

## CHAPTER III

### RESEARCH METHOD

#### A. Research Design

The design of this research was experimental research. Gay and Airasian (2000:367) state that experimental research is type of research that the writer can prove the hypothesis to know the relationship of cause and the effect. This design had two classes: those were experimental and control class. The experimental class had taught by Round Robin Strategy and control class had taught by Conventional Strategy. To know the effect of the treatment of the class, the researcher gave same post-test to both of class. In this case, the researcher used two variables. The variables were Round Robin strategy as independent variable and the students' speaking skill as dependent variable. The purpose of this research was for knowing the effect of teaching speaking through this strategy. The variables in this research can be formulated in table 3.1.

**Table. 3.1**  
**The Research can be Designed by Using Following:**

Group	Independent	Dependent
G1	Y	X
G2	Y	X

Where:

G1 : Experiment class

- G2 : Control class
- Y : Using Round Robin Strategy at G1
- Y : Using Conventional Strategy at G2
- X : Students' speaking skill at G1 and G2.

In the treatment class, the researcher gave pre-test by asking them a topic to speak. After taking the pre-test score, the researcher gave the treatment to the class by using Round Robin strategy and asked the students to speak the same topic. The treatment gave for six meetings, this is supported by Gay and Arasian (2000:378), they propose that some periods of time are required for treatment. It is assumed that six meetings will be enough to see the effect that would arise between the student's skill in speaking before treating by Round Robin strategy and after treating by Round Robin strategy. Then, after treating the class in six meetings, the researcher gave post test to the students by asking the students to speak the same topics with the previous pre-test. The procedures of experiment class can be seen in the table 3.2

**Table. 3.2**  
**Procedures of the Research**

<b>Class</b>	<b>Steps</b>	<b>Procedures</b>	<b>Aim</b>
Experiment Class	Step 1	Pre test (Speaking Test )	To measure the degree of the dependent variable before the treatment
	Step 2	Treatment (Round Robin Strategy)	To influence the dependent variable
	Step 3	Post Test (Speaking Test)	To measure the degree of change on dependent the variable

Control Class	Step 1	Pre test (Speaking Test )	To measure the degree of the dependent variable before teaching
	Step 2	Teaching by using Conventional Strategy	To influence the dependent variable
	Step 3	Post Test (Speaking Test)	To measure the degree of change on dependent the variable

## B. Population and Sample

### 1. Population

Population is the number of students on this research. Gay and Airasian (2000:122) state that population is the group of interest to the researcher. It means that the researcher would like to know the result of the study to be generalized. The population of this research was the seventh grade of Junior High School Number 1 Kubung that consist of 162 Students. Thus, the population of this research can be seen in the table 3.3.

**Table 3.3.**  
**The Population of Class VII Junior High School Number 1 Kubung**  
**Academic Year 2017/2018**

Class	Students
VII 1	26
VII 2	29
VII 3	30
VII 4	22
VII 5	29
VII 6	26
Total	162

*Taken from Administration Affair of SMPN 1 Kubung*

Those six classes used SPSS ( Statistical Product And Service Solution) to know the normality and homogeneous data to show the sample was representative. The table below shows the result of normality and homogeneity test.

**Table 3.4**  
**Normality of Normal and Homogeneous of Population**  
**Tests of Normality**

VAR00001	VAR00002	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
	1	.141	27	.177	.960	27	.363
	2	.105	26	.200*	.944	26	.172
	3	.213	22	.010	.927	22	.106
	4	.169	30	.029	.938	30	.083
	5	.169	26	.053	.939	26	.130
	6	.135	26	.200*	.963	26	.465

a. Lilliefors Significance Correction

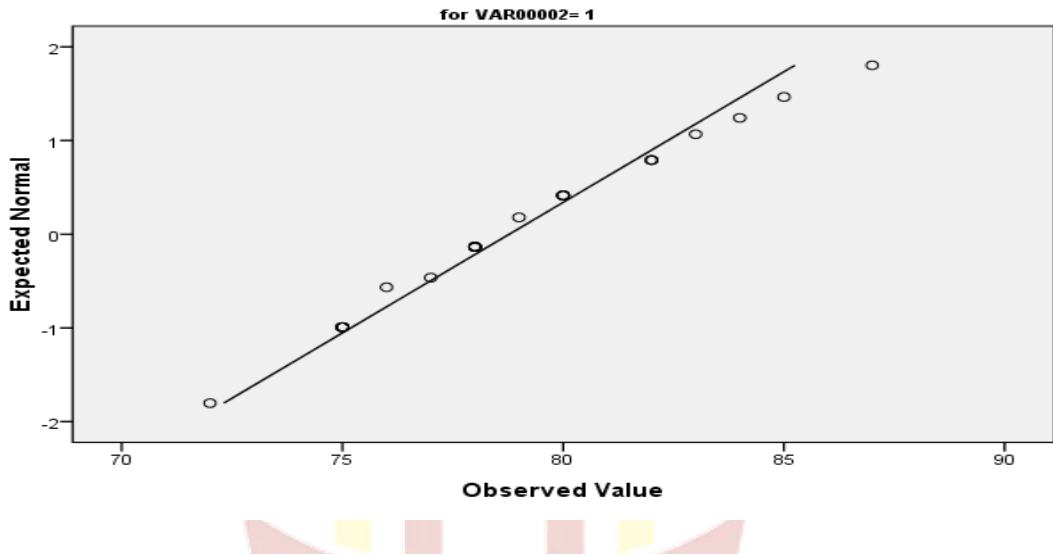
\*. This is a lower bound of the true significance.



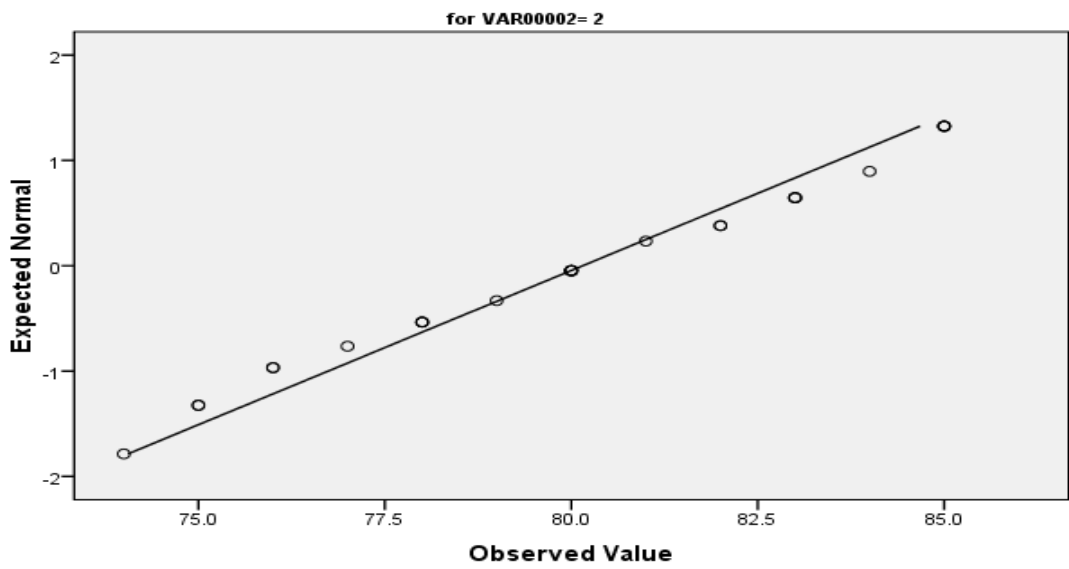
**Test of Homogeneity of Variance**

		Levene Statistic	df1	df2	Sig.
VAR00001	Based on Mean	2.210	5	151	.056
	Based on Median	2.004	5	151	.081
	Based on Median and with adjusted df	2.004	5	126.187	.083
	Based on trimmed mean	2.135	5	151	.064

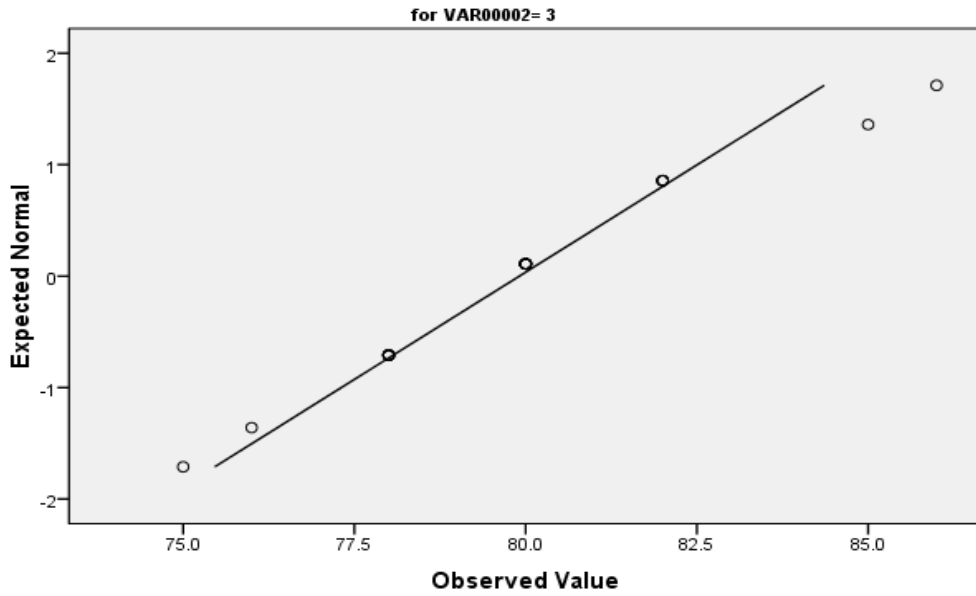
Normal Q-Q Plot of VAR00001



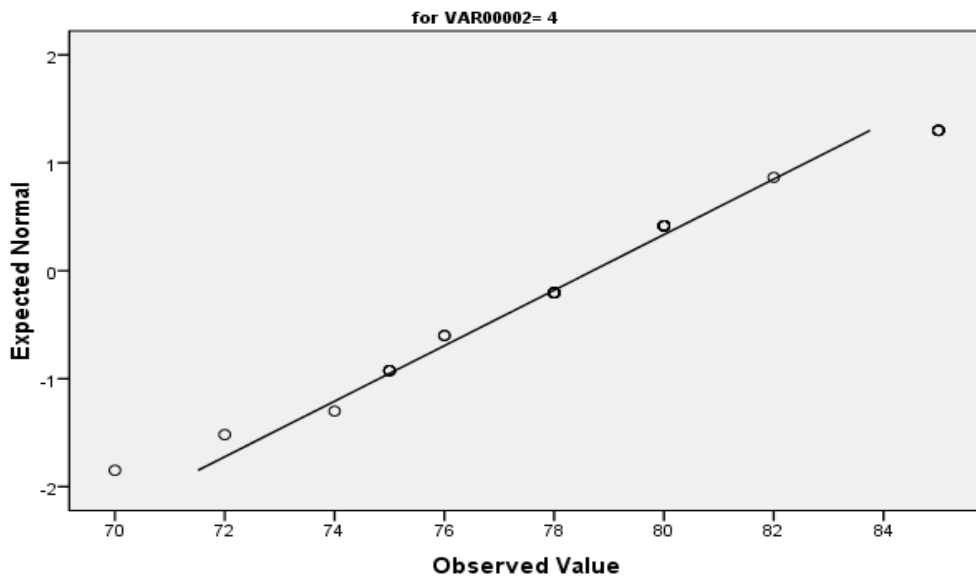
Normal Q-Q Plot of VAR00001

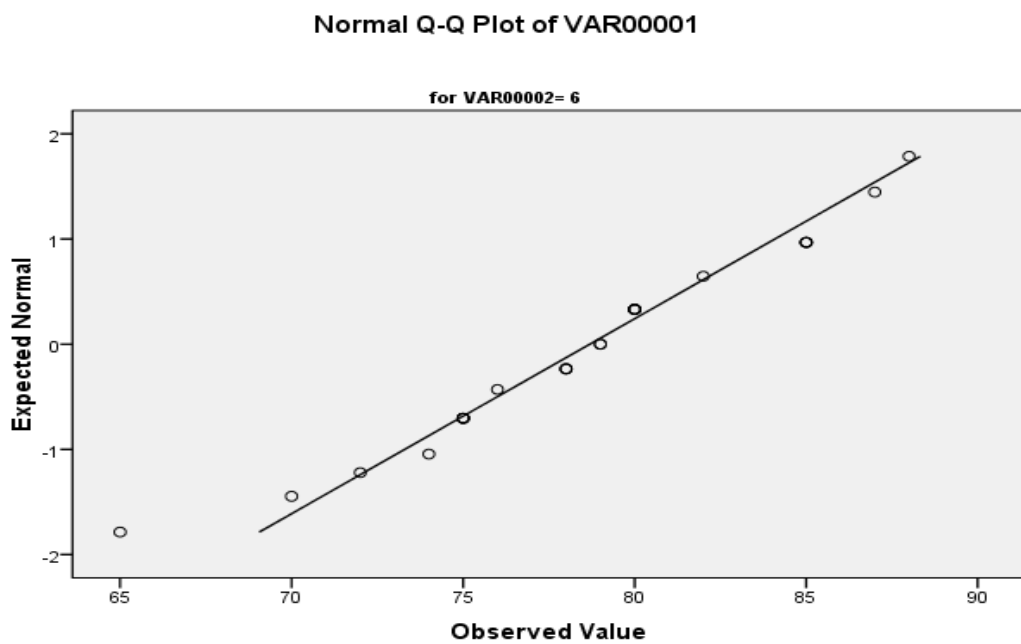
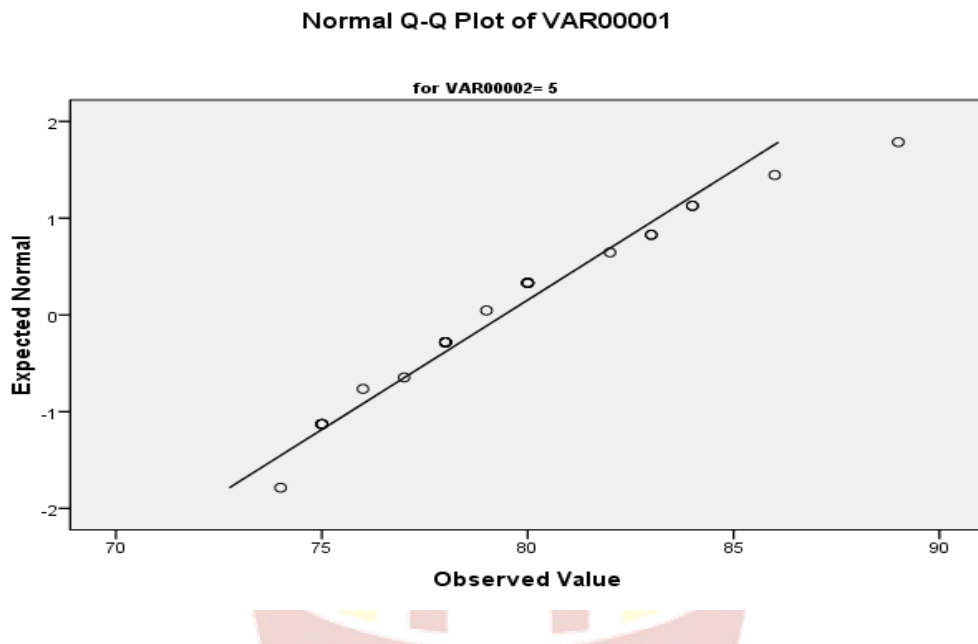


Normal Q-Q Plot of VAR00001



Normal Q-Q Plot of VAR00001





After knowing normality and homogeneity test by using SPSS, the researcher found all classes normal and homogeneity as a population and

162 students as population and homogeneity more than 0.05. Based on the graphics Q-Q Plot, if the data around and near with the line, it means that data was normal. After got population, researcher continues the next step to find the sample of this research.

## **2. Sample**

Gay and Airasian (2000:121) state that sampling is a process of selecting number of individuals for a study in such way from that they represent the larger group from which they are selected. In this research, the larger group is called population. Then, for individual group selected is a sample.

The researcher used cluster sampling technique in taking the data. Gay and Airasian (2000:129) also add that cluster sampling is a way to select sample in groups, not individually but randomly selected. The researcher chosen two classes that has similarity in ability among the students in it. So, the researcher took the scores of students in first semester. After that, the researcher calculated the data to find out the mean score of each class. After finding out the mean score of those classes, researcher found the normality of the class. It is done because the researcher wants to find whether Round Robin Strategy gives significant effect on students' speaking. In order to see the significant effect on students' speaking, therefore the researcher chosen the classes randomly to be researched. To get the sample, researcher used the lottery to get classes for the sample, such as VII 1 lottery A, VII 2 lottery B, VII 3



lottery C, VII 4 lottery D, VII 5 lottery E and VII 6 lottery H. The all lotteries put in box then the researcher shaken it and removed the lottery twice, so the samples of this research were the class VII 6 as experimental class and class VII 3 as control class.

**Table 3.5**  
**Sample of Research**

<b>No.</b>	<b>Grade</b>	<b>Total of Students</b>
1	VII 6 (Experimental Class)	26
2	VII 3 (Control Class)	30

### **C. Place and Time of Research**

This research was held in Junior High School Number 1 Kubung. The treatment conducted at first grade students at second semester. This research did eight times meeting in several weeks. The treatment carried out based on the teaching schedule of Junior High School Number 1 Kubung. At the first meeting, the researcher gave the students pretest. The next meeting, the researcher gave the students treatment in experimental class and without treatment in control class. After six times, the researcher gave post-test to find out the student's speaking skill. To see whether the application of Round Robin Strategy gives significant effect on student's speaking ability, the researcher compared the result of post-test in experimental class and control class.

## D. Procedure of Research

Generally, there are three phases procedures of this research, they are preparation, application, and the final phase.

### 1. Preparation

The researcher used two classes to collect the data, in experimental class, the researcher taught the students by using Round Robin Strategy and the researcher taught by using conventional strategy for control class.

In short, the researcher proposed these procedures:

- a. Determining the research time
- b. Preparing the lesson plan arranged by curriculum.
- c. Explaining to the students about the planning in learning process.
- d. Preparing the final test

### 2. Application Phases

The application phases of the research can be seen in the table 3.6

Experimental Class	Control Class
<b>a. Pre-Activity</b>  1. Teacher greets the students 2. Teacher guides the students to pray 3. Teacher checks students' attendance 4. Teacher asks students about the last material 5. Teacher builds students background knowledge	<b>a. Pre-Activity</b>  1) Teacher greet the students 2) Praying 3) Teacher checks students' attendance 4) Teacher asks students about the last material 5) Teacher builds students background knowledge

<p><b>b. Whilst-Teaching</b></p> <p><u><b>Observing</b></u></p> <ol style="list-style-type: none"> <li>1. Teacher shows the picture to the students that give for all the students</li> <li>2. Teacher asks them to see the picture</li> </ol> <p><u><b>Questioning</b></u></p> <ol style="list-style-type: none"> <li>1. The students ask the teacher about the picture that they looked</li> <li>2. Students ask the teacher about the name of picture that they do not know in English</li> <li>3. The students ask the teacher about how to say things in plural</li> </ol> <p><u><b>Exploring</b></u></p> <ol style="list-style-type: none"> <li>1. Students are divided into group</li> <li>2. The teacher poses a question about the name of the things in the class</li> <li>3. The students take turns stating responses or solutions</li> </ol> <p><u><b>Associating</b></u></p> <ol style="list-style-type: none"> <li>1. The teacher gives responses to students' answer</li> </ol> <p><u><b>Communicating</b></u></p> <ol style="list-style-type: none"> <li>1. A students speak the answer from all of the member of group (summary)</li> </ol>	<p><b>b. Whilst-Activity</b></p> <p><u><b>Observing</b></u></p> <ol style="list-style-type: none"> <li>1) The teacher shows the picture to the students on white board by using cardboard</li> <li>2) Teacher asks the students to see the picture</li> </ol> <p><u><b>Questioning</b></u></p> <ol style="list-style-type: none"> <li>1) Students ask the teacher what the picture about that they looked</li> <li>2) Students ask the teacher about the name of picture that they do not know in English</li> <li>3) The students ask the teacher about how to say things in plural</li> </ol> <p><u><b>Exploring</b></u></p> <ol style="list-style-type: none"> <li>1) The teacher asks the students to state things in the class</li> <li>2) The teacher writes students' answer on the white board and pronounce it together</li> </ol> <p><u><b>Associating</b></u></p> <ol style="list-style-type: none"> <li>1) Teacher ask the students how to say things if may things</li> <li>2) Students answer teacher's question</li> </ol> <p><u><b>Communicating</b></u></p> <ol style="list-style-type: none"> <li>1) Teacher asks the students to make the dialogue about things in the picture with pair.</li> <li>2) The students speak their dialogue about the things in front of class.</li> </ol>
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<p><b>c. Post Teaching</b></p> <ol style="list-style-type: none"> <li>1. Teacher gives feedback to the teaching process</li> <li>2. Teacher and students conclude what they learned</li> <li>3. Teacher informs the next material.</li> <li>4. Teacher close the class</li> </ol>	<p><b>c. Post teaching</b></p> <ol style="list-style-type: none"> <li>1) Teacher gives feedback to the teaching process</li> <li>2) Teacher and students conclude the lesson</li> <li>3) Teacher informs the next material</li> <li>4) Teacher closes the class</li> </ol>

### 3. Final Phase

The researcher gave the post-test to know the score of the students after giving the treatment for six meetings with different topic and it is based on the syllabus.

### E. Types of Data

The researcher collected the data in form of quantitative. The term quantitative data is used to describe a type of information that can be counted or expressed numerically. This type of data is often collected in experiments, manipulated and statically analyzed. Quantitative data can be representative get from the result of students' speaking test in form of speaking test.

### F. Technique of Data Collection

The research data collected by giving speaking test. The data of this research was students' score in post-test. After giving the treatment, the researcher gave the post-test to the students. First steps in post test was the researcher ask the students to tell about things in their home. Second, the students told the things in their home by taking turns. The last step was the

researcher took the video while the students were telling the things in their home. The researcher gave scores of the test. The score of test used as the data of this research.

### G. Technique of Data Analysis

The data of this research analyzed by using statistical procedure T-test. The formula that used was T-test. T-test means a statistical procedure used to determine whether there is any significant different between the means of two classes of scores' post-test between experimental class and control class. The purpose is to see difference of speaking skill between experimental class and control class.

Furthermore, the data analyzed by using T-test formula as suggested by Sudjana (2005:239). T-test formulas develop which was presented as follow: in analyzing the students' test score, some steps were done before analyzing the different mean by using t-test formula as follows:

1. This formula was applied to decide mean of students' test score in experimental and control groups;

$$\bar{X}_1 = \frac{\sum F_1 X_1}{\sum F_1} \quad (\text{experimental class})$$

$$\bar{X}_2 = \frac{\sum F_2 X_2}{\sum F_2} \quad (\text{control class})$$

2. This formula was used to decide standard deviation of experimental class;

$$S_1^2 = \frac{n_1 \sum F_1 x_1^2 (\sum F_1 X_1)^2}{n_1 (n_1 - 1)}$$

3. This formula was used to decide standard deviation of control class;

$$S_2^2 = \frac{n_2 \sum F_2 x_2^2 (\sum F_2 X_2)^2}{n_2 (n_2 - 1)}$$

The formula of t-test is as follows (Sudjana,2005)

$$T = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

Where:

$\bar{X}_1$  = Mean score of post test

$\bar{X}_2$  = Mean score of pretest

$S_1^2$  = Standard Deviation of pretest

$S_2^2$  = Standard Deviation of post test

$n_1$  = Number of samples in pretest

$n_2$  = Number of samples in post test

The T-table employed to see whether there is significant difference between the mean score of both experimental class and control class. The

value of obtained consulted with the value of t table at the degree of freedom  $(n_1-1) + (n_2-n_2)$  and the level of confidence of  $95\% = 0.05$ .

If the value T-obtained is less than the value of T-table, the null hypothesis would be accepted. On the contrary, if the value of the T-obtained is equal or bigger than the value of T-table, the alternative one is not accepted.

#### **H. Instrumentation**

According to Gay and Airasian (2000:145) instrument is a tool or something that is used in collecting data. The instrument which used in this research was speaking test.

After giving the treatment for six meetings the researcher gave two classes post test in order to know the students' speaking skill. In other word, experiment and control class gave post test with same topic and to see whether the use of Round Robin Strategy give significant effect than conventional strategy, the researcher compared the result of post test of the classes. The instrument of this research was speaking test and lesson plan. Speaking test used to measure the students' skill in speaking. Lesson plan used to treat students' problem in speaking. The blue print of speaking test can be seen in the following below:

**Table.3.7**

### Blue Print of Speaking Test

No	Component of Speaking Test	Indicator	Topic	Number of Item
1	Pronunciation	The students are able to speak in good Pronunciation Grammar Vocabulary Fluency Comprehension	1. Things in the school	1
2	Grammar		2. Things in the house	1
3	Vocabulary		3. Things in the bathroom	1
4	Fluency		4. Things in bedroom	1
5	Comprehension		5. Things in the market	1
			6. Things in kitchen	1
<b>Total</b>				<b>6</b>

From the table above, the students asked to tell about the name of the things based the topics that gave by the researcher. Researcher gave attention to the students about criteria to be evaluated from their speaking such pronunciation, grammar, vocabulary, fluency and comprehension. The researcher used the students' speaking to get the students' score by giving marks on each indicator were based on Huges speaking indicators such, pronunciation (0-4), grammar (5-36), vocabulary (4-24), fluency (2-12) and comprehension (4-23).

**Table.3.8**  
**Sample of Instrument in Giving Speaking Scores**

No	Name	Categories					Score
		Pronun- ciation	Grammar	Vocabulary	fluency	Comprehen- sion	
1.							



2.							
3.							
4.							
5.							



UIN IMAM BONJOL  
PADANG