CHAPTER III

RESEARCH METHOD

In this chapter the writer describes the research methodology; it consists of research design, population, sample and sampling, Variable ,research instrument, validity, reliability testing, normality testing data collecting method, and data analysis

A. Research Design

The researcher employed quantitative research through experimental design. Ary et al (2002), as cited in Rahmawati (2016) says that this experimental study has three subdivisions including pre-experimental, quasi-experimental, and true-experimental. In the present research, the researcher only focused on pre-experimental which meant there was only an experimental group here. The researcher decided to take pre-experimental in order to help the students to enrich their regular and irregular . Hence, it just needed a class which was given treatment. In this study, the independent variable is word wall media , meanwhile the dependent variable is teaching regular and irregular verb. In this study, the experimental research was done in the class with taking students as population.

This research is intended to investigate the influence of word wall as media in teaching regular and irregular verb for the eight graders in MTs Ma'arif Bakung Udanawu. The research design used by the researcher is pre-experimental design in the form of one-group, pretest-posttest design.

The procedures of experimental research that use One group Pretest Posttest design are as follow :

1. Administering a pretest before applying strategy with a purpose of measuring regular and irregular verb of eight graders at MTs Ma'arif Bakung Udanawu
2. Applying the experimental teaching regular and irregular verb by using Word Wall Media as a strategy to the subjects (eight graders at MTs ma'arif Bakung Udanawu)
3. Administering a post-test after applying strategy with a purpose of measuring regular and irregular verb of eight graders students at MTs Ma'arif Bakung Udanawu

B. Population, Sample and Sampling

1. Population

Sowell (2001) states, "A population refers to a group that has one or more characteristics in common, such as middle school students, first-born children, freshman at University, or teacher in school" (p. 43).Population is the defined group from which the participants in the study are to be selected (Barker, Pistrang & Elliot, 2002) The populations in this research are all students of class VIII MTs Ma'arif Bakung Udanawu which consist of 387 students. They are devided into ten classes which are class A, class B, class C, class D, class E ,class F, class G, class H, class I and class J.

2. Sample

Sample is part or representative of population that will be research (Arikunto, 2013: 174). In this study, the researcher took the VIII-D class as a sample. The class consisted of 38 students.

3. Sampling

Sampling is also as a way the researcher select number of individuals as a sample which represents the population. Sampling is the process of selecting

a number of individuals for a study in such as a way that the individuals represent the large group from which they were selected. The purpose of sampling is to gain information about a population; rarely is a study conducted that includes the total population of interest as subject (Gay, 1992:123)

Sampling is a technique of taking sample which gives opportunity for every element or population member to be chosen as sample. In this study the researcher used purposive sampling. Purposive sampling was technique to determine sample with a particular consideration.

Often many restrictions that prevent researchers took samples at random (random). So if using random sampling (random sampling), will complicate the researcher. By using purposive sampling, the expected criteria for samples obtained completely in accordance with the research to be conducted.

Choosing the sample is based on purposive sampling depends on what criteria are used. So first determined what criteria samples taken researchers took samples of class VIII. The researcher chose the class VIII-D at the sample because among other classes the students of the class VIII-D had average proficiency.

C. Variable

According to Ary (2010) variable is an attribute that is regarded as reflecting or expressing some concept or construct. Variable is something that may vary or differs. Related to the title of the research "The Effectiveness Of Using Word Wall Media in Teaching Regular and Irregular Verb Of The Eight Graders In MTs Ma'arif Bakung Udanawu ", there are two variables in this research

1. Independent variable

Independent variable is the condition that we ourselves vary (Butler: 1985:11). The independent variables are the conditions or characteristics that the researcher manipulates in his or her attempt to ascertain their relationship to observed phenomena. In this research, the independent variable is word wall media.

2. Dependent Variable

Dependent variable is those whose response we are measuring (Butler: 1985:11). It is the conditions or characteristics that appear, disappear, or change as the experimenter introduces, removes, or changes independent variables. The dependent variables are the measured changes in students' performance to the influence of the independent variables. In this research, the dependent variable is teaching regular and irregular verb.

D. Research Instrument

Instrument has important function in this research. , the instrument which is used by the researcher to collect the data is tests. Ary (2006: 210) stated test is a set off stimuli presented to individual in order to elicit responses on the basis of which a numerical score can be assigned. The researcher used one kind of instrument that was regular and irregular test. The aim to do test is to know Word Wall Media effective or not for the students to learn regular and irregular verb. The test was given into two sections; firstly was pre-test which was conducted at 04th of April 2019 and secondly was post-test which was conducted at 05th of April 2019.

The researcher present some steps in developing test. The first step is reviewing syllabus and material. Then the researcher identified syllabus and material to know the standard competence, basic competence, and topic that is used eighth graders level. After that, the researcher determine the topic or material that appropriate with this study. then, the researcher determined the objective of test is to measure and followed by making drafting in drafting the researcher designed a test. The test items for pretest consist of 20 questions. The pretest is given to students before the teacher teaches them by using word wall. While the post test is given to the students after they are given the treatment.

E. Validity and Reliability Testing

In quantitative researches is always depends on measuring instrument that used in research, to measure the instrument through two concepts that must understand when the researcher measuring test. They are validity and reliability.

1. Validity

Ary, Jacobes and Sorensen (2010: 224-225) states that validity is the most important consideration in developing and evaluating measuring instruments. It is the extent to which inferences made from assessment result are appropriate, meaningful, and useful in terms of the purpose of the assessment. A test should test what the writer wants to test. There are four different types of validity; they are content, construct, concurrent; and predictive. This research measure test to be a good validity by analyzed the test from content validity and construct validity.

a. L.R. Gay (1992: 156-157) states that content validity is the degree to which a test measures an intended content area. A test with good content validity adequately samples the appropriate content area. So, content validity is

appropriate with the instrument that used the researcher because it correspondence between curriculum objectives and objectives being assessed. The researcher made regular and irregular test which consist of word in the blanket. In this test, the students' are asked to answer the test to measure their teaching regular and irregular verb.

b. Construct validity is testing that done to measure the behavior of students. Brown (2004:25) mentioned that a construct is any theory, hypothesis, or model that attempts to explain observed phenomena in our universe of perception. Based on the theory above, in the test, the researcher asked the students to answer the question based on simple past tense to measure to the regular and irregular verb and fulfill the construct of regular and irregular test and therefore valid in the term of construct validity.

Table 3.1 The Result Construct Validity

No Items	T-Count	T-Table	Validity
Item 1	0.547	0.329	Valid
Items 2	0.496	0.329	Valid
Items 3	0.641	0.329	Valid
Items 4	0.690	0.329	Valid
Items 5	0.769	0.329	Valid
Items 6	0.809	0.329	Valid
Items 7	0.641	0.329	Valid
Items 8	0.740	0.329	Valid
Items 9	0.799	0.329	Valid
Items 10	0.508	0.329	Valid
Items 11	0.625	0.329	Valid
Items 12	0.584	0.329	Valid
Items 13	0.641	0.329	Valid
Items 14	0.604	0.329	Valid
Items 15	0.684	0.329	Valid
Items 16	0.716	0.329	Valid
Items 17	0.670	0.329	Valid
Items 18	0.769	0.329	Valid
Items 19	0.681	0.329	Valid
Items 20	0.434	0.329	Valid

2. Reliability

Reliability indicates how consistently a test measures whatever it does measure. Reliability of a measuring instrument is the degree of consistency with which it measures whatever it is measuring. This quality is essential in any kind of measurement (Ary:2010: 225). In this study,the researcher conducted test as try out before conducting pre-test and post-test to the students.Try out was administered to know whether the test reliable or not.The reliability of the test can be measured by SPSS 18 for windows.

In this research, the researcher uses SPSS 18.0 to know the reliability of the research instrument. According to Riduwan (2004:118), the criteria of reliability instrument can be divided into 5 classes as follows:

a. If the *alpha cronbach* score 0.00-0.20: less reliable
b. If the *alpha cronbach* score 0.21-0.40: rather reliable
c. If the *alpha cronbach* score 0.41-0.60: enough reliable
d. If the *alpha cronbach* score 0.61-0.8: reliable
e. If the *alpha cronbach* score 0.81-1.00: very reliable

The result of reliability testing can be seen from the table:

Table 3.2 The SPSS Reliability Test

Reliability Statistics

Cronbach's Alpha	N of Items
.927	20

The calculated data above was applied to measure the reliability of the try out result. The try out was held on Saturday, 30th March 2019. Try out was conducted in order to measure the reliability and the validity of the instrument before conducting both pre-test and post-test. The researcher took VIII F class which became the sample of try out. Based on the results of reliability testing it can be seen from the reliable value in the Alpha-Cronbach column.If the significance value is> 0.6, the data can be said to be reliable. From the table above it can be seen that the Alpha Cronbach column shows a significance of 0.927 which means> 0.6 it means that the test is very reliable.

F. Normality Testing

Normality test is intended to show that the sample data come from a normally distributed population. The normality testing in this research To know the normality, the researcher used statistic computation SPSS Statistics 18.0 One-Sample Kolmogrov-Smirnov test . Kolmogorov-smirnove test is a test of normality for large samples. The result of normality testing can be seen in the table below:

Table 3.3 Normality Result of The Data

One-Sample Kolmogorov-Smirnov Test

		pretest	post
N		38	38
Normal Parameters[a,b]	Mean	61.1842	84.3421
	Std. Deviation	24.11779	14.00632
Most Extreme Differences	Absolute	.130	.210
	Positive	.126	.144
	Negative	-.130	-.210
Kolmogorov-Smirnov Z		.802	1.291
Asymp. Sig. (2-tailed)		.541	.071

a. Test distribution is Normal.

b. Calculated from data.

Based on the result of the test above. the probability number or Asymp. Sig (2-tailed) is obtained. This value is compared with 0.05 (in this case using a significance level or $\alpha = 5\%$) for decision making with guidelines:

a) Sig value. or significance or probability value <0.05, data distribution is not normal.
b) Sig value. or significance or probability value> 0.05, data distribution is normal.

Table 3.4 The Decision of Normality Test

Name of Variablel	Value of Asymp. *Sig.(2-tailed)*	Level of significance	Decision
pretest	0,541	0,05	Normal
posttest	0,071	0,05	Normal

G. Data Collecting Method

Data collecting method is the technique to collect the data is needed by the researcher. In this research the researcher is going to use the test method, the test method in this case is used to get data of teaching regular and irregular verb in reading. The test will be used by researcher here contains about tests increase regular and irregular verb. In order to get the good quality of data, the researcher must choose the good instrument that used in research. In this research, the researcher used test as instrument they were pre-test and post-test. Before doing treatment, The researcher wants to know how far the vocabulary mastery of the students is before they use of word wall. After doing pretest the researcher gave treatment for the students'. Pretest and Posttest are to knowing the differences of the students' ability before and after the teacher use the method. Before the researcher applying the pre-test, the researcher conducted tryout of the test in other class to know the tests are valid and reliable or not.

H. Data Analysis

Data analysis is aimed to analyze the data which has been earned. This data analysis is very important to measure the regular and irregular verb before and

after being taught using word wall media. The data of this research had been gotten from both pre-test and post-test. The first data is data of student score before taught using Word wall media (pre-test). The data result is after using word wall media (post-test)If the post-test of using Word wall media score test is higher than pretest, it means that the method is effective. To get the achievement of regular and irregular verb in reading, the researcher is going to give the students a test after get treatment teaching regular and irregular verb by Word Wall Media. To know the significant difference of the regular and irregular verb between taught by using Word Wall Media between taught without Word Wall Media, the researcher in this research uses t-test at SPSS 18.0 for windows.

T-test is used to test the hypothesis that whether there is or no any significant before and after being taught using word wall. When the significant value (0.000) < significant level (0.05) the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. While significant value (0.000) > significant level (0.05) the null hypothesis (Ho) is accepted and the alternative hypothesis (Ha) is rejected. Because significant value (0.000) is smaller than significant level (0.05), it can be concluding that alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. It means that there is any significant difference between the achievement of teaching regular and irregular verb using word wall and without using the word wall in MTs Ma'arif Udanawu Academic Year 2018/2019.