatment

The Treatment will be done after the pre-test. The researcher will teach in experiment class by using peer tutoring method and in control class without using it.

c. Post-test

The post-test will be given to the students after the treatment. The students are given writing test.

This test which is designed to find out the improvement of the students writing skill after being taught using peer tutoring method. The test is same as in the pre-test, There will be the question is essay about descriptive text.

The difference is the researcher gives the treatment in experiment class using peer tutoring method and for control class without it. Finally, the researcher will compare the result of both classes using pre-test and post-test.

2. Data Analysis

To analyze the data collected from the instrument of research that is pre test and post-test, the researcher takes steps as follow:

1. Quantification of the data
2. Choose the sample of the data source
3. Determining mean of pre-test score
4. Making table of frequency distribution of post-test result
5. Determining mean of post-test score
6. Measuring last calculation with t-test, with the following steps:

To know the influence of using diagramming technique in learning teaching to improve students in writing descriptive text material, it can be seen from the result of the t-test. Anas's formula:

1. Determine mean variable X1 with formula

$$M_1 = \frac{\sum X_1}{N_1}$$

2. Determine of variable X2 with formula

$$M_2 = \frac{\sum X_2}{N_2}$$

3. Determine deviation score variable X₁ with formula

$$X_1 = X_1 - M_1$$

4. Determine deviation score variable X₂ with formula

$$X_2 = X_2 - M_2$$

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

$$t = \frac{M_1 - M_2}{\sqrt{\frac{(\sum X_1^2 + X_2^2)(N_1 + N_2)}{(N_1 + N_2 - 2)N_1 \cdot N_2}}}$$

Note :

M₁ = The average score of experiment class

M₂ = The average of control class

X₁ = Sum of the squared deviation score of control class

X₂ = Sum of the squared deviation score of experiment class

N₁ = The number of experiment class

N₂ = The number of control class

df = degree of freedom (N₁ + N₂ - 2)

2 = Consonant number.

F. Research Procedure

The study will conduct about one month in a term. At a beginning of the project, the students administrate a proficiency test and writing pretest. After a brief introduction about the purpose of the study, the students in the experimental group participate in learning use diagramming technique. Next, a writing posttest will give to the students individually. Finally, the scores collect, compute, and analyze by the researcher.