

## **CHAPTER III**

### **METHOD OF RESEARCH**

#### **A. Research Design**

This research uses experimental design. According to Fraenkel and Wallen (2009), “Experimental research is the most conclusive of scientific methods. Because the researcher actually establishes different treatment and then studies their effect, results from this type of research are likely to lead to the most clear-cut interpretations”. Consequently, experimental research is used in this research.

Quasi-experimental research will be used in this research. According to Fraenkel and Wallen (2009) quasi-experimental includes experimental group and control group on a certain variable. Experimental group receives a treatment, while the control group receives no treatment (Fraenkel and Wallen, 2009). Based on Campbell and Stanley (1963) in Seliger and Shohamy (1989) quasi-experimental designs are constructed from the situations which already exist in the real world, and are probably more representative of the conditions found in educational context. There is no control from the researcher to the subject, but the researcher can do manipulation in treatment. The control group or the comparison group is crucially important in all experimental research, for it enables the researcher to determine whether the treatment has had an effect or whether

one treatment is more effective than another. Both of the groups, control group and experimental group will be given pre-test and post-test. In this case, the experimental group is taught English by using word wall media and the controlling group is taught without using word wall media. This design is called The Non equivalent Control Group Design. (Emzir, 2008).

Observation, interview, and test ( pre-test and post- test) are used in this research. The researcher used mean, t-test, and Gain test formula, to know the influence of using word wall media toward vocabulary mastery of the seventh grade students at Islamic Junior High School (MTs) Ahsanul Huda Bahalayung and to know the students respond toward word wall media in improving vocabulary mastery with using word wall media.

## **B. Research Setting**

The researcher takes place in MTs Ahsanul Huda Bahalayung to apply her research which located on Jl. Bahalayung, Desa Bahalayung, Kecamatan Bakumpai, Kabupaten Barito Kuala.

The researcher is interested in applying this research at MTs Ahsanul Huda it is done want to know development of teaching and learning English here, especially at the seventh grade. The researcher wants to know about students interest at MTs Ahsanul Huda about English Learning at this school .

### C. Subject and Object the Research

Subject this research is all of Seventh grade students at MTs Ahsanul Huda Bahalayung total of them are 56 students. The object this research is class as experimental class and B as control class total of them are 36 students. To know more about them, it can be seen in the following table:

Table 3.1. The students of the seventh grade at MTs Ahsanul Huda

No	Classes		Total
	Control Class	Experiment Class	
1.	VII A	-	17
2.	-	VII B	19
Total			36

*Source : Administration Staff Documentary at MTs Ahsanul Huda Bahalayung*

While the researcher only focus on the seventh grade students A and B, the researcher do not choose class C, the English teacher suggestion for me. The students of A class and B class feel difficult for memorizing vocabulary and vocabulary limited than other class C, based on my interview with the English teacher of MTs Ahsanul Huda Bahalayung. And all of students class A and class B are boy students and class C is just girls students. I choose class A as Control class because when the researcher get them pre test they gets better point than Class B.

### D. Technique of Collecting Data

The technique of collecting data that is used in this research including :

### **1. Observation**

This is a technique which the researcher comes to MTs Ahsanul Huda Bahalayung and observes detail by using field note and recorded by video. The data that searched by researcher are activity, media and strategy in experiment class. The data are collected to know how is the activity of teaching vocabulary in control class that is used by teacher at MTsS Ahsanul Huda Bahalayung, media and strategy that is used by teacher.

### **2. Test**

The researcher uses pre-test and post-test to know the students first ability in vocabulary and the student last ability in vocabulary using word wall media in experiment class and not using word wall media in control class. This test is applied in experiment and control class to get the score of the students achievement of vocabulary mastery. The instrument that will be taken from the pre-test are multiple choice, arrange the word into a good sentence, complete the dialogue, and translate Indonesian sentences into English. The instrument that will be taken from post-test are multiple choice, arrange the word into a good sentence, complete the dialogue, and make word wall media appropriate word that give by teacher. The test can be seen in the appendix.

### **3. Interview**

In this technique, the researcher makes communication and interviews with some related person, such as : the teacher, the headmaster

and administration staff directly to obtain data that are related to primary data or secondary data by using interview guide. The interview guide to teacher is about before of using word wall media on Monday, 17<sup>th</sup> Juli 2017 and after using word wall media on Thursday, 10 August 2017 and interview guide to the headmaster and the administration staff is about data of school at MTs Ahsanul Huda on Monday 17<sup>th</sup> Juli 2017. The interview can be seen in the appendix.

## **E. Research Instrument**

In order to make organizing and analysis of the data processing easier, the writer organizer the research instrument of the teaching and learning by using word wall media at MTs Ahsanul Huda Bahalayung, as follow :

### **1. Written Test**

1.1 Answering 25 multiple choice questions (synonym, antonym, and meaning), each correct answer will be scored 2 points, if the students can answer all question correctly, they will get score 50 (question synonym, antonym, and meaning taken from source Syah, D. 1987. *Kamus Synonym & Antonym Untuk Ujian TOEFL & IELTS*, Jakarta : Rineka Cipta).

1.2 Answering 5 arrange the words into a good sentence, each correct answer will be scored 1 point. If the students can answer all question correctly, they will get score 5 (question

arrange the word into a good sentence taken from source Novitasari, Siswanto, et.al.2007.*New Let's Talk*. Bandung : Pakar Raya,p.5)

1.3 Answering 5 complete the dialogue (for post-test), for each question is scoring 3 points, if the students can answer all question, they will get score 15 (question fill in the blank taken from source Siswanto, Arini, Dewanto.2005. *Based on literacy Approach Let's Talk*. Bandung : Pakar Raya,p.68)

1.4 Translate 5 Indonesian Sentences Into English and each correct sentence will be scored 6 point (question translate Indonesian sentences into English taken from Gunawan, Khatimah, Wachidah,2013.*Bahasa Inggris When English Rings the Bell*. Jakarta : Kementerian Pendidikan dan Kebudayaan,p.11).

If the students can answer all question correctly, they will get score 30, (for pre-test question).Each students have vocabulary, begin from :

Table 3.2. The categorized of score vocabulary mastery

<b>Vocabulary</b>	<b>Score</b>
5	3
10	6
15	9
20	12
25	15
30	18
35	21
40	24
45	27
50	30

*(source : Score of English Teacher at MTs Ahsanul Huda Bahalayung)*

So, if the students have 50 vocabularies. They will get score 30, (for Post-Test question). After counting up all the three aspect, will be gotten the highest score is 100 points and the lowest score is 0. The total maximum expected score. (MES) of all questions is 100 points.

In this research students will pass two kind of the test:

a. Pre Test

In pre- test, all of seventh grade students at MTs Ahsanul Huda Bahalayung control class and experiment class will answer 40 items about vocabulary mastery, it means the researcher want to know they vocabulary skill before the teacher uses word wall media.

b. Post Test

In post-test, all of seventh grade students at seventh grade at MTs Ahsanul Huda Bahalayung, control class and experiment class will answer the same question with post-test, it means the researcher want to know the students mastery of vocabulary after the researcher uses word wall media.

The students score will be categorized into five levels based on Anas Sudijono as follows (Sudijono: 2011)

Table 3.3. The categorized of score test (pre-test and post-test)

Score	Categories
80-100	Very Good
66-<80	Good
56-<66	Fair

46-<56	Low
0-<46	Very Low

## **F. Technique of Data Processing**

### **1. Editing**

This technique is used to examine all of the collected data to make sure that they are already complete or not. The researcher arranged all of data systematically by following correct role in writing of research.

### **2. Scoring**

The researcher count the scores for the students based on the correct answer in the sheets of test. The students score are arranged on the table based on name of students and are completed with using category of score.

### **3. Tabulation**

Tabulation is to create tables that contain data that has been scoring in accordance with the analysis required. Result data on the table to be easy in interpretation data in this research.

### **4. Data Interpretation**

Data that has been edited and scored will be interpreted by the researcher. Data of result test is interpreted by using category of score based on Anas Sudijono. The interpretation of the researcher does not change the authenticity of data that is gotten in field.



## G. Technique of Data Analysis

### 1. Data from Observation

The researcher observes detail how is the activities, media and technique that are used by teacher in control class by using field note and recorded by video. From observation, the researcher analyzed detail and all data of observation. This data is used to complete data in this research.

### 2. Data from Test

Data from test, this data test was gain to compare students ability in vocabulary by using word wall media and not using word wall in instructional activities of vocabulary, the researcher used quantitative data which are related to the numerals and they are analyzed by statistic. The researcher used t-test formula to calculate the data. The analysis has concerned between experiment class and control class. The researcher calculate mean, deviation and T-test, the formulas as follows : (Murdan,2012)

- a. Looking for mean variable 1 as follow the formula

$$M_x = \frac{\sum X}{N_1}$$

$M_x$  : Mean of the experiment class

$\sum X$  : Accumulative of total score of the experiment class

$N_1$  : Number of subject of the experiment class

- b. Looking for mean variable II as follows the formula

$$M_y = \frac{\sum y}{N_1}$$

$M_y$  : Mean of the control class

$\sum y$  : Accumulative of total score of the control class

$N_1$  : Number of subject of the control class

- c. Looking standard deviation for variable I as follows the formula

$$SD_1 = \sqrt{\frac{\sum x^2}{(N-1)}}$$

$SD_1$  = Standard deviation of Experiment class

$\sum x^2$  = Accumulative of the quadrant of deviation of the experiment class

- d. Looking standard deviation for variable II as follows the formula

$$SD_1 = \sqrt{\frac{\sum y^2}{(N-1)}}$$

$SD_1$  = Standard deviation of control class

$\sum y^2$  = Accumulative of the quadrant of deviation of the control class

- e. Looking standard error of mean variable I as follow the formula

$$S E M_x = \frac{SD}{\sqrt{N-1}}$$

$SE M_x$  = Standard error of the experiment class

1 = Value of constant

- f. Looking standard error of mean variable II as follow the formula

$$SE M_y = \frac{SD}{\sqrt{N-2}}$$

$SE M_y$  = Standard error of the control class

1 = Value of constant

- g. Looking for standard error comparative mean variable I and mean Variable II as follow the formula

$$SE_{M1-M2} = \sqrt{SEM1^2 - SEM2^2}$$

$SE_{M1-M2}$  = standard error for comparative mean of experiment class and control class

$SEM_1^2$  = quadrant result of standard error of mean of the experiment class

$SEM_2^2$  = quadrant result of standard error of mean of the control class

- h. Looking for  $T_{test}$ , as follow the formula

$$T_{test} = \frac{M1-M2}{SEM2-SEM2}$$

$T_{test}$  = Value of  $T_{test}$  observatio

- i. Giving interpretation for twith consulting ttable

- 1) Looking for degree of freedom

$$Df/db = (N_1+N_2) - 2$$

$Df/db$  = Degree of freedom

$N_1$  = Number of subject the students in  
experiment class

$N_2$  = Number of subject the students in control  
class

2 = Value of degree of freedom for two  
variables

## 2) Consulting score of df/db with t table

$t_{table}$  = value of critic “t”

In significant degrees  $t_{table} 5\%$

In significant degrees  $t_{table} 1\%$

## 3) Making hypothesis interpretation

$H_0$  ( Zero Hypothesis) = there is no significant  
difference

$H_a$  ( Alternative Hypothesis) = there is significant  
difference

If “  $t_{test}$  is higher than value of  $t_{table}$  “ so  $H_0$  is  
rejected,  $H_a$  is accepted.

If “  $t_{test}$  is lower than value of  $t_{table}$  “ so  $H_0$  is  
accepted,  $H_a$  is rejected.

## 3. Gain Test

Nuraeni in Mahmudah (2014) state that Gain Test done  
took to look from the influences of word wall media in vocabulary  
mastery.

This can be done by using the following formula :

$$G = \frac{\text{score post test} - \text{score pre test}}{\text{Score maximal} - \text{score pre test}}$$

$$\text{Score maximal} - \text{score pre test}$$

Table 3.4. the categorize of score gain test for measure influence

Score	Category
$g < 0,3$	Low
$0,3 \leq g \leq 0,7$	Fair
$g \geq 0,7$	High

#### 4. Data Analysis Procedure to the students respond

Analysis technique that is used to measure the students respond in using word wall media is the percentage technique analysis as follow :

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

Explanation :

P = number of percentage

F = Frequency

N = Number of the respond

Table 3.5. the interpretation of influence of using word wall media toward students vocabulary ( Arikonto, 2002,p.44,in Ardila, 2014,p.49)

Percentage	Category
81 - < 100	Very Good
61 - < 81	Good
41 - < 61	Enough
21 - < 41	Bad
0 - < 21	Very Bad

## **H. Data from Interview**

In this study, the researcher take on the seventh grade students at MTs Ahsanul Huda Bahalayung. The researcher take 36 students as the sample consisting of 19 students as the experimental class and 17 students as the control class.

Before giving the treatment, the researcher conducted a pre-test for experiment class and control class on Monday, 20<sup>th</sup> July 2017. The test measures first students ability in vocabulary. The researcher use written test. The test about vocabulary consist 40 items that is divided into three test form, they are 25 items to multiple choice, 5 items to arrange the words into a good sentence, 5 items to fill in the blank, and 5 items to translate Indonesian Sentences into English sentences. The researcher make written test t for the seventh grade students based on condition which have difficult in remembering, pronouncing and writing words correctly. The teacher assisted the researcher to make written test.

After conducting the pre-test, the researcher gave a treatment to students in experiment class from Monday, 24<sup>th</sup> July 2017 until Monday 7<sup>th</sup> August 2017. 21 students as experimental class and 21 students as the control class. After giving the treatment, the researcher taught vocabulary to students in experiment class by using word wall media in five meeting and the teacher taught vocabulary to students in control class not using word wall media. The vocabularies that are learned in both classes are

same but media that is used is different in teaching vocabulary. The vocabularies related thing (transportation, family, hobbies, sport, and color).

After conducting the treatment, the writer gave a post-test both of two groups on Tuesday, 8<sup>th</sup> August 2017. The researcher compares result pre-test and post- test of experiment and control class. From this result, the researcher can know how the effectiveness using word wall media for students vocabulary mastery and not using word wall media.