# CHAPTER III METHODOLOGY OF THE RESEARCH

This chapter consist of research design, location and duration of the research, population and sample, instrument and procedure of collecting data and technique of data analysis.

## A. Research design

The researcher was used quantitative research by using experimental design in this research. The form of research design is research with an experimental approach a *Pre-Experimental* research design *Designs* in the form of *One-Group Pretest-posttest Designs* comparing with the circumstances before being treated.

Experimental research is the core method of existing research. This because in this method the researcher conducted research with three requirements that must be met. The three requirements, namely controlling activities, manipulate, and observe. In experimental research there is testing hypothesis to determine the conditions after manipulation, for example in the form of a treatment.<sup>1</sup>

The data obtained from this study will be analyzed using quantitative approach. Quantitative research is measuring data with using objective statistics through scientific calculations derived from the sample people or residents who are asked to answer a number of questions about the object of research to determine the frequency and presentation of responses they.

Table 3.1: *pre-test* and *post-test* designs

 $O_1\,X\,O_2$ 

<sup>&</sup>lt;sup>1</sup>Syamsuddin dan Vismaia S. Damaianti, *Metode Penelitian Pendidikan Bahasa*, (Cet, VI: Bandung: Raja Rosdakarya, 2015), p. 22.

Where:

O<sub>1</sub>: Pretest (Before given the treatment)

X: Treatment

O<sub>2</sub>: Post-test (After treatment)<sup>2</sup>

## B. Location and Duration of the Research

This research was conducted in Lintasan Imajinasi Bahasa Mahasiswa (LIBAM) IAIN Parepare and it was taken duration about a month.

# C. Population and Sample

# 1. Population

The population in this research are the members of Lintasan Imajinasi Bahasa Mahasiswa (LIBAM) IAIN Parepare. LIBAM has a total of 258 members, consist of 176 female and 82 male. Researchers take 20 members as a population of the total number of members that exist.

## 2. Sample

The researcher used simple random sampling consist of 20 members of LIBAM. It is said to be simple because the sampling of members of the population is done randomly without paying attention to the existing strata in the population. This method is done when members of the population are considered homogeneous.<sup>3</sup>

The researcher choose simple random sampling as the sampling technique because at the time of sampling the researcher only classified LIBAM members from the Tarbiyah faculty, the researchers did not classify

<sup>&</sup>lt;sup>2</sup>Jakni, *Metode Penelitian Eksperimen Bidang Pendidikan* (Cet. I; Bandung: Alfabeta, 2016),

p. 70. Sugiyono, *Metode Penelitian Manajemen*, (Bandung: Alfabeta, 2016), p. 152.

the population based on the batch or semester the LIBAM members were the population.

## **D.** Procedure of Collecting Data

Every research carried out will certainly use several techniques and research instruments, which is expected Technique and instrument from each other to strengthen so that the data obtained from the field is truly valid and authentic.

Research instruments are tools or facilities used by researchers in collect data so that the job is easier and the results are better, in a sense more accurate, complete, and systematic so that it is easier to process. In each study, several research instruments are often used to obtain data is in the field. The techniques and instruments used in this study are:

#### a. Pre-Test

Pre-Test preliminary test administered to determine a student's baseline knowledge or preparedness for an educational experience or course of study. The researcher gave a pre-test to the students for the first time before treatment. This test was used to find out the students' pronunciation before conducting the treatment.

#### b. Treatment

In treatment, the researcher doing some activities as follow:

- 1. The First Meeting (Consonants p/, b/,t/,d/)
  - a. The researcher gave a greeting to the students.
  - b. The researcher gave motivation to the students before giving the materials.
  - c. The researcher explained pronunciation and BBC Learning English application.

- d. The researcher started to point the word that has prepare and the students spell the word with their spell way.
- e. The researcher listened and correct the spell with a point the syllable to syllable alike with the word have been students incorrectly spell on the BBC Learning English application.
- f. The researcher shows the tutorial from the application. After that, the students repeated correctly.
- g. The researcher tried to move the pointer to other words.
- h. Students did spelling
- i. The researcher listened carefully and correct if there is some pronounce is wrong at the researcher's hearing. The same way with step e.
- j. Students repeated correctly after the researcher shows the tutorial from the BBC Learning English application.
- k. The researcher gave some words as the exercise for the students to pronounce.
- 2. The Second Meeting (Consonants /k/, /g/, /f/, /v/)
  - a. The researcher gave a greeting to the students.
  - b. The researcher gave motivation to the students before giving the materials.
  - c. The researcher tested the students related to consonant pronunciation on the previous material.
  - d. The researcher explained the materials.
  - e. The researcher started to point the word that has prepare and the students spell the word with their spell way.

- f. The researcher listened and correct the spell with the point the syllable to syllable alike with the word have been students incorrectly spell on the BBC Learning English application.
- g. The researcher shows the tutorial from the application. After that, the students repeated correctly.
- h. The researcher tried to move the pointer to other words.
- i. Students did spelling.
- j. The researcher listened carefully and correct if there is some pronounce is wrong at the researcher's hearing. The same way with step e.
- k. Students repeated correctly after the researcher shows the tutorial from the BBC Learning English application.
- 1. The researcher gave some words as the exercise for the students to pronounce.
- 3. The Third Meeting (Consonants /  $t\int /, /j/, / \int /, / 3 /$ )
  - a. The researcher gave a greeting to the students.
  - b. The researcher gave motivation to the students before giving the materials.
  - c. The researcher tested the students related to consonant pronunciation on the previous material.
  - d. The researcher explained the materials.
  - e. The researcher started to point the word that has prepare and the students spell the word with their spell way.
  - f. The researcher listened and correct the spell with the point the syllable to syllable alike with the word have been students incorrectly spell on the BBC Learning English application.

- g. The researcher showed the tutorial from the application. After that, the students repeated correctly.
- h. The researcher tried to move the pointer to other words.
- i. Students did spelling.
- j. The researcher listened carefully and correct if there is some pronounce is wrong at the researcher's hearing. The same way with step e.
- k. Students repeated correctly after the researcher shows the tutorial from the BBC Learning English application.
- 1. The researcher gave some words as the exercise for the students to pronounce.
- 4. The Fourth Meeting (Consonants /s/, /z/, /l/, /r/)
  - a. The researcher gave a greeting to the students.
  - b. The researcher gave motivation to the students before giving the materials.
  - c. The researcher tested the students related to consonant pronunciation on the previous material.
  - d. The researcher explained the materials.
  - e. The researcher started to point the word that has prepare and the students spell the word with their spells way.
  - f. The researcher listened and correct the spell with the point the syllable to syllable alike with the word have been students incorrectly spell on the BBC Learning English application.
  - g. The researcher shows the tutorial from the application. After that, the students repeated correctly.
  - h. The researcher tried to move the pointer to other words.

- i. Students did spelling.
- j. The researcher listened carefully and correct if there is some pronounce is wrong at the researcher's hearing. The same way with step e.
- k. Students repeated correctly after the researcher shows the tutorial from the BBC Learning English application.
- 1. The researcher gave some words as the exercise for the students to pronounce.
- 5. The Fifth Meeting (Consonants /m /, /n /, / $\eta$ /, / $\theta$ /)
- a. The researcher gave a greeting to the students.
- b. The researcher gave motivation to the students before giving the materials.
- c. The researcher tested the students related to consonant pronunciation on the previous material.
- d. The researcher explained the materials.
- e. The researcher started to point the word that has prepare and the students spell the word with their spells way.
- f. The researcher listened and correct the spell with the point the syllable to syllable alike with the word have been students incorrectly spell on the BBC Learning English application.
- g. The researcher shows the tutorial from the application. After that, the students repeated correctly.
- h. The researcher tried to move the pointer to other words.
- i. Students did spelling.

- j. The researcher listened carefully and correct if there is some pronounce is wrong at the researcher's hearing. The same way with step e.
- k. Students repeated correctly after the researcher shows the tutorial from the BBC Learning English application.
- 1. The researcher gave some words as the exercise for the students to pronounce.
- 6. The Sixth Meeting (Consonants  $/ \eth /, /h /, /w/, /y/)$ 
  - a. The researcher gave a greeting to the students.
  - b. The researcher gave motivation to the students before giving the materials.
  - c. The researcher tested the students related to consonant pronunciation on the previous material.
  - d. The researcher explained the materials.
  - e. The researcher started to point the word that has prepare and the students spell the word with their spells way.
  - f. The researcher listened and correct the spell with the point the syllable to syllable alike with the word have been students incorrectly spell on the BBC Learning English application.
  - g. The researcher shows the tutorial from the application. After that, the students repeated correctly.
  - h. The researcher tried to move the pointer to other words.
  - i. Students did spelling.
  - j. The researcher listened carefully and correct if there is some pronounce is wrong at the researcher's hearing. The same way with step e.

- k. Students repeated correctly after the researcher shows the tutorial from the BBC Learning English application.
- 1. The researcher gave some words as the exercise for the students to pronounce.

### c. Post-Test

Post-test is a test that gave after a lesson or a period of instruction to determine what the students have learned after the treatment. The post-test is used to find out the students' progress in pronunciation after giving the treatment and the steps the same as the steps in the pre-test.

- 1. The researcher gave a greeting to the student.
- 2. The researcher distributes the instrument sheet of the post-test to the students.
- 3. The researcher explains to the students about the procedure of the post-test.
- 4. The researcher gave time for 5 minutes to the students to learn the instrument of the post-test.
- 5. The researcher asked the student one by one to come forward. They pronounce the words which are in the instrument and the researcher recorded them. The result was analyzed to know the students' pronunciation ability before conducting the treatment.
- 6. The researcher collected the instrument sheet of pre-test from the students.

#### E. Instrument

## 1. Test

The test is a series of questions or exercises and other tools that are used to measure the skills, knowledge of intelligence, abilities or talents

owned by individuals or groups using BBC Learning English to determine whether or not the use of the media is effective in increasing capacity pronouncing consonant letter correct for students.

#### 2. Documentation

Documentation is a data collection technique by collecting images or taking data obtained through documents conducted by researchers.<sup>4</sup> This is done to prove that the researcher really did the treatment during the data collection process.

# F. Technique of Data Analysis

Data analysis is the process of organizing and sorting data into patterns, categories, and a basic description so that themes can be found and formulated working hypothesis as suggested by the data. The data analysis technique used by the researcher is a quantitative analysis technique, where the researcher analyzed collected data, process data, and draw conclusions from these data as well as describe or report what happened at the research location. Data collected then analyzed by quantitative analysis.

Furthermore, the researcher determined the level of mastery of students on the test results obtained as follows:

Table 3.2 Classification Students' Score

No.	Classification	Grade
1	Excellent	90 – 100
2	Very Good	80 – 89
3	Good	70 – 79

<sup>&</sup>lt;sup>4</sup>Husaini Usman, Purnomo Setiady Akbar, Metode Penelitian Sosial (Cet. IV; Jakarta: PT Bumi Aksara, 2006), p. 73

5	Fair	< 69 <sup>5</sup>
_	_ **	

Data analysis was performed in tabular form using the formula as following:

$$Result = \frac{the\ number\ of\ student}{the\ number\ of\ questions}\ x\ 100$$

Then analyzed using the following formula:

$$P = \frac{F}{N} \ 100\%$$

Where:

P: percentage

F: Frequency

N: The total number of sample<sup>6</sup>

Furthermore, the researcher look for the average value of students who have been obtained using the formula:

$$\overline{X} = \frac{\sum x}{n}$$

Where:

X: Average value

 $\sum X$ : The sum of all score

n: The total number of sample<sup>7</sup>

After looking for the students' average value, the writer looks for the standard value deviation using the following formula:

$$SD = \sqrt{\frac{\sum X^2 - \frac{(X)^2}{N}}{N-1}}$$

<sup>&</sup>lt;sup>5</sup>Nanang Fattah, *Analisis Kebijakan Pendidikan*, (Bandung: PT Remaja Rosdakarya, 2013), p.

<sup>59 &</sup>lt;sup>6</sup>Anas Sudjono, *Pengantar Statistik Pendidikan*, (Cet. X; Jakarta: Raja Grafindo Persada, 2000), p. 40-41.

<sup>&</sup>lt;sup>7</sup>Sutrisno Hadi, *Statistik* (Cet. III; Yogyakarta: Pustaka Pelajar, 2016), p. 46.

Where:

X = Average value

N =the total number of sample

SD= the standard derivation<sup>8</sup>

After looking for the standard deviation value, the researcher then conducted the test hypothesis to determine the effectiveness of BBC Learning English Application in improving abilities students' pronunciation in English consonant it is necessary statistically tested using the following formula:

$$t = \frac{D}{\sqrt{\frac{D^2 - \frac{(\sum D)^2}{N}}{N(n-1)}}}$$

Where:

D = Derivation

 $\Sigma = \text{Jumlah N}$ 

 $\Sigma$  = The sum of the score

N =the number of samples

 $T = Counted^9$ 

 $^8 \mathrm{Nana}$ Sudjan, Penelitian Hasil Proses Belajar Mengajar (Bandung: PT Rosdakarya, 2009), p. 109.

<sup>&</sup>lt;sup>9</sup>Suharsimi Arikunto, *Manajemen Pnelitian* (Cet. III; Jakarta: Rineka Cipta, 1995), p. 445.