**CHAPTER III**

**METHODOLOGY OF THE RESEARCH**

1. **Method of Research**.

 Research is equally important for social scientists in studying social relationship and in seeking answers to various social problems.[[1]](#footnote-1)

Nunan said that “Experiment is a procedure for testing a hypothesis by setting up a situation in which the strength of the relationship between variables can be stated”.[[2]](#footnote-2) This study employs experiment method. The writer will teach reading in two different classes using two different methods. To find out which method is more effective, in the beginning of the lesson the writer will give the pre-test to the student of both class to find out both group have relatively the same level of competence. In the experiment class the writer teaches reading comprehension using fix-up strategy while in the control class the writer teaches it using explanatory method. At the end of the experiment, the writer will administer post-test to the classes and compare the test result using t-test formula.

1. **The Place and time of the Research**

To examine the using fix-up strategy in teaching reading comprehension this research was held at $8^{th}$ grade of SPM Daar El-Istiqomah Islamic Boarding School, Serang - Banten, $2^{nd}$ semester, and the academic year 0f 2017-2018.

1. **The Population and Sample**

 According to Suharsimi Arikunto, a population is a set (or collection of all elements processing one or more attributes of interest.[[3]](#footnote-3) The population in this research is students of $8^{th}$ grade of SPM Daar El-Istiqomah Islamic Boarding School, Serang – Banten. There are 60 students of $8^{th}$ grade. The eighth grade consists of two classes. Number of VIII.1 is 30 students, VIII.2 is 30 students.

Sample is collecting data with small amount of population that tested at the research. Nunan stated that “sample is a subject of individual or cases from within the population”.[[4]](#footnote-4) In taking sample the researcher use no random technique, because it is one of the characteristic from quasi-experiment.

The writer took all of students at eighth grade. The writer took two classes as sample for the research. First is VIII.A class as experiment class which consists of 30 students and they were taught reading comprehension using fix-up strategy. Second is VIII.B class as control class which consists of 30 students and they also were taught reading comprehension without using fix-up strategy.

1. **The Techniques of Data Collecting**

In techniques of data collecting, writer uses teaching and learning process by giving the test to the students. The writer obtained the data by conducting teaching activity and collecting students’ test scores from both experiment class and controlled class before and after they have been taught reading comprehension. The test was conducted at the first meeting that can be called pre-test and the fifth meeting that can be called post-test which the scores were the result of learning reading comprehension by using fix-up strategy.

 Before giving the test to the students, the writer consulted to the English teacher about the questions she made, whether these questions can be given to the students. The writer gave the same kind of test for both the experimental class and the controlled class.

1. **The Instrument of the Research**

The research instruments used by the writer in collecting data are

1. Pre-Test

The writer did the pre-test when she for the first time entered the class. It is aimed to know the students ability in material of reading comprehension which given by the writer.

1. Post- test

Post-test was done in order to know the changeable on student’s reading comprehension material between learning process with explanatory method and learning process through fix-up strategy

1. **The Technique of Data Analysis**

The technique of analysis data in this research uses t-test. According to Anas Sudijono, Test-t is used for testing the null hypothesis of the mean differences of two sample.[[5]](#footnote-5) Because the quasi experiment use pre-test and post-test then the writer uses this test to measure the final test between experiment class and control class.

The steps for statistic analyze that are[[6]](#footnote-6) :

1. Determining mean of variable x with formula :

$$M\_{1= \frac{\sum\_{}^{}x\_{}}{N\_{1}}}$$

1. Determining mean of variable y with formula :

$$M\_{2= \frac{\sum\_{}^{}y}{N\_{2}}}$$

1. Determining derivation score variable X with formula :

$$\_{x = x\_{- M\_{1}}}$$

1. Determining derivation score variable x2 with formula :

$$\_{y = \_{y- M\_{2}}}$$

 After collecting the data from pre-test and post-test, the researcher analyze it by using statistic calculation of t-test by using fisher formula with significance degree 5% and 1%. The formula is as follow:

$$t= \frac{M\_{1}-M\_{2}}{\sqrt{\left(\frac{\sum\_{}^{}x\_{}^{2}+\sum\_{}^{}y\_{}^{2}}{N\_{1}+N\_{2}-2}\right)\left(\frac{N\_{1}+N\_{2}}{N\_{1}.N\_{2}}\right)}}$$

Notes:

$M\_{1}$ = Mean score of the experiment class

$M\_{2}$ = Mean score of the control class

$\sum\_{}^{}x\_{}^{2}$ = Sum of square deviation score in experiment class

$\sum\_{}^{}y\_{}^{2}$ = Sum of square deviation score in control class

$N\_{1}$ = Number of students of experiment class

$N\_{2}$ = Number of students of control class

$2$ = Constant number

 df = Degree of Freedom (df = $N\_{1}+N\_{2}-2$)

1. C.R. Kothari, *Research Methodology: Method and Techniques* (New Delhi: New Age International, 1990, p.1. [↑](#footnote-ref-1)
2. David Nunan, *Research Method in Language Learning* (New York: Cambridge University Press, 1992, p.230. [↑](#footnote-ref-2)
3. Suharsimi Arikunto, *Prosedur Penelitian*, (Jakarta: Rineka Cipta, 2010), p.173 [↑](#footnote-ref-3)
4. Nunan, *Research Method in Language Learning*,…p.231 [↑](#footnote-ref-4)
5. Anas Sudijono, *Pengantar Statistik Pendidikan*, Jakarta: PT Raja Grafindo, 2014, p.307 [↑](#footnote-ref-5)
6. Anas Sudijono, *Pengantar Statistik Pendidikan*,... p.314 [↑](#footnote-ref-6)