CHAPTER III

RESEARCH METHODOLOGY

A. Research of Method

Method of the research is a quantitative method. According to Creswell that quantitative research is testing objective theories by examining the relationship among variables by using research instruments that produce data with analyzed by statistics.¹ It means the variable of the research can be measured and analyzed to see the effect among variables. In this research there are two variables, variable X and variable Y Three-Column note strategy as (X) variable while speaking ability as (Y) variable.

Moreover, in this research uses experimental research the researcher choose an experimental research because this research using treatment by the purpose to search the effect of certain treatment on others with controlled conditions.² Then, the researcher wants to know the effect Three-Column note strategy on student reading comprehension. In addition, this research using Quasi Experimental by using the pre-test and post-test design by taking one of class as an experimental class

¹ John W Creswell, *Research Design (Qualitative, Quantitative and Mixed Methods Approaches)* (India : Sage Publication, 2014).

² Sugiono, *Metode Penelitian Pendidikan (Pendekatan Kuanititaif, Kualitatif dan R&D)*, (Bandung : Alfabet, 2015), 107.

which given pre-test, the treatment by time Three-Column note strategy and given post-test to measure the treatment is influence or not. And the researcher take second class as a control class, the class is given pre-test, treatment without Three-Column note strategy and post-test.

B. The Place and Time of Research

research was conducted in Madrasah Tsanawiyah Sabilul El-Muhtadin. The time for this research on September until October 2021. The researcher chooses this school because the researcher ever teach at its school as English teacher.

C. Population and Sample

1. Population

The population in this research is students of eigth grade of Madrasah Tsanawiyah Sabilul El-Muhtadin that consists 70 students divided into two classes, Class A consist 35 students as experimental class and Class VIII B consist of 35 students as a controlled class.

2. Sample

The sample consists of two classes from the second grade. Class VIII A consist of 25 students as experimental class and Class VIII B consist of 25 students as a controlled class.

D. The Technique of Data Collecting

For collecting the data, the researcher used classroom observation, test (pre-test and post-test).

A. Observation

The researcher conducted observation directly to the place where the research will going on. The reason was to analyze students' condition in the class and also to know their problems and difficulties in learning English. The purpose of this observation was to get information about students capability in English subject especially in reading comprehension.

B. Pre-test

After getting data from classroom observation, the researcher conducted the pre-test both experimental and control classes. This step was conducted to know the students' reading comprehension before conducting the research and as measurement between two classes. The writer gave students equal text related to subject matter based on the syllabus and lesson plan for the student of first grade. The researcher instructed them to do an exercises on paper given which was related to improving students' reading comprehension.

C. Treatment

During treatment process was used lesson plan. The purpose was to make systematical learning process. This lesson plan was attached. Based on the lesson plan the control class only received the traditional teaching reading while the experimental class received treatment of Three-Column note strategy in improving students' reading comprehension.

D. Post-test

Both experiment and control class have the post-test after giving the treatment for experimental class. It is used to measure the effect of Three-Column note strategy toward students' reading comprehension.

E. The technique of Analysis Data

The technique of analysis data in this research uses t-test. According to Anis Sudijono t-test is used for testing the null hypothesis of the mean differences of two samples.³ Because the quasi experiment use pre-test and post-test then the researcher uses this test to measure the final test between experiment class and control class.

The steps for statistic analyze that are^4 :

³ Anas Sudijono, *Pengantar Statistik Pendidikan* (Jakarta: PT Raja Grafindo, 2014), 278.

⁴ Sudijono, *Pengantar Statistik Pendidikan*, 317.

1. Determining mean of variable X1 with formula :

$$M_{1=\frac{\sum X_1}{N_1}}$$

2. Determining mean of variable x2 with formula :

$$M_{2=\frac{\sum X_2}{N_2}}$$

3. Determining derivation score variable x1 with formula :

$$x_{1=X_{1-M_1}}$$

4. Determining derivation score variable x2 with formula :

$$x_{2=X_{2-M_{2}}}$$

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 :

$$t = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right)\left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

Notes :

- M_1 = Mean score of the experiment class
- M_2 = Mean score of the control class
- $\sum x_1^2$ = Sum of square deviation score in experiment class
- $\sum x_2^2$ = Sum of square deviation score in control class
- N_1 = Number of students of experiment class

<i>N</i> ₂	= Number of students of control class
2	= Constant number
df	= Degree of Freedom (df = $N_1 + N_2 - 2$)