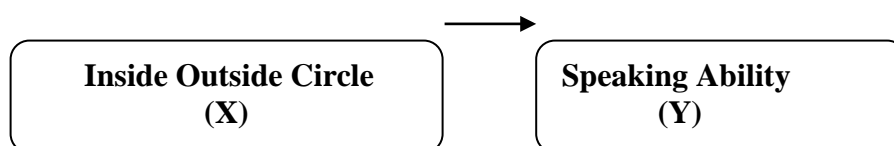


## CHAPTER III

### RESEARCH METHODOLOGY

#### A. Research Design

The design of the research was quantitative, the researcher have done used pre-experimental research because the purpose of this study was to identify the cause effect between both of the variables, whereas inside outside circle (X) and Students' speaking ability (Y). The relationship between both variables is shown in the schema below:



Researcher used pre-experiment research; because it was aimed to find out whether inside outside circle strategy gave significant effect to students' speaking ability. Sugiyono(2013: 111-113), this research design will aim to find out whether the implementation of Inside outside circle strategy give significant effect on students' speaking ability. In this research the experimental group will give a treatment by applying the inside outside circle strategy to improve their speaking ability.

Based on the expert's views above, researcher used the design which used to find out whether inside outside circle strategy gave significant effect on students' speaking ability or not conduct by the *one-group pretest-posttest design*. One group is pretest and expose to the treatment, and then post-test. This is calling a one group pretest-posttest design because the two tests wereadministrated to same group. According to Sugiyono (2010:11) *the one-group pretest-posttest design* is one of the kinds of pre-experiment research that divide into three steps: pre-test, treatment and post-test. The pre-test gave at the first meeting on the research to see the students' ability before doing the treatment and post-test is done at the last meeting

of the research to find the result of the treatment given. The success of the treatment is determined by comparing pre-test and post-test scores.

**Table. 3**  
**One- Group Pre-Test Post-Test Design**

<b>STEPS</b>	<b>PROCEDURE</b>	<b>AIM</b>
<b>Step 1</b>	<b>Pre-test</b> (Speakingtest)	To measure the degree of the dependent variable before the treatment
<b>Step 2</b>	<b>Treatment</b>	to influence the dependent variable
<b>Step 3</b>	<b>Post-test</b> (Speaking test or telling the past experience story)	to measure the degree of change on the dependent variable

**Table 4**  
**The Research Design**

<b>Group</b>	<b>Pre-test</b>	<b>Treatment</b>	<b>Post-test</b>
A	O <sub>1</sub>	X	O <sub>2</sub>

Where:

- A : Experimental group
- O<sub>1</sub> : Pre-test
- X : Treatment of experimental group by  
Using Inside outside circle strategy
- O<sub>2</sub> : Post-test

## **B. Population and Sampling**

### **1. Population**

Gay (2002:122) state population is the testing sample of the research can allow the researcher to make inferences about performance of the larger group. Sugiyono

(2013:119) say that population is the generalization region the consist of object or subject that have certain qualities and characteristic.

In this case, there were three classes of class VIII of Islamic Junior High School 8 Padang Pariaman. The total number of population were 127 students.

**Table. 5**  
**Population of the Research**

Class	Number of the students
VIII- 1	43
VIII- 2	42
VIII- 3	42
Total	Students are 127

*Source: Officer of Islamic senior high School 8 Padang Pariaman*

To know the normality and homogeneous of the data, the researcher uses the aid of computer program called by SPSS (Statistical Product and Service Solution).

After knowing the normality and homogeneous test by using SPSS, the researcher found that two classes were not normal, they are VIII-2 and VIII 3, while there was one class that normal. It was VIII-1 the significant of normality and homogeneous more than 5% (0.05).

## 2. Sample

After decided the population, the researcher needs to choose the research sample. In deciding which was group have been experimental group, the sample were taken by simple random sampling. According to Sugiyono (2010:120) concern that simple random sampling refers to select the sample that researcher believes to be representative of homogenous population. In this research, the researcher chooses one class as experimental group. It was class VIII-1 because it has normal and homogeny data.

In order to get sample, the sample of this research has been taken by cluster sampling. According to Gay (2012:144) cluster sampling is sampling in which groups, no individuals are randomly selected that have similar characteristics and in which subjects can be found. The sample of this research has been taken by cluster sampling. To get the representative sample of this research the following steps:

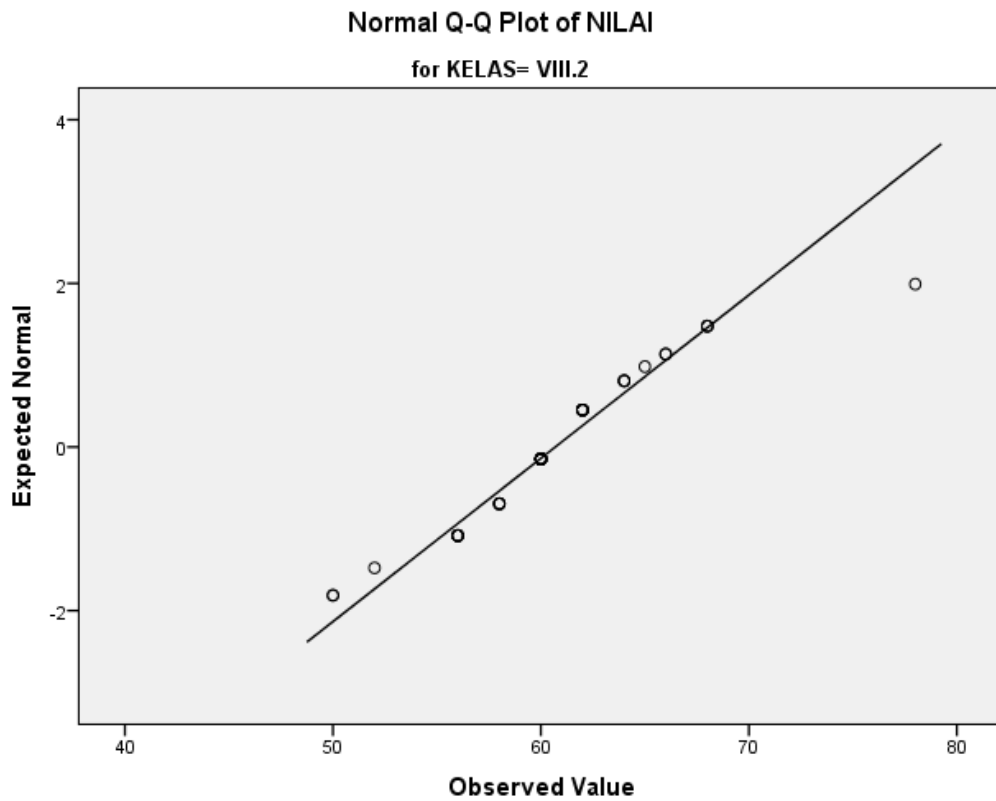
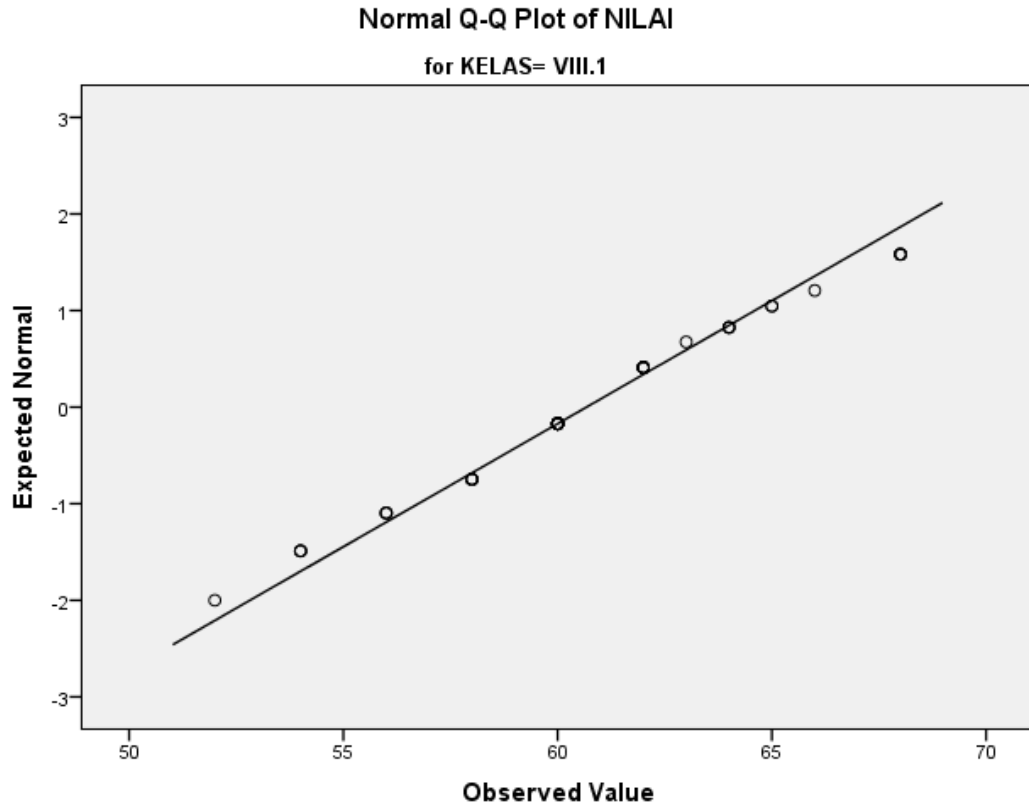
- a. Collecting the score MID test scores the entire students class VIII from the teacher
- b. Test of normality

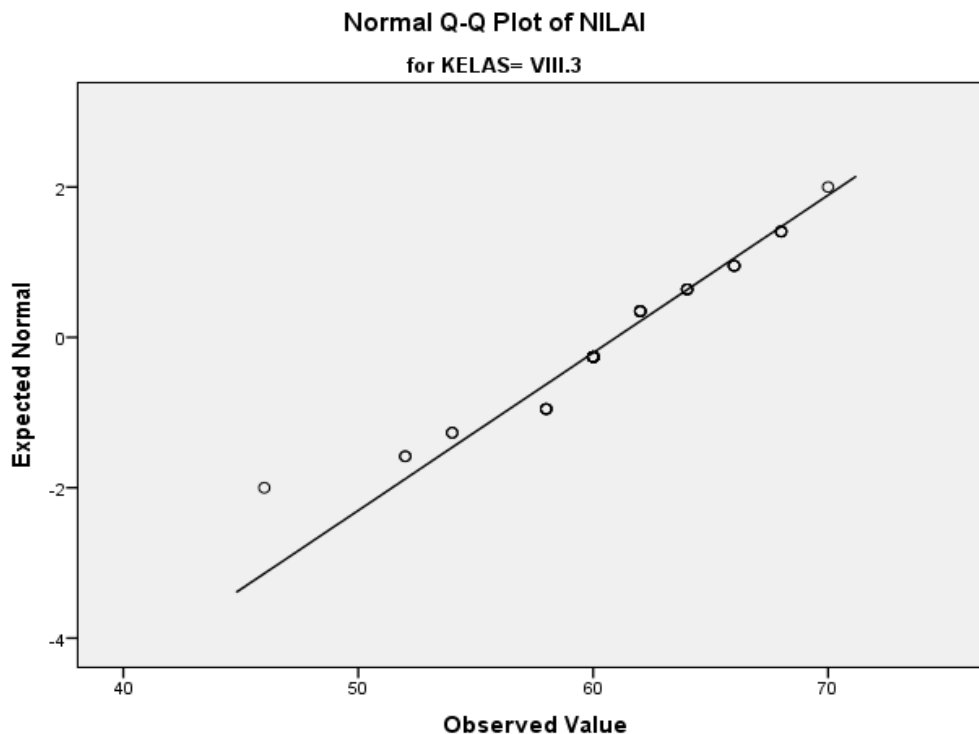
Normality test had an objective to know the population normal or not. In this research, researcher used kolmogrov smitnov and shapiro wilk to know the sample normal or not. Based on analyzed by SPSS ( *statistical product and service solution* ) 20.0 program all of the groups of population the result of P-value lower than 0.05, it means that the data was not normal.

**Table. 6**  
**Tests of Normality**

KELAS	Tests of Normality						
	Statistic	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		df	Sig.	Statistic	df	Sig.	
NILAI	VIII.1	,153	43	,013	,958	43	,116
	VIII.2	,159	42	,009	,925	42	,009
	VIII.3	,210	42	,000	,923	43	,007

a. Lilliefors Significance Correction





#### a. Test of Homogeneous Variances

After did the normality test and got the data was not normal data. Then the researcher does the homogeneous variation test. This test has an objective as to know the sample homogeneity or not. This test uses SPSS with levene test, if the data were significant or not the data were more than 0.05 it meant the data was not homogeneous.

Next, got the mean class that has no significant differences, the researcher chose one classes as experimental group. To describe the sample the researcher used of paper it was experimental class is VIII-1

**Table. 7**  
**Test of homogeneity of variance**

#### Test of Homogeneity of Variance

Levene Statistic	df1	df2	Sig.
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NILA I	Based on Mean	1,838	2	124	,163
	Based on Median	1,705	2	125	,186
	Based on Median and with adjusted df	1,705	2	108,044	,187
	Based on trimmed mean	1,717	2	125	,184

- b. After knowing the normality and homogeneous test by using SPSS, the researcher found that two classes were not normal, they were VIII -2 and VIII-3, while there was one class that normal. It was VIII the significant of normality and homogeneous more than 5% (0.05).

### C. Place and Time of Research

The research had been held in the class VIII-1 consist of 43 students of state Islamic Junior High School at 8 Padang Pariaman, it was conducted on May-July 2018. This research was conducted on fivemeeting in several weeks. At the first meeting, the researcher gave the students pre-test without treatment. After giving treatment for five times in classroom activities. The researcher gave post-test in order to know students' speaking skill., and to see whether Inside Outside Circle starategy was effective to improve students' speaking skill, the researcher compares the result of pre-test in class VIII-1.

### D. Instrument

Instrument was a tool collect data from the sample. There was one treatment that used in this research. The instrument in this researc h was oral test. The researcher used speaking test (retell to past experience) as instrument. This test to know the students speaking skill in speaking aspect for example: pronunciation, grammar, vocabulary, fluency and comprehension. The researcher gave some picture to the students about recount text and asked students to retell about their past experience for their test.

The instrument of this research in English test in the form of oral test. The test is created by the researcher based on the curriculum and syllabus in that school. The test was about recount text. The speaking test was given in pre-test and post-test activities are the same material about recount text. In this case, the students asked to retell about their past experience that related the topic has given.

While, in scoring the pre-test and post-test , researcher used the hughes categories (1996:111-112), criteria 1-6 in scoring test, such as pronunciation , grammar, vocabulary, fluency and comprehension.

**Table. 8**  
**Sample of Instrument in Giving Speaking Scores Pre-test and Post-test**

Aspect	Score Item					
	1	2	3	4	5	6
Accent	0	1	2	2	3	4
Grammar	6	12	18	24	30	36
Voc	4	8	12	16	20	24
Fluency	2	4	6	8	10	12
Comprehension	4	8	12	15	19	23

## E. Research Procedures

This research used conducted in one class. The students given a pre-test at the first meeting, the had been done treatment five times meetings and a post-test at the last meeting. The researcher used three steps to achieve the goal of the research.

**Table. 9**  
**Treatment activity for experimentalclass**

### A. Pre-activity

1. Do the opening in learningprocess, apperception, and motivate students.
2. Before the speaking classtarted teacher activatethe students'



- prior knowledge by giving some question related to the topic which will be discussed.
3. The teacher asks the students about their knowledge
- B. Whilst activity
1. Students form pairs. One student from each pair moves to form one large circle in the class facing outward.
  2. Remaining students find and face their partners (class now stands in two concentric circles).
  3. Inside circle students ask question from their question card outside circle student answers. Inside circle students praise or coach. (Alternative: the teacher asks a question and indicates inside or outside student to answer to their partner).
  4. Partners switch roles: Outside circle students ask, listen, then praise or coach.
  5. Partners trade question cards.
  6. Inside circle students rotate clockwise to a new partner. (the teacher may call rotation numbers: “(Rotate Three Ahead.” The class may do a “choral count” as they rotate).
- C. Post-activity
1. Teacher reviews and concludes the lesson
  2. Give Reflection
  3. Close the Class

## F. Technique of Data Collection

The data of this research was collected by giving speaking test. The data of this research was student's score in pre-test and post-test. Pre-test is the process to identify the students' skill before giving the treatment and learning process to improve the student's speaking skill.

While, post-test is the process of giving the test after giving the treatment. It aims to conclude the contribution of Inside Outside Circle strategy in teaching and learning process to student's speaking skill. The score of the pre-test and post-test which data in this research; the data was collected through following procedures:

- a. Each of students asked to retell their past experience in few minutes in front of class

- b. The researcher evaluated students' record and then gave the score for students (pronunciation, grammar, vocabulary, fluency and comprehension). There are many scoring in speaking abilities. The researcher uses the Hughes 'criteria in scoring the student's speaking skill, Hughes (2003: 131-132).

### 1. Pronunciation

- 0 : Pronunciation frequently unintelligible.
- 1 : Frequent gross errors and a very heavy accent make understanding difficult, require frequent repetition.
- 2 : "Foreign accent" requires concentrated listening, and Mispronunciations lead to occasional miss understanding and apparent errors in grammar or vocabulary.
- 2 s : Marked "foreign accent" and occasional mispronunciations which do not interfere with understanding.
- 3 : No conspicuous mispronunciations but would not be taken for a native speaker.
- 4 : Native pronunciation, with no trace of "foreign accent".

### 2. Grammar

- 6 : Grammar almost entirely inaccurate phrases.
- 12 : Constant errors showing control of very few major patterns and frequently preventing communication.
- 18 : Frequent errors showing some major patterns uncontrolled and causing occasional irritation and misunderstanding.

- 24 : Occasional errors showing imperfect control of some patterns but no weakness that causes misunderstanding.
- 30 : Few errors, with no patterns of failure.
- 36 : No more than two errors during the interview.

### 3. Vocabulary

- 4 : Vocabulary inadequate for even the simplest conversation.
- 8 : Vocabulary limited to basic personal and survival areas (time, food, transportation, family, etc.)
- 12 : Choice of words sometimes inaccurate, limitations of vocabulary prevent discussion of some common professional and social topics.
- 16 : Professional vocabulary adequate to discuss special interests.
- 20 : Professional vocabulary broad and precise
- 24 : Vocabulary apparently as accurate and extensive as that of an educated native speaker.

### 4. Fluency

- 2 : Speech is so halting and fragmentary that conversation is virtually impossible.
- 4 : Speech is very slow and uneven except for short or routine sentences.
- 6 : Speech is frequently hesitant and jerky.
- 8 : Speech is occasionally hesitant, with some unevenness caused by rephrasing and grouping for words.

10 : Speech is effortless and smooth, but perceptibly non-native in speech and evenness.

12 : Speech on all professional and general topics as effortless and smooth as a native speakers’.

#### 5. Comprehension

4 : Understands too little for the simplest type of conversation.

8 : Understands only slow, very simple speech on common social and touristic topics.

12 : Understands careful, somewhat simplified speech when engaged in a dialogue.

15 : Understands quite well normal educated speech when engaged in a dialogue.

19 : Understands everything in normal educated conversation.

23 : Understands everything in both formal and colloquial speech to be expected of an educated native speaker.

**Table. 10**

Aspect	Score Item					
	1	2	3	4	5	6
Accent	0	1	2	2	3	4
Grammar	6	12	18	24	30	36
Voc	4	8	12	16	20	24
Fluency	2	4	6	8	10	12
Comprehension	4	8	12	15	19	23

## G. Technique of Data Analysis

The data are described with quantitatively. Tehcnique that also used to analyze the data statistical procedures by used a set of test. It i s used to see the different quality of the student's speaking before and after used Inside Outside Circle strategy.

T-test mean a statistical procedure use to determine whether there is any significant different between the means of two sets of scores or between pre-test and post-test.

Furthemore, tha data analyzed by using t-test formula as suggest by Subana

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

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

Where :

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

$\bar{X}_2$  = Mean score pre-test

$S_1^2$  = Standard deviation of pre-test

$S_2^2$  = Standard deviation of Post-test

$n_1$  = Number of samples in pre-test

$n_2$  = Number of samples in post-test

The t-table employ to see whether there was a significant difference between the mean score of pre-test and post-test of experimental class. Then, it was also used to see whether there was a significant difference between the mean score of pre-test and post-test. The value of t-obtained is consulted with the value of t-table. The data analyze by using simple regression for hypothesis with 1% (=0,01) of significance level and the value of t-table of the level of freedom ( $n_1 + n_2 - 2$ ).

If the value  $t$ -calculate is bigger than the value of  $t$ -table, the null hypothesis was accepted. On the contrary, if the value of the obtained is smaller than the value  $t$ -table, the alternative one was not accepted ( $t$ -table)  $t$ -obtained.