

## CHAPTER III

### RESEARCH METHODOLOGY

#### 3.1 Time and Location

This research will be conducted to the ninth grade at SMP Swasta Islam An-Nizam addressed at Jl. Perjuangan/Tuba II No. 62 on May – June 2023.

In this study, the reason why researchers chose SMP Swasta Islam An-Nizam as the location of the study is that this school is a Pancasila flagship school that has followed the Merdeka Belajar curriculum. This school is also located in a very strategic place. Researchers chose this site because of the problems faced by the teacher regarding the students' lack of ability to speak. Researchers have observed this school while conducting Field Introduction Practice III.

#### 3.2 Population and Sample

Population is the amount of individual or object that have similar characteristic (Lind et al., 2017). The population of this research was ninth grade at SMP Swasta Islam An-Nizam which consisted of three classes. There were 22 students in each class, so the total of the population was approximately 66 students.

Table 3.1 The Number of Ninth Grade Students of SMP Islam An-Nizam

Class	Population		
	Male	Female	Total
IX AD	11	11	22
IX HA	11	11	22
IX KHD	11	11	22
<b>TOTAL</b>			66

Sample is part of the elements on population. Etikan et al., (2017) mentioned that sample is a part or portion of the whole population. The sample in this research was two classes IX AD and IX HA where the total of the students were 22 students each class, consist of 11 students of each male and female.

### 3.3 Research Design

The type of the research is experimental research. According Cresswell (2008), experiment is the researcher test an idea (or practice procedure) to determine whether it influences an outcome or dependent variable. The research design is quasi experimental research. In this research, the writer uses the design of the pretest post-test in two groups. Because in conducting this research, two classes of ninth grade at SMP Swasta Islam An-Nizam has been participated. The first class as experimental class and the second class as controlled class. Both of them got a pretest at the beginning, treatment in the middle and posttest at the end of the research. The pretest and posttest results have been being compared in order to determine the influence of the treatment.

Table 3.2 Research Design

Class	Pretest	Treatment	Posttest
Experimental	Direct Method	Direct Method	Direct Method
Controlled	Non Direct Method	Non Direct Method	Non Direct Method

Arikunto (2013) states that a test is a series of questions or exercises and other tools used to measure skills, knowledge, abilities, or talents possessed by individuals or groups. The procedures are:

a. Observation

Observation is a data collection technique that uses direct observation in the field to observe the symptoms that appear on the research object. The observations made were experimental to determine the students' ability to speak by using the Direct Method.

b. Pre-test

A test is a series of questions or exercises as well as other tools used to measure skills, intelligence, knowledge, abilities, or talents possessed by individuals or groups (Arikunto:2013). This test method is used to determine

the results of students' speaking abilities. The pretest and posttest were used in this study.

In this study, the researchers used a pretest and posttest in the form of oral presentations about the material describing picture. After the researcher explained the material, the researcher gave an instrument to the students in which the instrument contained pictures and some auxiliary vocabulary to make it easier for students to explain the material. Students were asked to observe the picture according to their knowledge then the researcher asked the students to describe the picture in front of their classmates according to what they observed the picture.

c. Treatment

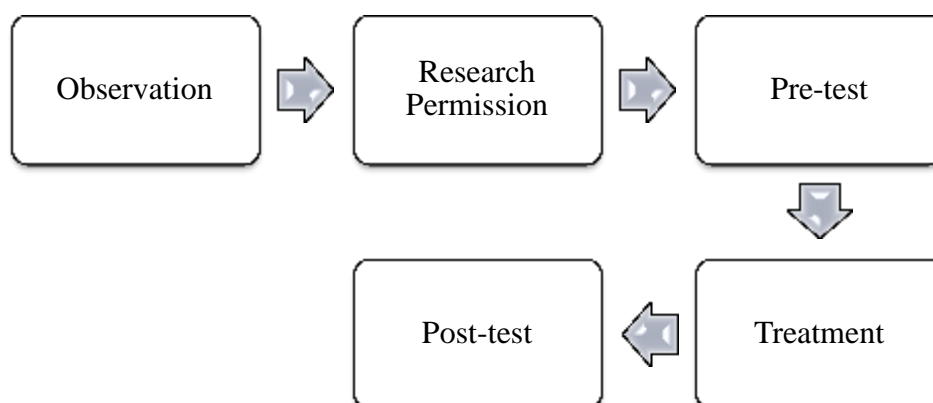
After both groups have been given a pretest and have been deemed commensurate, the next stage is to do treatment. The researcher gave treatment to the students for 2 meetings. The researcher explains the material describing pictures to students where the researcher explains the meaning of describing, generic structures and some examples of describing pictures. At each meeting, the researcher gave several tests to students to evaluate students' knowledge regarding the describing picture material in the form of questions.

d. Post-test

The posttest is used after students take part in learning using the Direct Method. The post-test conducted by the researcher is the same as what the researcher did in the pre-test. The researcher gave an instrument in the form of an image to the students to observe based on their knowledge and then the researcher asked the students to describe the image in front of their classmate. The results of this post-test are used to find out whether or not there is an increase in speaking abilities in students using the Direct Method.

Simply, the process of research procedures is flowchart as follow:

Chart 3.1 Research Procedures



### 3.4 Instrument of the Research

Because the research instrument is a data gathering and processing tool, it is associated with data collection and processing operations. According to Sugiyono (2013:305), a research instrument is a tool used to measure observed natural and social phenomena. All of these phenomena are referred to as research variables. The authors employed pre-test, treatment and post-test instruments in their experimental and controlled class. Oral test will be given to both experimental and control group are require each individual to orally conduct a test in one to two minutes. The test, therefore, aims to identify the impact of Direct Method during and after the treatment. During the test, the researcher will give the scores in accordance with students' skill in speaking and fills the rubric of speaking test. Also, interviews will be used to gain in-depth information on students' responses to the use of the Direct Method.

The researcher scored the students' speaking ability according to categories developed by Brown (2004) there are components of speaking generally recognized in the analysis of speech namely fluency, pronunciation, vocabulary, grammar, and comprehension. Brown (2004) describes the ratings as follows:

#### 1. Fluency

Table 3.3 The Fluency Category

Category	Requirement
5	Has complete fluency in the language such that his speech is

	fully accepted by educated native speakers.
4	Able to use the language fluently on all levels normally pertinent to professional needs. Can participate in any conversation within the range of this experience with a high degree of fluency.
3	Can discuss particular interest of competence with reasonable ease. Rarely has to grope for words.
2	Can handle with confidence but not with facility most social situations, including introductions and casual conversations about current events, as well as work, family and autobiographical information.
1	(No specific fluency description. Refer to other four language areas for implied level of fluency.)

(Source: Brown, 2010)

## 2. Pronunciation

Table 3.4 The Pronunciation Category

Category	Requirement
5	Equivalent to and fully accepted by educated native speaker.
4	Errors in pronunciation are quite rare.
3	Can discuss particular interest of competence with reasonable ease. Rarely has to grope for words.
2	Errors never interfere with understanding and rarely disturb the native speaker. Accent may be obviously foreign
1	Errors in pronunciation are frequent but can be understood by a native speaker used to dealing with foreigners attempting to

	<p>speak his language.</p>
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(Source: Brown, 2010)

### 3. Vocabulary

Table 3.5 The Vocabulary Category

Category	Requirement
5	Speech on a level is fully accepted by educated native speakers in all its features including breadth of vocabulary and idioms, colloquialisms, and pertinent cultural references.
4	Can understand and participate in any conversation within the range of his experience with a high degree of precision of vocabulary.
3	Able to speak the language with sufficient vocabulary to participate effectively in most formal and informal conversations on practical, social, and professional topics. Vocabulary is broad enough that he rarely has to grope for a word.
2	Has speaking vocabulary sufficient to express him simply with some circumlocutions.
1	Speaking vocabulary inadequate to express anything but the most elementary needs.

(Source: Brown, 2010)

### 4. Grammar

Table 3.6 The Grammar Category

Category	Requirement
5	Equivalent to that of an educated native speaker.

4	Able to use the language accurately on all levels normally pertinent to professional needs. errors in grammar are quite rare.
3	Control of grammar is good. Able to speak the language with sufficient structural accuracy to participate effectively in most formal and informal conversation on practical, social, and professional topics.
2	Can usually handle elementary constructions quite accurately but does not have thorough or confident control of the grammar.
1	Errors in grammar are frequent, but speaker can be understood by a native speaker used to dealing with foreigners attempting to speak his language.

(Source: Brown, 2010)

## 5. Comprehension

Table 3.7 The Comprehension Category

Category	Requirement
5	Equivalent to that of an educated native speaker
4	Can understand any conversation within the range of his experience.
3	Comprehension is quite complete at a normal rate of speech.
2	Can get the gist of most conversation of non-technical subjects (i.e., topics that require no specialized knowledge)
1	Within the scope of his very limited language experience, can understand simple questions and statements if delivered with

	slowed speech, repetition, or paraphrase.
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(Source: Brown, 2010)

The speaking ability was scored by counting five qualities above and each component has score or level. Each component has the highest score 20 and the highest of teacher' score is 100. Each score get by students from each category will be combined, and the number obtained is multiplied by 20 and divided by 5 to get the score that the student has achieved.

The following are the ratings for the students' ability to speak:

Table 3.8 Classification of the Students' Score on Speaking in the Level of Ability

Score	Classification
80-100	Excellent
66-79	Good
56-65	Average
40-55	Poor
0-39	Failed

### 3.5 Technique of Data Analysis

Sugiyono (2013: 333) said that in quantitative research, the data analysis technique used is clear, that is, it is directed to answer the problem formulation or hypothesis testing that has been formulated in the proposal. Because the data is quantitative, the data analysis technique uses descriptive statistical methods that are already available.

#### 3.5.1 Normality Test

Normality test was held to determine whether normal or abnormal research data or research variable. The data normality test can determine whether the distribution of a data follows or approaches the normal distribution. In this study, the normality test was carried out using the SPSS version 23 program. The normality test can use one of the test tools: the Kolmogorov-Smirnov test or the



Shapiro-Wilk test. The Kolmogorov-Smirnov test is a statistical test tool used to determine whether a sample comes from a population that has a certain distribution of data or follows a certain statistical distribution. While the Shapiro Wilk Test is a method or formula for calculating the distribution of data created by Shapiro and Wilk (Suliyanto, 2011). The Shapiro Wilk method is an effective and valid normality test method used for small samples. By test criteria:

- a. If the significant number (SIG)  $> 0.05$ , then the data is normally distributed.
- b. If the significant number (SIG)  $< 0.05$ , then the data is not normally distributed.

### 3.5.2 Homogeneity Test

According to Arikunto (2005), the homogeneity test of variance is used to determine whether or not the sample's variance is drawn from the same population. In this study, researchers used the Levene test. Levene's test is used to test the homogeneity of variance for more than two data groups by finding the difference between each data and the group average (Starkweather, 2010). Levene's test is better used if the amount of data between groups is the same.

According to Widiyanto (2010:51), the basis or guidelines for decision making in the homogeneity test are as follows:

- a. If the significance value (sig)  $< 0.05$ , it is said that the variance of two or more population data groups is not the same (not homogeneous).
- b. If the significance value (sig)  $> 0.05$ , it is said that the variance of two or more data population groups is the same (homogeneous).

### 3.6 Statistical Hypothesis

Ghozali (2016: 171) states that the t-test is used to determine the effect of each independent variable on the dependent variable. This test is done with the t test, which compares the t count with the t table. This test is carried out with the following conditions:

- a. If t count  $<$  from t table then  $H_0$  is accepted which is mean that there is the influences of Direct Method on students' ability in speaking.

- b. If  $t$  count  $>$  from  $t$  table then  $H_0$  is rejected which is mean there is no the influences of Direct Method on students' ability in speaking.

Furthermore, this test can be performed by observing the significant value of  $t$  at the level (0.05). The analysis is based on comparing an effective  $t$  with a significance of 0.05. The basic decisions taken in the  $t$  test are:

If  $t$  is significant  $<0.05$ , then hypothesis  $H_0$  is rejected. This means that the independent variable has a significant effect on the dependent variable. If  $t$  is significant  $> 0.05$ , then the hypothesis  $H_0$  is accepted. This means that the independent variable has no significant effect on the dependent variable.

