CHAPTER III
METHOD OF THE RESEARCH

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. Time token technique 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 time token technique on student speaking ability. 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 which given pre-test, the treatment by time token technique and given post-test to measure the treatment is influence or not. And the researcher take second

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[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.

class as a control class, the class is given pre-test, treatment without time token technique and post-test.

B. Place and Time of The Research

This research was conducted in SMPN 4 Kota Serang. The time for this research on July to August 2018. The researcher chooses this school because the student is still confused for studying English,

C. Population and Sample

1. Population

   The population in this research is students of First grade of junior high school SMPN 4 Kota Serang that consists 240 students divided into eight classes.

2. Sample

   The sample consists of two classes from the first grade. Class VII A consist of 30 students as experimental class and Class VII E consist of 30 students as a controlled class.

D. Research Instrument

1. **Observation**

   Before doing the research, the researcher does the observation directly to the school which become the place of this research and the population who becomes the object of this research. The researcher uses observation to identify the condition of students in the class and investigate their problem and difficulties in study. The purpose of this observation is to

get information about teaching learning of students in English subject.

2. **Lesson Plan**

Lesson plan is used for treatment process. The purpose is to make systematical learning process. This lesson plan is attached.

3. **Scoring Sheet**

Scoring sheet is used to make the researcher know about the ability of students in speaking. After giving test to the students the researcher has measured and score the result of them by the purpose to analyze the test that was given by researcher. Based on FSI Proficiency Ratings (as cited in Higgs & Clifford, 1982)[3] the scoring sheet as follow:

The rating sheet of listening test

Name : ………………
Class : ………………

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[3] Jack C. Richards and Willy A. Renandya, *Methodology in Language Teaching – An Anthology of Current Practice* (Cambridge: Cambridge University Press, 2002), 316.

Table 3.1

The Criteria of Students' Score

Listening English Weighting Table

Description	Results				Total
Accuracy		3	9	12	
Visual representation		6	5	15	
Symbol and abberviations		4	8	12	
Total					

Letter	Score	Description
A	**83 – 99**	**Very good**
B	**63 – 82**	**Good**
C	**43 – 62**	**Enough**
D	**26 – 42**	**Less**

E. The Technique of Data Collecting

The collecting of data is a systematic procedure and standard obtain the necessary data. For collecting the data in this research, the researcher uses test (pre-test and post-test) and documentation.

1. Pre-test

Before applying the time token technique in experimental class, the researcher gives the pre-test to experiment and control

class in the first meeting to know the initial students' speaking skill.

2. **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 time token technique toward students' speaking ability.

3. **Documentation**

   Documentation was collecting data to see a report that is available. This method is taken some pictures, record video and audio.

   Both the test are assessed by two raters ; by the researcher herself and the English teacher. It is doing to keep the validity and reliability.

F. **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.[4] 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[5] :

   1. Determining mean of variable X1 with formula :

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

[5] Sudijono, *Pengantar Statistik Pendidikan*, 317.

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

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 :

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

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
N_2	= Number of students of control class
2	= Constant number
df	= Degree of Freedom (df = $N_1 + N_2 - 2$)

G. Research Procedure

In general, the procedure of this research can be described as follows :

1. Observation the English teaching activity.
2. Provide pre-test of the experimental class and control class.
3. Provide treatment to the experimental class using time token technique and control class without time token technique as follow :

   a. **Experimental Class**
      1) Preparation
         a) Preparing the lesson plan
         b) Preparing the material
         c) Preparing the token for students' speaking
      2) Implementation
         a) Teacher explain the material
         b) Teacher gives the example
         c) Teacher guide students to make group and discuss the material and give them the token
         d) Teacher guide students to speak the result of discussion by using the token

   b. **Controlled Class**
      1) Preparation
         a) Preparing the lesson plan
         b) Preparing the material
      2) Implementation
         a) Teacher explain the material
         b) Teacher gives the example
         c) Teacher ask the students to speak in front of class

4. Provide post-test of the experimental class and control class.

5. Analyzing the data from pre-test and post-test

6. Drawing the interpretation based on the result of test and making conclusion.