CHAPTER III
RESEARCH METHOD

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

A. Research Design

In this research, the researcher used a pre-experimental method by applying one group pre-test, treatment and post-test design, this presented as follow:

$$E = O1 \ X \ O2$$

Where:

E   =   Experimental

O1   =   pre-test

X   =   treatment

O2   =   post-test[1]

In this experimental design, the differences were seeing in pre-test and post-test result of the students' achievment when the treatment was applying in classroom.

B. Location and Duration of the Research

The researcher would be conducted in SMPN 8 Parepare by focusing at the second year students of SMPN 8 Parepare. There were 5 classes in second grade, but the researcher only took one class. The duration of the research was taken almost one month. The research started on 1st of October.

C. Population and Sample

1. Population

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[1] Sugiono, *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D)* (Bandung: Alfabeta, 2010), p.110-111

The population of this research was the second year student's of SMPN 8 Parepare . The total of population were 144 students. The researcher only took one class 8.2 from 5 classes in SMPN 8 Parepare. There were 29 students in this class.

2. Sample

The technique of sampling that was used in this research was cluster sampling. Which the sample consist of one class. The number of the students for the sample was 29 students from class 8.2. The researcher gave short video in Whatsapp group to make sure the sample was taken clearly by the students.

D. Instrument of the Research

Researcher delivered test to identify the students'vocabulary ability. There was multiple choice. This multiple choice that used to measure the students' vocabulary ability. This test applied in pre-test and post-test.

E. Procedure of Collecting Data and Data Analysis

In collecting data, the researcher would give the students some steps as follows:

1. Multiple Choice

Because of Covid 19 the researcher could not conducted the test in the classroom. All students studied at their home, they learned using E-Learning method. So, the vocabulary test would be conducted via google form. The multiple choice consist of 10 questions abaout vocabulary. The researcher would share the link for students by Whatsapp in group. All the students should answer the questionnaire correctly and completely.

2. Google meet

After informed the students to fill the questionnaire, the resear her would invite them to join in Google meet in order to the researcher could introducing herself and keep in touch with them. In this method, the

researcher could point one by one students who really pay attention as long as the researcher explained about the material.

F. The Technique of Data Analysis

1. Vocabulary test

The data would collect through the test analyzed quantitatively in percentage to measure the students' achievement. This quantitative analysis employed statically calculation to test the hypothesis. The steps are:

a. Scoring the students' answer

$$Score = \frac{students\ correct\ answer}{The\ Total\ Number\ of\ Item} X\ 100$$

b. Classification the students' score based on the following classification

Table: 1.1 Classification of the Score

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

(Suharsimi Arikunto, Dasar-Dasar Evaluasi Pendidikan[2]

The students should memorize approximately 50 vocabulary from noun and verb before join in English material classroom.

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[2]Suharsimi Arikunto, *Dasar-Dasar Evaluasi Pendidikan* (edisi revisi), (Jakarta: PT. Bumi Aksara, 2005), p.245.

2. Finding out the mean score of pre-test by using the following formula :

$$X = \frac{\sum E}{N}$$

In which:

X = Mean score

∑E = Total f row score

N = Number of Students[3]

3. Calculating the mean score of difference between pre-test and post test by using following formula :

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

In which:

D   = the mean score of difference

∑D   = the total scores of difference between pre-test and post-test

　　　$(X^1 - X^2)$

N   = Total sample

4. Formulating ut the difference by calculating the T-test value by using the following formula :

Notation:

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[3]L.R. Gay, *Educational Research* (New York: Charles Merril Publishing Company, 1987), p.298.

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

T   : the test of significance

D   : the mean score of difference (X1-X2)

$\sum$D   : the sum of the total score

$\sum$D2 : the square of the sum score of difference

N   : the total sample