#### **CHAPTER III**

#### RESEARCH METHOD

This chapter presents the research method. It focuses the method used in conducting this study which covers research design, population sample and sampling, variable of the study, research instrument, validity and reliability testing, data sources, data collection method, data analysis.

#### A. Research Design

"Research designs are plans and procedures for research that span the decisions from broad assumptions to detailed method of data collection and analysis." (Creswell, 2009:3).

This research uses quasi experimental design. This design intent on reveal the causal relationship by using control group and experimental group and does not selects those groups randomly.

This study used quasi experimental design in the form of nonrandomized control group, pretest-posttest design. This design does not permit random assignment of subject to the experimental and control group (Ary, 2010:316). The researcher determines to select two intacts group. The first group is given treatment, called experimental group and the other group is not be given a treatment, called control group. Then, both of two groups will be given pretest to know the beginning condition that is there any differences between control group and experimental group. Further, conducts

experimental treatment activities with the experimental group only, and then administers a posttest to asses the differences between the two groups (Creswell, 2012: 310). The research design in this research is explained at table 3.1, as follows:

Table 3.1 Nonrandomized Control Group, Pretest-Posttest Design

Group	Pretest	Independent variable	Postest
Е	Y1	X	Y2
С	<b>Y</b> 3	-	Y4

(Ary, 2010: 316)

#### **Notes:**

E: experimental group

C: control group

Y<sub>1</sub>: pretest for experimental group

Y<sub>3</sub>: pretest for control group

X : treatment, speaking using picture

Y<sub>2</sub>: posttest for experimental group

Y<sub>4</sub>: posttest for control group

# **B.** Subjects of the Study

### 1. Population

Population is all of what we investigated. Ary (2010:147) stated that population is defined as all members of any well-defined class of

people, events, or subject. The population in this research is the seventh grades students of MTsN Pucanglaban in academic years 2017/2018 the total number of seventh grades of MTsN Pucanglaban are 127 students which are consist of VIII-1 class until VIII-5 class.

### 2. Sampling Technique

In this research, the researcher use Purposive Sampling Technique to take the samples. In purposive sampling, which also referred to as judgment sampling, sample elements judged to be typical or representative are chosen from the population. (Ary,2010:156). The researcher had taken two classes at seventh grade of MTsN Pucaglaban in academic year 2017-2018, those are VIII-B class and VIII-C class. It was done with some considerations that both of two classes are the existing classes which almost have the same average in speaking ability.

#### 3. Sample

Sample is taken from population. According to Ary, (2010: 47) sample is a portion of a population. It shows that sample is take a role as the representative in the research. The researcher decides to draw a sample from population because the population is big. It is more efficient (in case of money, time and energy), can decreasing bustle and minimizes the errors which can be easily be made by researcher during collecting data. This research uses quasi experimental design which has main characteristics; without random placement and use intact group or group

which be available. So, the researcher use the groups which are available as sample. The researcher does not take the sample individually but in the form of class. The sample which be taken areVIII-B class as the experimental group and VIII-C class as the control group.

#### C. Research instrument

Instrument of the research is a tools which be used by the researcher in collecting data. The instrument that is used in this research is test.

#### **Test**

Test is a set of stimuli presented to an individual in order to elicit responses on the basis of which a numerical score can be assigned (Ary, 2010:201). The researcher applies pretest and posttest. Pretest is taken before giving treatment or before teaching by using elicitation technique. The purpose is to know or measure the students' ability in speaking before be given a treatment. Pretest has similar questions and it is given to experimental group and control group. The theme of the test is asking and giving something

After getting the result of pretest from experimental group and control group, the researcher gives treatment to teach asking and giving for experimental group by using pictures. Meanwhile, the researcher does not give treatment or gives conventional method teaching to teach recount text for control group. After that, the researcher gives posttest to

experimental group and control group. Posttest is used to know the students' speaking ability after taught by using pictures from the one of not using pictures. The test from the researcher, is giving pictures to the students, and ask to the students to describe picture.

#### D. Validity and Reliability Testing

#### 1. Validity

Validity is the most complex criterion of an effective test the most important principle of language testing (Brown, 2001:22). In this research, the researcher use scoring rubric to check the validity of the test

# a. Face validity

The instrument have face validity when it looks can measure what is supposed to measure. Face validity refers to the degree to which a test looks right and appears to measure the knowledge or abilities it claims to measure (Mousavi, 2002:244). The test in this research was designed to measure the students' speaking ability. To achieve face validity, the researcher provides the instructions to describe the picture or object

#### b. Construct validity

Construct validity is validity which show how far the tests are suitable with the theory that becomes a foundation on composing

those tests. Construct validity referred to what extent the instrument measure concept of a theory, which be base of composing instruments. The instrument is constructed concerning aspects that will be measured according to the certain theory. Then, the instrument is consulted to the expert. In this research the researcher consulted with Mr Mahruf Muarif

#### c. Content Validity

Construct validity is one kind of validity that is measure the ability which is supposed to measure. The word 'construct' refers to any underlying ability which is hypothesized in the theory of language ability (Isnawati, 2014: 29). Based on theory above, in the test the researcher asked the students to present their idea about topic that was given. The students used speaking scoring rubric which involves accuracy, fluency, comprehensibility.

# The Rubric of Grading System by Heaton (1988: 100)

Scor	Accuracy	Fluency	comprehensibility	Content
81- 90	Pronunciation is only very slightly influenced by the mother-tongue There are no mistake of pronunciation and grammar at all	Speaks without too great an effort with a fairly wide range of expression. Searches for words occasionally but only one or two unnatural pauses. Each of students is able to deliver 6 line conversations by delivering all necessaries content. Delivering the conversation not more than 2 unnatural pauses.	Easy for the listener to understand the speaker's intention and general meaning. Very few interruption or clarification required. The listeners are easy to understand the content and catch goal of the conversation. There are no interruption required.	All the ideas the students presents, re garding his/her opinion, are supported by additional information or explanations.
71- 80	Pronunciation is slightly influenced by the mothertongue. A few minor grammatical and lexical errors but most utterances are correct There are no more than 5 pronunciation and grammatical	Has to make an effort at times to search for words. Nevertheless, smooth delivery on the whole and only a few unnatural pauses. Each student is able to only 5 line conversations by delivering 5 necessaries content. Delivering the conversation not	The speaker's intention and general meaning are fairly clear. A few interruptions by the listener for the shake of clarification are necessary. The listeners have one interruption to content or the goal of the conversation	Most of ideas that the students presents are supported by additional information or explanation.

	mistake	more than 5		
	IIIIStake	unnatural pauses		
61-	Pronunciation	Although he has to	Most of what the	Some ideas that
70	is still	make an	speaker	the students
70	moderately	effort and search for	says is easy to	presents are
	influenced by	the	follow. His	supported by
	the mother-	words, there are not	intention is always	additional
	tongue but no	, and the second	clear	information or
	serious	too many	but several	explanation
	phonological	unnatural pauses. Fairly	interruptions	explanation
	errors. A few	smooth delivery	-	
			are necessary to help him	
	grammatical and lexical	mostly.		
		Occasionally	to convey the	
	errors but only one or two	fragmentary but succeeds in	message or to seek clarification	
			The listeners have 3	
	major errors	conveying the		
	causing confusion.	general meaning.	interruptions to content or	
		Fair range of		
	There are no more then 10	expression. Each student is able	the goal of the conversation	
			Conversation	
	pronunciation	to		
	and	mention only 4 line		
	grammatical	conversations by		
	mistakes	delivering 4		
		necessaries content.		
		Delivering the		
		conversation		
		not more than 8		
		unnatural		
<i>5</i> 1	D	pauses	The 1'-4	T 1441- 1.1
51-	Pronunciation	Has to make an	The listener can	Little ideas that
60	is fluored by	effort for	understand a lot of	the students
	influenced by	mush of the time.	what is	presents are
	the mother	Often has to	said, but he must	supported by
	tongue but	search for the	constantly seek	additional
	only few	desired	clarification. Cannot	information or
	serious	meaning. Rather	understand many of	explnation
	phonological	halting	the	
	errors. Several	delivery and	speaker's more	
	grammatical	fragmentary.	complex or	
	and lexical	Range of expression	longer sentences.	
	errors, some of	often	The listeners have 4	
	which	limited.	interruptions to	
	cause	Each student is able	content or	

	confusion. There are no more than 15 error of pronunciation and grammatical mistakes	to mention only 3 line conversations by delivering 3 necessaries contents. Delivering the conversation not more than 12 unnatural pauses	the goal of the conversation	
41-50	Pronunciation seriously influenced by the mothertongue which errors causing a breakdown in communication. Many 'basic' grammatical and lexical errors. There are more than 15 pronunciations and grammatical errors.	Long pauses while he searches for the desired meaning. Frequently fragmentary and halting deliver. Almost gives up making the effort at times. Limited range of expression. Each student is able to mention only 2 line conversations by delivering 2 necessaries contents. Delivering the conversation more than 12 unnatural pauses	only small bits (usually short sentences and phrases) can be understood-and then with considerable effort by someone who is used to listening to the speaker. The listeners have 4 interruptions to content or the goal of the conversation	The ideas re garding the opinion of the students are not supported by aditional information or explanation

# 2. Reliability

In this test, the researcher used rater reliability is where the researcher involved two raters scoring the students' speaking achievement. After that, the researcher analyzed the correlation of two scores by using Pearson correlation which is called product moment Pearson. For analyzing the researcher use SPSS 16.0 for windows.

#### E. Normality and Homogeneity Testing

#### 1. Normality Test

Data normality testing is conducted to show that the sample data come from a normally distributed population. In this research, the result of data both experimental and control group are tested with the helped of SPSS program 16.0 version. The data includes students' score in pretest and posttest. The output is seen by Kolmogrov-Smirnov column. Normalitytesting is done by using the rule of Asymp. Sig (2 tailed) as follows:

- a. If Asymp. Sig (2 tailed) > 0.05, so the test distribution is normal.
- b. If Asymp. Sig (2 tailed) < 0.05, so the test distribution is not normal.

#### 2. Homogeneity Test

The homogeneity test is conducted to know whether the variety of data both experimental and control classes is same or not. Homogeneity test is important since the result of research will be generalized in a population. In this research, a researcher conducts testing the homogeneity with the helped of SPSS program 16.0 version. The homogeneity testing must fulfill the testing criteria as follows:

- a. P-value or Sig. is  $\geq 0.05$  means the data have same variant or homogeny
- b. P-value or Sig. is < 0.05 means the data have different variant or not homogeny

#### F. Data Collecting Method

Data collecting method is process to collect the data in the research. To get the data, the researcher used method of data collecting as follow:

#### a. Pre-test

Pre-test was given before the students were taught by using elicitation technique to know the students' speaking ability before give the treatment. In pre-test, the student's were given the topic and they were given 2 minutes to present their opinion about the picture in front of the class. The topic of pre- test is the elephant, lion girraffe. Pre-test will be held on Monday 30 july 2018

#### b. Post-test

Post-test was given after the students were taught by using elicitation technique to know the students' speaking ability after give the treatment. In post-test, the students were given the topic, they were given 2 minutes to present their opinion about the picture in front of the class. The topic of pre- test is the elephant, lion, giraffe. Post-test will be held on Wednesday 08 august 2018

## G. Data analysis

Data analysis is a technique to analyze data to know the result of a research. In analyzing data, the researcher used quantitative data by using statistical program SPSS 16.0. The quantitative data analysis was used to know the significant differences on the students' speaking ability after teach by using think pair share strategy. Data that was obtained from the pre-test and post-test would be analyzed statistically using *Paired-Sample T Test* through SPSS 16.0. The steps of analyzing data are as follow:

- 1. The researcher opened the program SPSS 16.0
- 2. The researcher computed the students' speaking score of pre-test and posttest and analyzed by click *Analyze* > *Compare Means* > *Paired Samples*T-Test
- The researcher choose option to decide confidence interval percentage
   95%
- 4. After that click *OK* to get the result.