

CHAPTER III

THE RESEARCH METHOD

This part describes about the description of the research design, location of the research, population, sample, instrument of research, and procedure of collecting data.

A. Research Design

This study used a pre-experimental design with a pre-test and post-test design.

The design is as follows:

$$E = O_1 X O_2$$

Where:

E : Experimental

X : Treatment

O₁ : Pre-test Value

O₂ : Post-test Value¹

B. Location and Duration of the Research

The location of the research took a place at Lorong Belajar Pinrang. The researcher used the quantitative research that has several times to collect and analyze data. So, the researcher took one month for collecting the data.

C. Population and Sample

1. Population

The population in this study was students of the Lorong Belajar Community. Consists of 28 students, where students in the learning hall were divided into two

¹ Sugiyono, "Metode Penelitian", (Bandung: Alfabeta, 2015), p.111

levels, namely the beginner level with 15 students, while the elementary level with 13 students.

Table 3.1 The total Students of Lorong Belajar Pinrang

No	Class	Sex		Total
		Male	Female	
1.	Level Beginner	6	9	15 Students
2.	Level Elementary	2	11	13 Students
TOTAL				28 Students

2. Sample

There were two levels as population. The sample was taken by using purposive sampling technique. The researcher used one level at Lorong Belajar Pinrang because the beginner levels at Lorong Belajar Pinrang ready for receiving the method. Sugiyono explained that purposive sampling is a sampling technique with certain considerations.² The purpose of this research is improving students' vocabulary by using hot seat game, that the students' in level beginner which is consisted of 15 students need the treatment because almost all of students lack participation in the class and difficult to communicate in English.

D. The Instrument of the Research

In this study, researcher used a vocabulary test as an instrument. To make it clear, the details can be shown as follow:

1. Vocabulary Test

The test is distributed to measure the students vocabulary. The test is divide into two test. They are pre-test give before treatment and post-test gave after doing the

² Sugiyono, "Metode Penelitian", (Bandung: Alfabeta, 2015), p.85

treatment. Each the consists of 8 numbers multiple choice, 7 numbers fill the blank the name of picture, and 5 numbers matching.

A. Procedure of Collecting Data

In collecting the data, the researcher gave some steps for the students as follow:

1. Pre-Test

Before doing the treatment, the researcher gave students a pre-test as an initial activity. A pre-test was gave to students by giving them several vocabulary tests. The researcher was gave 8 numbers multiple choice questions, 7 numbers fill the blank the name of the picture, and match the picture 5 numbers questions to students according to the learning design implementation material. After giving the pre-test the researcher checked the students' work to find out what the students lack in vocabulary. After that, researchers provided treatment with hot seat games to improve their vocabulary.

2. Treatment

After giving pre-test, the researcher was gave a treatment to the students by using hot seat game. The treatment process would be conducted for four meetings

In the first meeting, the researcher explained about the hot seat game and how to play hot seat game that will be used in the class, and divided into several groups maybe 3-4 groups. The researcher showed the first material about “Vocabulary of Adjective”, and the researcher gave the list of vocabulary. After that, the researcher showed the picture related the topic, read the vocabulary and the students repeated it. The researcher gave a five minutes to the students to memorized and understand vocabulary. And then the researcher asked all of the students to make a sure that the students have known about vocabularies. After students understand the material that

has been given and the rules for playing the hot seat game, the researcher then starts playing the game according to the rules described. The last, after all the students play the hot seat game, the researcher will show the picture related to the material again. Ask the students one by one to guess the picture according to the material that has been studied.

In the second and the third meeting, actually the steps are the same as in the first meeting, but at the second meeting and the next meeting the researcher went straight to the material to be taught without explaining further about the hot chair game. The material about “Vocabulary of Noun”, but in the second meeting discussed about “Person and Profession”, and then at the third meeting discussed about “Animals”.

In the fourth meeting, the material discussed about “Vocabulary of Adjective”. The steps are still the same as the previous steps. After treatment or the last meeting, the researcher gave the students post-test to see improvement students’ vocabulary.

3. Post-Test

After the treatment, the researcher gave a post-test to the students to improved the students' vocabulary. It is used to check the results of treatment, it is also useful to find out whether hot seat games are effective for use in teaching vocabulary. The post-test has the same procedure as the pre-test.

B. Technique of Data Analysis

Data collected through testing that has been analyzed through quantitative analysis using static calculations to test hypotheses. Proceed as follows:

1. Scoring the students’ answer

$$\text{score} = \frac{\text{correct answer}}{\text{Total number of items}} \times 100$$

No.	Classification	Score
1.	Very Good	86-100
2.	Good	71-85
3.	Fair	56-70
4.	Poor	41-55
5.	Very Poor	≤ 40

2. Cl
 assifying
 the score
 five levels
 classificati
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follow:

Table 3.2 Classification students' score

(Dirjen Pendidikan Dasar dan Menengah)³

3. Finding out the mean score would use the following formula:

$$\bar{x} = \frac{\sum x}{N}$$

where:

³ Dirjen Pendidikan Dasar dan Menengah, Peraturan Direktorat Jendral Pendidikan Dasar dan Menengah Tentang: *Penilaian Perkembangan Anak Didik* (Jakarta: Depdiknas, 2005), p.2

\bar{x} : Mean Score

$\sum x$: Total Score

N : The total number of sample⁴

4. Calculating the rate percentage of the students score:

$$p = \frac{n}{N} \times 100\%$$

Where:

p : Percentage

n : Frequency

N : The total respondent⁵

5. Finding out the standard deviation by using the following formula:

$$SD = \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{n}}{n-1}}$$

Where :

SD : Standard Deviation

$\sum x^2$: The sum all square

n : The total number of students

$(\sum x)^2$: The sum square of the sum square

6. Finding out the difference of the mean score between pre-test and post-test by calculate the T-test value using the following formula:

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

⁴ Suharsimi Arikunto, "Dasar-Dasar Evaluasi Pendidikan, Edisi Revisi", (Jakarta: Bumi Aksara, 2009), p.298

⁵ Munawir, "Improving the Students' English Vocabulary at the Second Year of SMP Negeri 3 Kahu by Using Whispering Game", (UIN: 2010)

Where:

- t : Test of significant
- D : The mean score of difference (X1-X2)
- $\sum D$: The sum of the total score
- $\sum D^2$: The square of the sum score of difference
- N : The total sample⁶



⁶ Gay L.R, “*Educational Research, Competencies for Analysis and Application Second Edition*”, (Columbus: Charles E Merrill Company, 1981), p.331