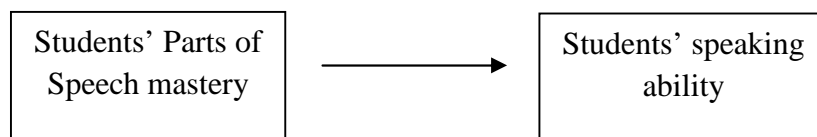


### CHAPTER III

#### THE RESEARCH METHODOLOGY

##### A. The Research Design

This research was a correlation research. Correlation research involves collecting data in order to determine where, and to what degree, a relationship exists between two or more quantifiable variables. The degree of relationship is expressed as a correlation coefficient. The purpose of correlation research is to determine relationship between variables or to use this relationship to make prediction.<sup>1</sup> This research consisted of two variables. They were the students' parts of speech as independent variable (X) and the students' speaking ability as dependent variable (Y). The following diagram pictures are design of this research.



##### B. Location and Time of the Research

The location of this research was SMAN 12 Pekanbaru. It is located on Garuda Sakti street, KM.3/Ketitiran Street. Kelurahan Simpang Baru, Tampan-Panam Pekanbaru. The research was conducted on April 3<sup>rd</sup> to Mei 19<sup>th</sup> 2014.

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<sup>1</sup> L.R. Gay and Peter Airasian, *Educational Research Competences for Analysis and Application* (New Jersey: Prantice-Hall, 2000), p. 321

### **C. Subject and Object of the Research**

The subject of this research was the eleventh grade students of SMAN 12 Pekanbaru, and the object of the research was the students' parts of speech mastery and their speaking ability.

### **D. Population and Sample of the Research**

The population of this research was the eleventh grade students of SMAN 12 Pekanbaru. The total population of the eleventh grade students was 340 students from nine classes. The classes were divided into two categories, IPA and IPS classes. Four classes for IPA namely XI IPA 1 by 34 students, XI IPA 2 by 40 students, XI IPA 3 by 40 students, XI IPA 4 by 40 students, and five classes XI IPS 1 by 38 students, XI IPS 2 by 38 students, IPS 3 by 38 students, IPS 4 by 37 students, XI IPS 5 by 35 students. The sample was selected by using cluster sampling technique. The specification of the population can be seen from the table below:

**Table III. 1**  
**The Population of the Eleventh Grade Students at SMAN 12**  
**Pekanbaru 2014**

No	Classes	Population		Total
		Male	Female	
1	XI IPA 1	8	26	34
2	XI IPA 2	9	31	40
3	XI IPA 3	12	28	40
4	XI IPA 4	17	23	40
5	XI IPS 1	10	28	38
6	XI IPS 2	22	16	38
7	XI IPS 3	18	20	38
8	XI IPS 4	19	18	37
9	XI IPS 5	20	15	35
Total				340

### **E. Data Collecting Technique**

In order to collect the data the researcher used test. There were two kinds of test applied.

1. Interview. Interview was conducted in the beginning of the research. It was used to get primary information.
2. Multiple – choice items from which they have to choose one correct answer among four possible answers. To reach a good analysis, there were 50 multiple choice items given.<sup>2</sup> The test was used to measure the students' parts of speech mastery.
3. Oral test. Oral test was applied by using oral presentation. The students were given the single topic. It was "Prophet Muhammad peace be upon him". The oral test was used to recognize students' speaking ability.

<sup>2</sup> Sumarna Surapranata, *Analisis, Validitas, Reliabilitas, dan Interpretasi Hasil Implementasi Kurikulum 2004* (Bandung: Rosdakarya, 2004), p. 13

## F. The Technique of Data Analysis

The technique of data analysis of this research was the statistical technique of Pearson Product Moment Correlation by using SPSS 16.0 version.

To analyze the students' score in mastering parts of speech, the writer used the following scale.<sup>3</sup>

**Table III. 2**  
**The Classification of Students' Scores in Parts of Speech**

No	The Score Level	Category
1	80-100	Very Good
2	66-79	Good
3	56-65	Enough
4	40-55	Less
5	30-39	Failure

To get score 0 – 100 for the students' Part of Speech mastery, the writer used following formula:<sup>4</sup>

$$S = \frac{R}{N} \times 100 \%$$

Where:

S = Individual score                      N = Maximum score  
R = Right answer                          100 = Standard mark

Furthermore, for speaking ability test the writer used oral language scoring rubric by Hughes below:<sup>5</sup>

<sup>3</sup> Suharsimi Arikunto, *Dasar-Dasar Evaluasi Pendidikan; Edisi Revisi* (Jakarta, Bumi Aksara, 2005), p. 245

<sup>4</sup> Ngalim Purwanto, *Prinsip-Prinsip dan Teknik Evaluasi Pengajaran* (Bandung, PT. Remaja Rosdakarya), p. 112

<sup>5</sup> Arthur Hughes, *Testing for language Teachers* (New York: Cambridge University Press, 2003), pp.131-132

**Table III. 3****The Category Level of Speaking Ability****a. Accent**

<b>Score</b>	<b>Requirements</b>
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 mispronunciation 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.”

**b. Grammar**

<b>Score</b>	<b>Requirements</b>
1	Grammar almost entirely inaccurate except in stock phrases.
2	Constant errors showing control of very few mayor 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 causes misunderstanding.
5	Few errors, with no pattern of failure.
6	No more than two errors during the interview.

**c. Vocabulary**

<b>Score</b>	<b>Requirements</b>
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 circumlocution.

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.

#### d. Fluency

Score	Requirements
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 grouping 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.

#### e. Comprehension

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

The result of the speaking was evaluated by concerning five components and each component had scores or level. Because the highest level for non-native speaker is 5, therefore, the highest score is 20. The total of all components is 100. The specification of the test as below:

**Table III. 4**  
**The Specification of the Test**

No	Speaking skill	The highest score
1	Accent	20
2	Grammatical	20
3	Vocabulary	20
4	Fluency	20
5	Comprehension	20
<b>Total</b>		100

### G. The Normality of the Data

The normality test is used to recognize whether the data are distributed normally or not. Because of the analysis of the research is correlation product moment, so the data should be normally distributed. The illustration can be seen as follows:

**Table III.5**  
**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PARTS OF SPEECH	.100	34	.200	.959	34	.230
SPEAKING	.116	34	.200	.969	34	.445

a. Lilliefors Significance Correction

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

The data are normal when the significance  $> 0.05$ . From the table above, it can be seen that the significance of part of speech is 0.200 and the significance of speaking is 0.200. It can be concluded that the data are normally distributed.

#### H. The Validity and Reliability of the Test

The test used for testing the students' parts of speech mastery had to have validity and reliability. The test to be valid if it measures accurately what is intended to be measured.<sup>6</sup> Validity is also called items discrimination. It means that the goal of validity of the test is to find out whether the test can differentiate between higher and lower group. There are four types of validity they are content validity, construct validity, concurrent validity, and predictive validity.<sup>7</sup> To know the validity of the test the researcher used construct validity.

According to Gay and Airisian, readability is the degree to which a test consistently measures whatever it is measuring.<sup>8</sup> The reliability of the data was assessed by using SPSS. The description of the data can be illustrated as follows:

**Table III. 6**  
**Reliability Statistics of variable X**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.635	.640	2

<sup>6</sup>*Ibid.*, p. 26

<sup>7</sup> Suharsimi Arikunto, *Dasar-Dasar Evaluasi pendidikan* (Jakarta: Bumi Aksara, 2009), p. 67

<sup>8</sup> L. R Gay and Peter Airisian, *Loc.Cit.*, P. 169



**Table III. 7**  
**Item Statistics**

	Mean	Std. Deviation	N
TRY OUT	55.76	12.208	34
TEST	62.12	10.628	34

From the data above, it shows that the data are reliable on calculation 0.635. More ever, the reliability of students' speaking ability from two raters can be seen as follows:

**Table III. 8**  
**Reliability Statistics of Speaking ability**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.537	.541	2

**Table III. 9**  
**Item Statistics**

	Mean	Std. Deviation	N
RATER 1	66.35	7.823	34
RATER 2	67.65	8.991	34

From the table above, it shows that the calculation of rater 1 and rater 2 is 0.537. It means the data are reliable.