

## CHAPTER III

### RESEARCH METHOD

In this chapter, the writer presents research design, population and sample, setting of the study, research instrument, variable and data source, validity and reliability testing, data collecting method, and data analysis.

#### A. Research Design

Research has important role in educative process, which is to know or to solve the certain problem that happens in the teaching and learning process. Besides, research is a process or steps used to collect and analyze information in order to increase our understanding of a topic or issue.

In this research, the researcher was conducted in a pre-experimental design using quantitative approach with Pretest- Posttest design. Ary et al (2006:325) state experimental research is to enable researcher estimate the effect of an experimental treatment. Experimental research can be done in the field, in the laboratory and in the classroom. In this study, the researcher will be done in the classroom with the sample has been obtained from a population.

**Table 3.1. The design of One-Group-Pretest-Posttest Design**

Pre-test	Treatment (Independent variable)	Posttest (Dependent variable)
Y1	X	Y2

Y1 : Students speaking ability of experimental in pre-test

X : Students speaking ability of experimental group in treatment.

Y2 : Students speaking ability of experimental in post-test

The procedure of Experimental research that use pretest-posttest design:

1. Administering a pretest with a purpose of measuring speaking ability of the first grade of MTs AL MA'ARIF Tulungagung.
2. Applying the experimental treatment teaching speaking by using inquiry method of the first grade of MTs AL MA'ARIF Tulungagung.
3. Administering a post-test with a purpose of measuring speaking ability of first grade of MTs AL MA'ARIF Tulungagung.

Difference attribute to application of the experimental treatment is determined by comparing the pretest-posttest of speaking achievement. In this study, the researcher wants to know the effectiveness of using Oral Presentation toward students speaking ability by experimental research. The effectiveness will be known after knowing the significant differences score between the students who are taught before and after using Oral Presentation.

## **B. Population, Sampling and Sample**

### **1. Population**

The population and sample are very important part in a study. Population is all subjects (students, sentences, animals, and many others) being studied. Whereas sample is part of population that is being studied. Meanwhile, according to Ary Donal et al (2006:167) population is the larger group about which the generalization is made. Based on the

description above the researcher take conclusion that the population is whole research subject used by the researcher.

The the target population in the present study was all the first grade students of MTs AL MA'ARIF the total number of first grade students at MTs AL MA'ARIF are students consisting of 5 classroom. Consis of class A:45, B:47, C:40, D:35, and E:30 so total the all students in MTs AL MA'ARIF is 197 the students.

## **2. Sampling**

Sampling is a process of selecting a number of the students who will be represent from the large group (Ary, 2010:155). To determining the one group of sample, the researcher used purposive sampling. Purposive sampling is a type of nonprobability sampling where the researcher consciously selects subjects for addition in a study so as to make sure that the elements will have certain characteristics pertinent to the study.

## **3. Sample**

Sample is a group of subject or participant (students) is chosen from the populations to be a representative (Fraenkel and Wallen, 2009:90). It means that a good sample must be representative of the entire as possible, so that the generalization of the sample as true as population. To take a sample the researcher use purposive sampling where the researcher choose one class that is VII D to be a sample that consist of 35 students, there are 15 male and 20 female at MTs AL MA'ARIF Tulungagung in academic year

2016/2017 that believed that this class can give sufficient information. Those 35 students were given a pre-test, treatment, and post-test during the research.

### **C. Variable**

Variables are defined as attributes, qualities, and characteristics of persons, groups, settings, or institutions, such as gender, social skills, socioeconomic status, exclusiveness, or achievement. According to Ary (1985:30) states that Variables can be classified in several ways, they are

- 1. Independent variables (Y)** is variable that consequence of or upon attendance variables. One independent variable must be the treatment variable. One or more group receive the experimental manipulation or treatment. In this study the speaking by using Oral Presentation strategy was independent variable.
- 2. Dependent variable (X)** is the response or the criterion variable that is presumed to be caused by or influenced by the independent treatment conditions and any other independent variables. In this study the dependent variable was student's speaking skill.

### **D. Description of Treatment**

The treatment of this research is Oral Presentation strategy, in which the researcher as teacher used treatment to teach students' speaking problems in the class. Oral Presentation is one of the strategy that is able to help students in teaching and learning speaking process. Oral Presentation is implemented in discussion group and it can make students more active. Besides, Oral

Presentation strategy can provide opportunities for students to develop their ideas in speaking practice.

In teaching speaking by using Oral Presentation strategy, the research as English teacher provided the topic and picture that was appropriate with the material in learning of syllabus. Then, the teacher explained the role of Oral Presentation strategy to the students. These are steps of Oral Presentation;

1. The students listened and comprehended the instruction learning with us technique Oral Presentation of the teacher explained.
2. The students observed the picture about famous people who had given by the teacher and made a group that consisting 4 or 5 students in each groups;
3. The students questioned about the step from application technique Oral Presentation from the teacher.
4. The teacher gave the students technique about oral presentation (how to open, how to explain, and how to close).
5. The teacher gave an example of doing activities Oral Presentation about famous people (Joko Widodo).
6. The students discussed about the topic they choose to oral presentation
7. The students find the source about the word sentence is good and easy understand.
8. The students analyzed the sentence about famous people with the group of each based on a picture of their chosen and the guidance the teacher.

9. Each of the group forward to the next to present the discussion based on the picture of each group choose.
10. Each the students interchangeably continued presentation have they prepared each of the group with oral and right.

Oral Presentation is very easily done by the teachers and students in the teaching and learning speaking process in the classroom, because the students can increase vocabulary and increase confidently to speaking English in front of the class.

#### **E. Instrument and Instrumentation of the Research**

Instrument of research are the tools to measure something that we observe in order to obtain the data and answer the research problems (Sugiyono: 2011). Instrument was used to collect data in research and it was one of the significant steps in conducting the research. The researcher used test to elicit and collect information on students' speaking ability before and after giving treatment. There are two test in this research, pre-test and post-test.

##### **1. Piloting Instrument.**

The instrument that was used in this research was speaking test. To the pre-test instruments, the researcher provided four topic and picture. The researcher tried out her instrument before conduct pre-test. Firstly, on Monday, March 20<sup>th</sup> 2017 until Monday, March 25<sup>th</sup> 2017 the instrument was consulted or validated to the expert lecture in speaking. Afterthat, the instruments was can be tried out the students, exactly on Monday, March

27<sup>th</sup> 2017. At the time, they were asked to choose one of four the picture that familiar to them and practice speaking based on the topic that they were choose. The researcher took five students at MTs AL MA'ARIF Tulungagung, specially VII D. As a result, the students didn't have problems in understanding the instruction when they were asked to choose the topic. And also, they were able to describe the topic well.

The researcher conducted pre-test with the topic which was result of instrument's try out. Pre-test was done within a week before giving the treatment, exactly on Wednesday, March 30<sup>th</sup> 2017. Then the researcher gave the treatment. It was done a week before post-test. It means that, the researcher was done treatment spend three meeting, exactly from Monday, April 3<sup>rd</sup> 2017 until Monday, April 10<sup>th</sup> 2017. And then, post-test was done immediately after giving treatment, exactly on Wednesday, April 12<sup>th</sup> 2017.

In assessing the students' speaking ability, the researcher set up analytic scoring rubric which includethe criteria such of accent, grammar,vocabulary,fluency,and comprehension, that adopted from Hughes' book entitled "Testing for Language Teachers" (2003: 113)

**Table 3.2 Speaking Scoring Rubric**

<b>Aspect</b>	<b>Score</b>	<b>Proficiency Description</b>
Accent	1	Pronunciation frequently unintelligible
	2	Frequent gross errors and a very heavy accent make understanding difficult, require frequent repetition.
	3	"Foreign accent" requires concentrated listening, and mispronunciations lead to occasional misunderstanding and apparent errors in grammar or vocabulary.

	4	Marked “foreign accent” and occasional mispronunciations which do not interfere with understanding.
	5	No conspicuous mispronunciations, but would not be taken for a native speaker.
	6	Native pronunciation, with no trace of “foreign accent”.
Grammar	1	Grammar almost entirely inaccurate except in stock phrases.
	2	Constant errors showing control of very few major patterns and frequently preventing communication.
	3	Frequent errors showing some major patterns uncontrolled and causing occasional irritation and misunderstanding.
	4	Occasional errors showing imperfect control of some patterns but no weakness that cause misunderstanding.
	5	Few errors, with no patterns of failure.
	6	No more than two errors during interview.
Vocabulary	1	Vocabulary inadequate for even the simplest conversation.
	2	Vocabulary limited to basic personal and survival areas (time, food, transportation, family, etc.).
	3	Choice of words sometimes inaccurate, limitations of vocabulary prevent discussion of some common professional and social topics.
	4	Professional vocabulary adequate to discuss special interest; general vocabulary permits discussion of any non technical subject with some circumlocutions.
	5	Professional vocabulary broad and precise; general vocabulary adequate to cope with complex practical problems and varied social situations.
	6	Vocabulary apparently as accurate and extensive as that of an educated native speaker
Fluency	1	Speech is so halting and fragmentary that conversation is virtually impossible.
	2	Speech is very slow and uneven except for short or routine sentences.
	3	Speech is frequently hesitant and jerky; sentences may be left uncompleted.
	4	Speech is occasionally hesitant, with some unevenness caused by rephrasing and groping for words.
	5	Speech is effortless and smooth, but perceptively non native in speed and evenness.
	6	Speech on all professional and general topics as effortless and smooth as a native speaker’s.



Comprehension	1	Understands too little for the simplest type of conversation.
	2	Understand only slow, very simple speech on common social touristic topics; requires constants repetition and rephrasing.
	3	Understands careful, somewhat simplified speech when engaged in a dialogue, but may require considerable repetition and rephrasing.
	4	Understands quite well normal educated speech when engaged in a dialogue, but requires occasional repetition or rephrasing.
	5	Understands everything in normal educated conversation except for very colloquial or low frequency items, oe exceptionally rapid or slurred speech.
	6	Understands everything in both formal and colloquial specch to be expected of an educated native speaker.

## F. Validity and Reliability Testing

Validity and reliability are a instrument which will be used must be valid and reliable before using it to collect the data. To doing validity and reliability testing as follow:

### 1. Validity

Validity is measure appropriate what will be measured, and usually established through an in depth review instrument, including an examination of the instrument's items being tested. validity is the most complex criterion of an effective test and the most important principle of language testing. It is the extent to which inferences made from assessment result are appropriate, meaningful, and useful in terms of the purpose of the assessment (Brown 2004:22).

There are four kinds of validity, content validity, criterion-related validity, construct validity, face validity. In this research, the researcher checked content validity and construct validity.

#### **a. Content validity**

Content validity is relevant. It means that the items or tasks in the test match what the test as a whole is supposed to assess. Where the objectives of the programme are set out in detail, for example in a syllabus that lists skills or functions, then the content validity can be assessed by comparing the kind of language generated in the test against the syllabus (Underhill, 2006:106).

The instrument of study had content validity because the items were materials used for teaching speaking in descriptive text at the first graders of MTs AL MA'ARIF Tulungagung .Also, the content validity since the tests was designed based on main competence and basic competence in syllabus Curriculum of 2013 since the school implements the Curriculum of 2013 in the time the researcher conducted this research.

**Table 3.3 Content validity of test.**

Core Competence	Basic Competence	Indicator	Test items		Item Test
			Pre-test	Post-test	
4. Analyzing, thinking, and performing in	4.8 Capture the meaning of the	4.8.1 Understanding the	Speaking test	Speaking test	To describe the picture, students

both concrete and abstract field related to the development of what has been learn in school individually, and being able to use the method based on the theory in science.	descriptive text oral and write.	public place picture carefully in group. 4.8.2 Defining the possible vocabular y used to describe the public place according picture detail. 4.8.3 Drawing the public place according clear and exact with oral presentatio n.			must pay attention to these steps: 1. Two minutes to understand the public place picture and think about the possible vocabubular y used to describe. 2. Five minutes to speaking practice in the front.
---	----------------------------------	--	--	--	--

### **b. Construct validity**

Construct validity is any theory, hypothesis, or model that attempts to explain observed phenomena in our universe of perception (Brown 2004:25). It means that it is a instrument to measure just the ability which supposed to measure. Language testing used in this research was appropriate with the theory of testing speaking. In this research, testing speaking used describing the picture orally.

### **c. Face validity**

A test is said to have face validity if it looks as if it measures what it is supposed to measure. Face validity is hardly a scientific concept, yet it is very important. A test which does not have face validity may not be accepted by test-takers, teachers, education authorities or employers (Isnawati. 2014: 29). In this test, there are some aspects that are consideration from this test to make a good test based on the validity, that are:

- a. The instruction must be clear for the students and can understood by the students.
- b. In this test, the students present their idea about the topic to their friends. The topic that given is known by the students and suitable with the their level.
- c. Time allocation must be clear. The teacher give 5 minutes to present the idea.

The resercher ensured face validity by consulting to some expert, they are the reseracher's advisor and English teacher of MTs AL MA'ARIF Tulungagung.

## **2. Reliability**

The researcher achieves reliability through the use of reability as equivalence. Through using equivalent forms of a test. If an equivalent form of the test is devised and yields similar result, then the instrument can be said to demonstrate this form of reliability (Cohen, 2005:118).

In this case, the pretest and post-test in the experimental model of evaluation are predicted on this type of reliability, being alternate forms of instrument to measure the same issues. This type of reliability will also be demonstrated if the equivalent forms of a test yield consistent results if applying those samples to be matched simultaneously (the control and experimental group). Hence, the both classess which are as the subjects of research will get the same tests so that the realiability will be achieved. Here reliability can be seen through the demonstration of means and standard deviations between two groups.

**Table 3.4 The Statistical Correlations of pre-test score (try out) with Pearson Product Moment from SPSS Statistics 16.0**

		Correlations	
		X1	X2
X1	Pearson Correlation	1	.751**
	Sig. (2-tailed)		.000
	N	20	20
X2	Pearson Correlation	.751**	1
	Sig. (2-tailed)	.000	
	N	20	20

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 3.3 show that Pearson Correlation of X1 and X2 is 0,751. So, the score of pre-test (try out) has reliability because  $0,751 > 0,05$ .

**Table 3.5 The Statistical Correlations of post-test score (try out) with *Pearson Product Moment* from SPSS Statistics 16.0**

		Correlations	
		Y1	Y2[U1][U2][U3][U4]
Y1	Pearson Correlation	1	.712**
	Sig. (2-tailed)		.000
	N	20	20
Y2	Pearson Correlation	.712**	1
	Sig. (2-tailed)	.000	
	N	20	20

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 3.4 show that Pearson Correlation of X1 and X2 is 0,712. So, the score of pre-test (try out) has reliability because  $0,712 > 0,05$ .

## G. Normality Testing and Homoginity Testing

### 1. Normality Testing

Normality testing is very important testing that was conducted by the researcher before analyzing the data. The both test was conducted to fulfill the criteria of parametric statistic whether the researcher can use t-test, z-test, or f-test to analysis the data. While the meaning of parametric according to Garson (2012:08) are significance test which assume a certain distribution of the data (usually the normal distribution). The most common significance tests are t-test, z-test, and f-test. In order to be able to decide the formula used for analysis, the normality testing was done in this study.

Normality is one of the testing data that assumes the data is parametric or non parametric test, the researcher should determine the normality of the data.

The researcher using formula Kolmogorov-Smirnow test of SPSS IBM 16.0. It is supported by Lubis (2008) who point out that normality testing of distribution data was conducted by using kolmogorov smirnov statistical which the tool has been available in spss. Widiyana (2012) stated that the ways that can be used to test whether the residual variable has a normal distribution as follow;

1. If the significance value or probability  $> 0.05$ , so residual has normal distribution.
2. While the significance value or probability  $< 0.05$ , so residual hasn't normal distribution.

**Table 3.6 The Statistical Correlations of pre-test and post-test score (try out) with One-Sample Kolmogorov-Smirnov Test from SPSS Statistics 16.0**

		One-Sample Kolmogorov-Smirnov Test		
		Pretest	Posttest	Unstandardized Residual
N		20	20	20
Normal Parameters <sup>a</sup>	Mean	65.3500	70.3500	.0000000
	Std. Deviation	4.82619	2.81490	4.76919987
Most Extreme Differences	Absolute	.229	.149	.178
	Positive	.229	.149	.178
	Negative	-.144	-.121	-.071
Kolmogorov-Smirnov Z		1.024	.668	.794
Asymp. Sig. (2-tailed)		.245	.763	.553

a. Test distribution is Normal.

Based on the result of pretest and posttest in normality testing above, it is known that the significance of pretest is 0,245 and the significance value of posttest is 0,763. So, it can be conclude that test has normal distribution, because the significance value of pretest 0,245 and the significance value of posttest 0,763 are higher than 0,05. To fulfill the provision of normal distribution is if the significance value or probability  $> 0,05$  (Widyana,2012).

## 2.Homogeneity Testing

Homogeneity testing is intended to show that two or more groups of data samples come from populations having the same variance. To know the homogeneity, the researcher used One Way Anove with SPSS 16.0. The result can be seen in the table below:



**Table 3.7 The Statistical Correlations of pre-test and post-test score (try out) with One Way Anove from SPSS Statistics 16.0**

**Test of Homogeneity of Variances**

Pretest			
Levene Statistic	df1	df2	Sig.
2.364	6	12	.096

Based on the table above is known that the sig/p value is 0.96 higher than 0.05 means  $H_0$  is accepted and  $H_a$  is rejected. So, it can be interpreted that the data is homogeny.

## **H. Data Collecting method**

Method of data will provide reality about some steps which are used in the process of collecting data which were collected though pre-test and post-test, during the three weeks study, the students followed the research either on direct meeting. To get the data the researcher used method of data collecting as follow:

### **1. Pre-test Method**

Pre-test was used measure the students' speaking ability before new strategy applied. The researcher conducted pre-test in the begining of study, exactly on Wednesday, March 30<sup>th</sup> 2017. Before starting practice speaking, students in expressing ideas. In pre-test, the students started expression their ideas about public place. This test is given in order to know how far the students' speaking ability before got treatment.

## 2. Treatment Method

Treatment was given to the students in teaching speaking skill. It was purpose to know the students' ability in speaking skill after giving treatment. So, treatment is new strategy by the researcher that can be accepted by the students or not. The researcher conducted treatment while three meeting, exactly from Monday, April 3<sup>th</sup> 2017, Wednesday, April 5<sup>th</sup> 2017, Thrusday, April 6<sup>th</sup> 2017.

In the begining of study, the researcher introduced Oral Presentation to the students. Although they have not known Oral Presentation before, when the researcher explained Oral Presentation and its steps, they understood quickly. Also, when the researcher asked them to apply this strategy, they are very enthusiastic.

## 3. Post-test Method

Post test was one kind of test which given aftergaining the score in pre-test and conducting treatments. It was purpose to know the result of the new strategy given is there effective or not. Post-test itself was conducted within once meeting, exactly on Wednesday, April 12<sup>th</sup> 2017.

Before starting practice speaking in front of the class, identify the topic and think about possible vocabulary used to describe the picture was also conducted in classroom to help the students in expressing their ideas when practice speaking.

## **I. Data Analysis**

The analysis of data was used to analyze and calculate data from the students' achievement in speaking Oral Presentation technique. The analysis used in this study is in the form of quantitative data. The quantitative data of this research will be collected from the tests conducting. The researcher conducted test to the students before and after they were taught by using Oral Presentatio. Also, the researcher used the formula t-test to analyze the data because to know the result of the students' speaking ability. To analyze the data, the researcher used the process as follow:

### **1. Speaking**

In speaking, the students were asked to describe the picture. The students developed their speaking based on the picture from the researcher. In this research, the researcher only used one class.

### **2. Scoring**

In assessing of students' speaking, the researcher used scoring rubric. Here, the researcher determined criteria in the scoring rubric is accent, grammar, vocabulary, fluency, and comprehension. Of this assessment, the researcher can measure students' speaking and find out the students' score of each item. The formula to find out total score as follow:

Score obtained

$$\text{Score} = \frac{\text{Score obtained}}{\text{Total score}} \times 100$$

Total score

### 3. Statistical Analysing

Here, the researcher used t-test, using statistical program to ensure the effectiveness and to get stronger conclusion. The t-test was taken from the students, test-result which has conducted before and after being taught using Oral Presentation.

After analysing the data from tests. The researcher would know the effective or not of Oral Presentation toward students' speaking skill at first grade at junior high school of MTs AL-MA'ARIF Tulungagung.