

CHAPTER III

METHOD OF THE RESEARCH

A. Research Method

In this research, the writer will use experimental research because the researcher to know how the use of english phonemic chart to improve students' pronunciation. Experimental reserch is a research method that test the hypothesis which has the form of cause and effect relations between variables. Experiments are carried out in order to explore the strength of relationship between variables.¹

Experimental research divided into three types. In this chapter, the writer will explain that and its characteristic briefly. First is pre-experiment that may have pre- and post treatment, but lacks 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 subjects.² From that explanation, the writer uses quasi experiment. According to Sugiono quasi experimental design used because actually it difficulties to get control group that

¹ David Nunan, *Research Method In language Learning* (USA : CambridgeUniversity Press, 1992), p. 24-25

² David Nunan, *Research Methods in Language Learning*, p. 41

used for researching.³ So there will be two classes between experiment and control class.

In applying this research, the writer teaches pronunciation through interactive english phonemic chart media as experimental class and teaches pronunciation without phonemic chart media as control class. In order the writer to know further Teaching Pronunciation Through Interactive English Phonemic Chart.

The presentation of the design in a follow :

T₁ X T₂

T₁ : Pre-Test

T₂ : Post-Test

X : Treatment

Experimental Research Design

Group	Pre-Test	Treatment	Post-Test
Control	√	-	√
Experimental	√	√	√

³ Sugiono, Metode Penelitian Pendidikan (*Pendekatan Kuantitatif, Kualitatif, and R &D*). Bandung: Alfabeta. 2015, p. 114

B. Place and Time

In research activity, the writer will take place for research at Eight Grade of SMP Negeri 2 Balaraja, Kabupaten Tangerang, which is located on Jalan Raya Kresek, No. Km, 2, Saga, Balaraja, Tangerang, Banten 15610. Because the writer knows in SMP Negeri 2 Balaraja some problems that happen with students in English skills especially in speaking skill of students' pronunciation. The research started from April 29th May 14th 2019.

C. Population and Sample

1. Population

In this research method in language learning which David Nunan say that "a population is all cases, situation or individuals who share one more characteristics."⁴ The population in this research is the students in the eight grade at SMP negeri 2 Balaraja are 360 students'. They are divided into nine class.

2. Sample

The sample is part of the number and characteristics of the population.⁵ Or sample is a small proportion from a population which should be examined, chosen or established for analysis requirement. It is simply understood that the sample may generalize the final conclusion. The writer takes subjects as the sample in this

⁴ David Nunan, *Research Method In language Learning*, p. 114

⁵ Sugiyono, *Metode Penelitian Manajemen*, Cetakan ke-5, (Bandung: Alfabeta, 2016), p.

research as many as 80 students. 40 students of experimental class and 40 students from VIII A and students from VIII B.

The writer uses random sampling to get data from two classes at the eight grade. The total students consists part of the research are 80 students. Consists of 40 students from VIII A and 40 students from VIII B.

D. The Research Instrument

Research instrument is for fasilitation that use by writer to collect the data. Researcher uses test to know the students' pronunciation. The instrument is a process of selecting or developing device and method appropriate to give evaluation and getting the data.

1. Pronunciation Pre-test and Post-test

To know the use phonemic chart to improve students' pronunciation the writer will give the speaking test to the students. Every students will receive the instructions or questions, an then she/he gives respon. Based on that activity, the writer will calculate the students' pronunciation result and analyze it. Because with this test the writer will to gives the score of pronunciation of speaking.

The writer will give two kind of test, there are as follows :

a. Pre-test :

The test that is given to both of control class before giving treatment non phonemic chart as a media and experiment class before given treatment with phonemic chart as a media.

b. Post-test :

The test that is given to both of control class after given the treatment non phonemic chart as technique and experiment class after given treatment with phonemic chart as a technique.

2. Rubric of Pronunciation Assessment

Table 3.1
Pronunciation Assessment⁶

No	Aspect	Points
1	Frequent phonemic errors and foreign stress and intonation patterns that cause the speaker to be unintelligible	0.0-0.4
2	Frequent phonemic errors and foreign stress and intonation patterns that cause the speaker to be occasionally unintelligible	0.5-1.4
3	Some consistent phonemic errors and foreign stress and intonation patterns, but the speaker is intelligible	1.5-2.4
4	Occasional non-native pronunciation errors, but the speaker is always intelligible	2.5-3.0

E. The Technique Data Collection

Collecting data is an important thing in this research that can be determine. The technique data collecting will use this research is:

⁶ H. Douglas Brown. *Language Assessment: Principles and Classroom Practice* (The United States: Longman.com, 2004), p. 47

1. Test

a. Pre-test

Before the writer gives pre-test to collect the data firstly, introduce about pronunciation and then gives pre-test before using phonemic chart to know students' pronunciation ability at Second Grade of SMP Negeri 2 Balaraja before using phonemic chart to improve students' pronunciation. In the pre-test, the writer gives 10 instructions to pronounce words.

b. Teaching and phonemic chart

After the writer gives pre-test then teach pronunciation through phonemic chart in experimental class and without phonemic chart in control class. Both the experimental class and control class will give the same instructional materials with different technique:

The writer give some steps in teaching pronunciation for the experimental class and control class, as follow:

1. Teaching by using phonemic chart media in the experimental class :
 - The teacher shows some symbols that contain about the vocabulary noun and adjective.
 - The students see the phonemic chart.
 - The teacher says the word in the phonemic chart and the students see how to read it in the phonemic chart.

- The teacher repeats to pronounce the vocabulary and the students follow it.
- The teacher gives test with some activity by using phonemic chart.
- That activity can motivate the students to learn more pronunciation and help them to brave in speaking.

2. Teaching by using phonemic chart media in the control class

- The teacher gives some vocabularies and how to pronounce it about the vocabularies that are noun and adjective.
- The teacher says the word and the students follow it.

c. Post-test

After the writer gives pre-test and teaching material than gives post-test after using phonemic chart in learning English, the writer can know the result how phonemic chart to improve students' pronunciation.

F. Technique of Data Analysis

To analyze the data, the writer will use Quantitative technique. To analyze the data for pronunciation in experimental class and control class. So, to find out significant the influence of using phonemic chart to improve students' pronunciation, the use variable of research.

Pronunciation ability in experimental class as the X variable and control group as the Y variable. The writer used t-test to know whether the

students' achievement from the experiment or controlled class in learning pronunciation through interactive english phonemic chart.

In this case, the writer will use the second formula or *fisher formula* according to Sudjiono (2012) for computing the *t-value* would look like this:

$$t_0 = \frac{M_1 - M_2}{\sqrt{\left(\frac{\Sigma x_1^2 + \Sigma x_2^2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

Notes:

t_0 = t observation

M_1 = Mean score of the experiment class

M_2 = Mean score of the control class

Σx_1^2 = The sum of square deviation score in the experiment class

Σx_2^2 = The sum of square deviation score in the 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 ($df = N_1 + N_2 - 2$)

First, to adjust to the symbol used in the fisher formula:

Variable I is given the symbol X_1 , the variable II is given the symbol X_2 , and the deviation score of Variable I is given the symbol x_1 , and the deviation score of Variable II is given the symbol x_2 .⁷

Next the writer will take the square root of the result:

1. Determining Mean of variable X_1 with formula :

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

2. Determining Mean of variable X_2 with formula :

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

3. Determining derivation score variable X_1 :

$$x_1 = X_1 - M_1$$

4. Determining derivation score variable X_2 :

$$x_2 = X_2 - M_2$$

5. The squaring of X_1 , then add up; obtained $\sum x_1^2$

6. The squaring of X_2 , then add up; obtained $\sum x_2^2$

7. Determine t_0

$$t_0 = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

8. Determining t-table in significance level 5% and 1% with df:

$$df = N_1 + N_2 - 2$$

⁷ Anas Sudjiono. *Pengantar Statistik Pendidikan*, (Jakarta: Rajawali Pers, 2012), p. 317