

CHAPTER III

RESEARCH METHODOLOGY

This chapter presents the methodology of research. It focuses on the method used in conducting this research. It covers the method of research, the place of research, research instrument, population and sample, technique of data collection, and technique of data analysis.

A. The Method of Research

“Research is a systematic process of inquiry consisting of three elements or components: (1) a question, problem, or hypothesis, (2) data, (3) analysis and interpretation of data”.¹In this research, the writer uses the experimental method. Experimental research is a research method that test the hypothesis which has the form of cause and effect relation by manipulating which is not caused by other variable. The author will explain the types of experiments and its characters

¹David Nunan, *Research Methods in Language Learning*, (America: Cambridge University press 1992), 3

briefly. First is Pre-Experiment that may have pre and –post treatment, but lack of control group. Second is Quasi Experimental that has both pre- and post-test and experimental and control groups, but no random assignment of subjects. And the last is true experiment that also has pre- and post-test experiment with random assignment of subject. “².

In this research the writer uses quasi experiment research to conduct the study. quasi experimental design has two groups, the first group obtain treatment, while the second group is control. In the design, the treatments’ group (Experimental group) and controls’ group before obtain treatment have pre-test, in this experimental design no carrying out of random. By using quasi experimental design we can know about cause effect relationship and hedge the power of our generalization.

²Nunan, *Research Methods*, 41

B. Place and Time of the Research

In this research the writer takes in Second grade at MTs N 1 Kota Serang, located at Jl. Bhayangkara No. 84. The reason of choose this school are easy to be reached and the writer want to give contribution to this school. Futhermore this school most popular in Serang City and the Students' much give the contributed to they're school. The writer will hold this researcher on the February 2018until this research is finished.

C. Population and Sample

1. Population

According to Arikunto. "Population is the of research subject.³ And according to Nunan "Population is all cases situation or individuals who share one or more characteristic".⁴ The population of this research is the students of MTs N 1 Kota Serang expecially the second grade

³Arikunto, Suharsimi, *Prosedur Penelitian Suatu Pendekatan Praktek*, (Jakarta:Rineka Cipta press, 2002),130

⁴David Nunan, *Research Method in Language Learning*, 231

of students that consists of 8 classes and each class is generally consists of 30-38 students. So the total numbers of population are 304 students. Looking at the number of population, the writer not to take all of them as respondent, because it will take long time and much cost for finishing this study. So the writer takes samples from the population or part of population.

2. Sample

Sample is a part or representative of population being researched. A sample “ a subject of individuals or cases from within a population”⁵. It is called sample research if researcher aims to generalize the result of sample research. It means that the researcher concludes the research as validity of population. The writer takes two classes as sample research by clustering from the first year (VIII F class and VIII H class). F class as experimental class and H class as control class. So the total numbers of population are 60 students.

⁵Nunan, *Research Method in Language Learning*, 232

D. Technique of the Data Collection

There are three techniques to get valid data and objective information.

1. Observation

The writer observed respondent activities and the way of their learning process during the research held.

2. Test

The writer chooses test for the technique of data collection. Test is the way to examine or measure a hypothesis. The researcher needs to make criteria from the data that will be tested. The result of the test can be acquired in form the score. And It is more transparent.

a. Pre-test

Before the researchergives pre test in collect the data.Firstly, the researcher introduce about pronunciation and then gives pre-test to know as long

as students' pronunciation skills before using Homophone Games in teaching pronunciation, there were consisting of 10 instructions to pronounce word. Before I teach pronunciation. I give pre test the students to know students' ability. After I give pre-test then I teach pronunciation through Homophone Games in experimental class and without Homophone Games in control class. The writer teaches audio-visual by asking students to read it aloud in front of the class.

Both experiment class and control class were given the same instructional materials with different technique.

b. Post-test

The researcher gives the post-test to the students when students finished lesson. The researcher do post test as pre test that to know as long as students'

pronunciation skills after using Homophone Games in teaching pronunciation.

So to get the data, the writer uses English rating sheet:

5 = has few traces of foreign accent

4 = always intelligible, though one is conscious of a definite accent

3 = pronunciation problem necessitate concentrated listening and occasionally lead to misunderstanding

2 = very hard to understanding because of pronunciation problem, must frequently be asked to repeat

1 = pronunciation problem so severe as to make speech virtually intelligible.⁶

⁶David P.Haris, *Testing English as a Second Language*, (New York: mcgraw-Hill Inc.,1969), p.84

Table 3.1
Pronunciation Assessment Rubrics

Score	Pronunciation
1 pts	POOR The students present unclear pronunciation. He or she makes too many pronunciation mistakes that interfere with comprehension. (11-12 mistakes)
2 pts	UNCLEAR The students present a pronunciation that sometimes interferes with comprehension. Regularly makes mispronounce (8-10 mistakes)
3 pts	PARTS CLEAR The students present a parts clear pronunciation that helps comprehension. Some mispronounce are made (5-7 mistakes)
4 pts	MOSTLY CLEAR The students mostly present a clear pronunciation that helps comprehension. Very few mispronounce are made (1-4 mistakes)
5 pts	VERY CLEAR The students make no mispronounce

Source: <http://www.rcampus.com/>

Note:

- Pts: Points

3. Technique of Analyzing Data

To analyse the data, the writer will apply the following steps:

1. The result of pre-test in experiment and control class.
2. The result of post-test in experiment and control class.
3. Statistical approach for quantitative data.
 - a) Collecting and scoring the students' test sheet
 - b) Interpreting the students score

To analyse the data, the writer uses t-test, there are several steps in analysing the result of the test.⁷

- 1) Determine D (*Difference*) between score variable I and score variable II. Variable I is given symbol X and Variable II is given symbol Y . $D = X - Y$

⁷AnasSudijono, *PengantarStatistikPendidikan*, 23th Edition (Jakarta : PT RajaGrafindoPersada, 2014) 306-307.

- 2) Sum D, to gain $\sum D$
- 3) determine the mean of difference, by the formula:

$$M_D = \frac{\sum D}{N}$$

- 4) Squaring D, then sum it to gain $\sum D^2$
- 5) Determine the standard deviation, as follow:

$$SD_D = \sqrt{\frac{\sum D^2}{N} - \left(\frac{\sum D}{N}\right)^2}$$

- 6) Determine the mean of differences (SE_{MD}) by the formula:

$$SE_{MD} = \frac{SD_D}{\sqrt{N-1}}$$

- 7) Determine the result of t_0 by the formula:

$$t_0 = \frac{M_D}{SE_{MD}}$$

- 8) Determine the degree of freedom:

$$Df = N-1$$