

## 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 pre-test post-test design.**

Pre-test	Treatment (Independent variable)	Post-test (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.

1. Administering a pretest with a purpose of measuring speaking ability of the Thai students for fourth semester of State Islamic Institute Tulungagung.
2. Applying the experimental treatment teaching speaking by using inquiry method of the Thai students for fourth semester of State Islamic Institute Tulungagung.
3. Administering a post-test with a purpose of measuring speaking ability of the Thai students for fourth semester of State Islamic Institute 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**

### **1. Population**

The first step to do the research is finding the target of 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. According to McMillan (1996:85), a population is a group of elements or cases, whether individuals, objects, or events, that conform to specific criteria and to which we intend to generalize the result of the research.

The population of this research is the fourth semester for English Department at State Islamic Institute Tulungagung. That consist of 10 students, there are 5 male and 5 Female.

## **C. Variable**

According to Fraenkel (1996:61) a variable is any characteristic or quality that varies among the numbers of particular group. In experimental research, there are two variables: independent variables and dependent variable;

1. Independent variable (Y)

Independent 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)

Dependent variable is the respons or the criterion variable that is presumed to be caused by or influenced by the independent treatment condition and any other independent variables. In this study the dependent variable was student's speaking skill.

#### **D. Validity and Reliability Testing**

- 1. Validity**

Validity is measure appropriate what will be measured, and usually established through an in depths 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).

**a. Face validity**

Face validity is the extent to which a measurement method appears “on its face” to measure the construct of interest. Most people would expect a self-esteem questionnaire to include items about whether they see themselves as a person of worth and whether they think they have good qualities. So, a questionnaire that include these kinds of items would have good face validity. The finger-length method of measuring self-esteem, on the other hand, seems to have nothing to do with self-esteem and therefore has poor face validity. (Cacioppo & Petty, 1982). 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 is not determined by the researcher or the topic not determined by the researcher).
- c. The topic that given is known by the students and suitable with their level.
- d. Time allocation must be clear. the teacher gives 5 minutes to present the idea.

**b. Content validity**

Content validity is the extent to which a measure “covers” the construct of interest. For example, if a researcher conceptually defines test anxiety as involving both sympathetic nervous system activation and negative thought, then his measure of test anxiety should include items about both nervous feelings and negative thought. Or consider that attitudes are usually defined as involving thoughts, feelings, and action toward something. By this conceptual definition, a person has a positive attitude toward exercise to the extent that he or she thinks positive thoughts about exercising, feels good about exercising, and actually exercises. (Cacioppo & Petty, 1982).

The instrument of study had content validity because the items were material used for teaching speaking in descriptive text at the fourth semester of State Islamic Institute Tulungagung. Also, the content validity since the test was designed based on *Kurikulum berbasis Kerangka Kualifikasi Nasional Indonesia* (KKNI) since the school implements the *Kurikulum berbasis Kerangka Kualifikasi Nasional Indonesia* (KKNI) in the time the researcher conducted this research.

**Table 3.2 Content validity of test.**

Core Competence	Basic Competence	Indicator	Test items		Item Test
			Pre-test	Post-test	
4. Analyzing, thinking, and performing in both concrete and abstract field relates to the development of what has been learn in school individually, and being able to use the method based on the theory in science.	4.8 Capture the meaning of the descriptive text oral and write.	4.8.1 Understanding the public place picture carefully in group. 4.8.2 defining the possible vocabulary used to describe the public place according picture detail. 4.8.3 drawing the public place according	Speaking test	Speaking test	To describe the picture, students must pay attention to these steps: 1. Two minutes to understand the picture and think about the possible vocabulary used to describe. 2. five minutes to speaking

		clear and exact with oral presentation.			practice in the front.
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### c. Construct validity

Construct validity is one way to test the validity of a test; it's used in education, the social sciences, and psychology. It demonstrates that the test is actually measuring the construct it claims it's measuring. For example, you might try to find out if an educational program increases emotional maturity in elementary school age children. Construct validity would measure if your research is actually measuring emotional maturity.

It isn't that easy to measure construct validity—several measures are usually required to demonstrate it, including pilot studies and clinical trials. One of the reasons it's so hard to measure is one of the very reasons it exists: in the social sciences, there's a lot of subjectivity and most constructs have no real unit of measurement. Even those constructs that do have an acceptable measurement scale (like IQ) are open to debate. (Brown, J. D. 1996). In this research, testing speaking



used describe the picture orally, describing what students see around them and talking about what students want to convey.

## **2. Reliability**

Based on Gay (1992:161) reliability is the degree to which a test consistently measures whatever it measures. Or reliability is expressed numerically, usually as a coefficient, a high coefficient indicates high reliability. There is significant difference between the score of pre-tests and the score of post-tests. So, the result of research is reliable.

According to Horizon (1983:10) says that the reliability of the test is its consistency. Thus, reliability is a measure of accuracy, consistency, dependability or fairness of score resulting from administration or particular examination.

In this case, the pre-test and post-test in the experimental model of evaluation is predicted on this type of reliability, being alternate forms of instrument to measure the same issue. This type of reliability will also be demonstrated if the equivalent forms of a test yield consistent result if applying those samples to be matched simultaneously.

## **E. Normality and Homogeneity 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 data (usually the normal distribution). In this research, the normality testing used SPSS 16.0 version. The normality testing is done toward both pre-test and post-test score. The hypotheses for testing normality are that  $H_0$  (null hypotheses) is accepted and  $H_a$  (alternative hypothesis) is rejected. It was also can be concluded as follow:

- a.  $H_a$ :  $H_a$  was rejected if significance value is lower than 0.05
- b.  $H_0$ :  $H_0$  was accepted if the significance value is higher than 0.05

## 2. Homogeneity Testing

Homogeneity testing is intended to show that two or more groups of data samples come from population having the same variance. To know the homogeneity, the researcher used One Way SPSS 16.0. The value of significance of homogeneity is 0.05.

- a.  $H_0$ : If the value of significance  $> 0.05$ , it means the data is homogeneity.
- b.  $H_a$ : If the value of significance  $< 0.05$ , it means that the data is not homogeneity.

## **F. Data Collecting method**

In this research the data collection is administering test that consist of pre-test and post-test. The procedures of administering test was clarified as follow:

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

Pre-test is a form of question, which the teacher gives to his students before starting a lesson. The questions asked are the material that will be taught that day (new material). The question is usually done by the teacher at the beginning of the opening lesson. Pre-test is given with the intention to find out whether there are students who already know about the material to be taught. Pre-test can also be interpreted as an activity to test the level of students' knowledge of the material to be delivered, pre-test activities carried out before teaching activities are given. This test is given in order to know how far the students' ability before got treatment.

### **2. Treatment**

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 research that can be accepted by the students or not. The researcher conduct treatment while three meeting, exactly from Wednesday 12 June 2019, Friday 14 June 2019 and Saturday 15 June 2019.

In the beginning of the 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

Post-test is a form of question given after the lesson / material has been delivered. In short, the post test is the final evaluation when the material taught on that day has been given which a teacher gives a post-test with the intention of whether the student has understood and understood the material just given that day. It was purpose to know the result of the new strategy given is there effective or not.

## **G. 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 Presentation. 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, students are asked to explain what the student wants to explain and explain the topic determined by the researcher. In this research, the researcher only used Thai students of fourth semester at State Islamic Institute Tulungagung.

## 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:

**Table 3.3 Scoring rubric of speaking**

ASPECT	SCORE	DESCRIPTION
Pronunciation	5	Easy to understand and has native speaker's accent
	4	Easy to understand and with certain accent
	3	There are some problems in pronunciation made listener should more concentration and sometimes

		there is misunderstanding
	2	Difficult to understand because there is problem in pronunciation, asked to repeat
	1	The serious pronunciation so it can not be understood
Grammar	5	There is no or little mistake in grammar
	4	Sometime makes mistake in grammar, but it does not influence the meaning
	3	Often makes mistake in grammar and it influence the meaning
	2	There are many mistakes in grammar which made hinder in meaning and should re-arrange sentence
	1	The grammar mistakes is so bad so it is difficult to understand
Vocabulary	5	Using vocabulary and expression like native speaker
	4	Sometimes using vocabulary which is not appropriate
	3	Using vocabulary which is not appropriate, conversation becomes

		limited because the vocabulary is limited
	2	Using wrong vocabulary and it is limited so it is difficult to understand
	1	Vocabulary is so limited so conversation impossible to occur
Fluency	5	Speech is smooth as a native speaker's
	4	The fluency is disturbed by language problem
	3	The fluency is disturbed more by language problem
	2	Speech is fluency hesitant and jerky; sentences may be left uncompleted
	1	Speech is so halting and fragmentary that conversation is virtually impossible
Comprehend	5	Understand all without any difficulties
	4	Understand almost all, although there is repetition in certain part
	3	Understand most of what she/he talks in slow speaking
	2	Difficult to understand what she/he

		talks
	1	Can not understand although in simple conversation

(Source of: <http://english-on-blog.blogspot.co.id/2015/02/scoring-rubric-for-speaking-and-scoring.html>)

Score obtained

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

Total score

**Table 3.4 The scoring guide**

Interval	Letter value	Conversion number	State of graduation
96-100	A+	3,76-4,00	Pass
91-95	A	3,51-3,75	Pass
86-90	A-	3,26-3,50	Pass
81-85	B+	3,01-3,25	Pass
76-80	B	2,76-3,00	Pass
71-75	B-	2,51-2,75	Pass
66-70	C+	2,26-2,50	Pass
61-65	C	2,00-2,25	Pass
56-60	D	1,01-1,99	Don't pass
0-55	E	0,00-1,00	Don't pass

(Source of: *Pedoman penyelenggaraan pendidikan tahun akademik 2015/1016*)



### 3. Statistical Analyzing

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 analyzing the data from tests. The researcher would know the effective or not oral presentation toward students' speaking skill at fourth semester of Thai students at State Islamic Institute Tulungagung.