

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design.

In this research, the researcher used Ex Post Facto design with quantitative approach. Ex Post Facto research is defined to find causal relationships without manipulated or treated (designed and implemented) by researchers. Furthermore, it is defined that ex post facto research is carried out on the program, activities that have taken place or have taken place. Ex post facto research has no variable control and usually no pre-test.¹

The researcher used ex post facto. Ex Post Facto is taking the data which have been existed. Ex Post Facto will use if we cannot do treatment or go down directly in the field. So this research used the Ex Post Facto which only focuses on taking grades of students who have learned procedural text using a quantitative approach.

Researchers did not control the treatment group. In this case the researchers only get the data on the impact of dependent variables on dependent variables studied from the teacher.²

According to Sugiyono quantitative is a research that explaining phenomena with collecting numerical data that analyze using statistical calculated by examine the population or particular sample.³

B. Location and Time

1. Research Location

The location of the research conducted at SMK Muhammadiyah Parepare, Muhammadiyah street No. 8, Ujung Lare, Soreang District, and South Sulawesi.

¹Sukmadinata, Nana Syaodih, “*Metode Penelitian Pendidikan*”. (Bandung:PT. Remaja Rosdakarya, Cet, Kedua, 2005). p.89.

²Evatul Jannah Mustahat. “*The Using of Fix up Strategy in Reading Skill at M.Ts.P.PYasrib Lapajung Soppeng*”. (State Islamic Institute; 2020). p. 23.

³ Indah kemala Tawarnate, “*The Use of Teacher-Made Videos to Improve Students’ Achievement in Writing Procedure Text*”, (Universitas Islam Negeri Ar-Raniry Darussalam-Banda Aceh: 2018). p. 20.

2. Research Time

The implementation of this research carried out around \pm 1 month and adjust to the research needs.

C. Population and Sample

1. Population

The population in this research took all students of class SMK Muhammadiyah Parepare, where are divided two classes, namely TAV (Teknik Elektro Audio-Video) and TKJ (Teknik Komputer Jaringan). The number of population as shown in below:

Table 3.1 The Total of Population

No.	Class	Male	Female	Total
1.	XI (TAV)	12	-	12
2.	XI (TKJ)	9	3	12
Total				24

2. Sample

The technique of sample used total sampling technique. Which is a sampling technique when all members of the population is using as the sample. The researcher took two classes for the sample because each class consists of 12 students. So the total of this sample in research is 10 students.

D. The Instrument of the Research

1. Documentation

The researcher used document (students' writing score). Documents provided valuable information which helped the researcher to understand central phenomena in quantitative studies. The researcher analyzed the documents for the accuracy, completeness, and usefulness in answering the research questions. In this case, the

researcher took students' writing score from the teacher. Then the researcher analyzed the test items refer to the aspect of writing skill.⁴

A. Technique of Collecting Data

1. Documentation Technique

Documentation may refer to particular individuals, as with school records and reports about pupils, or may concern more „macro“ issues, as with one of Her Majesty's Inspectorate reports on the physical state of schools, it can have a number of features. For the example, they may be made up exclusively of written words, or they may include statistics, as in a survey research report. It means that documentation is note of information in the form of documentation.⁵

In collecting the data, the researcher used the document (students' writing score). The researcher took the students' writing scores which conducted from examination in the eleventh class from the teacher.

The documentation means the researcher took all the document pictures as research evidence and as raw data to be processed which will be included to the attachment.

B. Technique of Data Analysis

1. Descriptive Analysis

The researcher applied the process of analyzing data as follow:

- a. Scoring the students answer based on the variable of the research, in this case, the researcher has noted all the students' score given by the teacher.

⁴Evatul Jannah Mustahat. "The Using of Fix up Strategy in Reading Skill at M.Ts.P.PYasribLapajungSoppeng". (State Islamic Institute; 2020). p. 25.

⁵YosyieMikatama "Improving the Students' Reading Skill by Using Sketch to Stretch Strategy among The Eight Grades at SMPN 1Batanghari East Lampung", (2019). p. 36-37.

b. The classification of the students' score into five levels as follow in table below:

Table 3.2 The Classification student's Score

No.	Classification	Result
1.	$KKM \geq 75$	Pass
2.	$KKM \leq 75$	Fail

c. Finding out the mean score use the following formula:

$$1) \text{ Mean} = \frac{\sum xi}{N}$$

Where,

X : Mean

$\sum xi$: Total Score

N : Total Number of Sample⁶

$$2) s = \sqrt{\frac{(x-\mu)^2}{n(n-1)}}$$

Where,

s : population of standard deviation

n : total of population

x : each value from the population

μ : population mean.⁷

d. Finding out the percentage score use the following formula:

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

Where,

P = the percentage

F = frequency of the percentage is being calculated

N = number of cases⁸

⁶SuharsimiArikunto, "Dasar-DasarEvaluasiPendidikan", (Jakarta:BumiAksara. 2010), p.298.

⁷ http://digilib.uinsgd.ac.id/9305/6/6_BAB%20III.pdf

2. Inferential Analysis

a. T-Test

This test mainly focuses on the comparison between two different classes, therefore, the researcher administered statistical analysis namely independent T-test, the researcher will use the formula as follow:

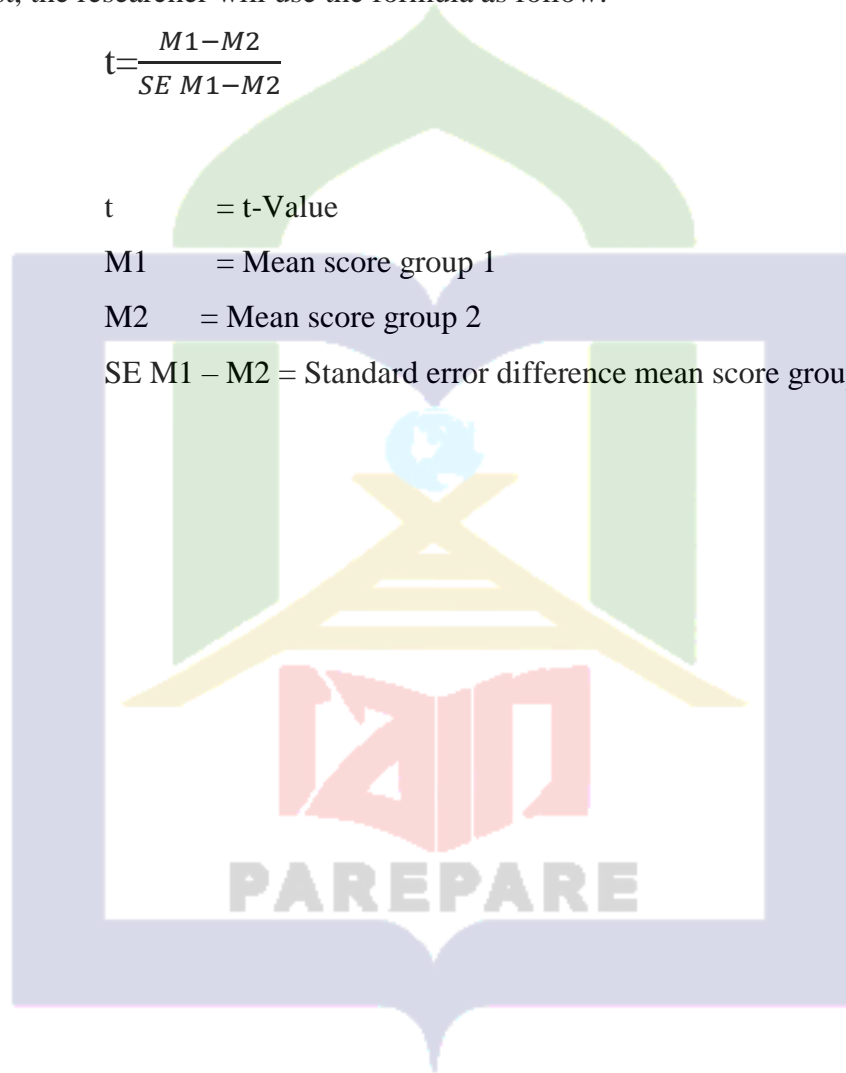
$$t = \frac{M1 - M2}{SE M1 - M2}$$

t = t-Value

M1 = Mean score group 1

M2 = Mean score group 2

SE M1 – M2 = Standard error difference mean score group 1 and 2.⁹



⁸Evatul Jannah Mustahat. "The Using of Fix up Strategy in Reading Skill at M.Ts.P.PYasribLapajungSoppeng". (State Islamic Institute; 2020). p. 27.

⁹Evatul Jannah Mustahat. "The Using of Fix up Strategy in Reading Skill at M.Ts.P.PYasribLapajungSoppeng". (State Islamic Institute; 2020). p. 27.

