

### **III. METHODS**

This chapter discusses about the research methods that use in this study, such as: design, data, data source, instruments, procedure, data analysis, and hypothesis testing describe here.

#### **3.1 Design**

This research applied a Quasi-experimental design that involved periodic measurements on the dependent variable for a group of test units. This was a quasi- experiment design, because there was no randomization of test units to treatments, and the timing of treatment presentation, as well as which test units are exposed to the treatment, may not be within the researcher's control (Gay, 2006). The researcher used Quasi-experimental design to identify the application of using three types of information gap technique to the students' speaking skill. The researcher has given different topic or activity for each treatment in every test. In this research, the researcher analyzed quality of speaking and quantity of interaction in taught information gap technique to improve speaking skill.

The research design will be describe as follows:

X1 T1

X2 T2

X3 T3

Note: X1 : Treatment 1 (Finding Missing Information) T1 : Speaking Test 1

X2 : Treatment 2 (Finding Difference) T2 : Speaking Test 2

X3 : Treatment 3 ( Giving Direction) T3 : Speaking Test 3

The researcher has given three treatments that is teaching speaking by using information gap technique to the students which has given three different topics and three different tasks. After that, the researcher analyzed how the implementation of information gap in improved speaking skill in term of quality of speaking and quantity of speaking.

### **3.2 Subject of The Research**

Subject of this research was the second year students of SMP N 4 Bandar Lampung in academic year of 2014/2015. The researcher used one class as the subject of the research. The class was 8L that consist of 27 students.

### **3.3 Data Collecting Technique**

The data of this research were the form of students' oral ability or speaking skill in performing transactional dialogue to anayzed quality of speaking in term of pronunciation, vocabulary, and grammar, and quantity of interaction in term of

time of speaking and turn taking. In collecting the data, the researcher would be the following steps:

1. Recording

The researcher recorded the students' speaking skill during treatment in each topic by using voice recorded as the recording tool.

2. Transcribing

The researcher transcribed the students' speaking skill from the audio recording that has been conducted in order to investigate the quality of speaking and quantity of speaking to find which topic of information gap is the most effective to improve speaking skill.

### **3.4 Research procedure**

In collecting the data, the researcher follows the following steps:

1. Determining the subject

In this research, the researcher has conducted at SMP N 4 Bandar Lampung as the population. The subject was class VIII L, there were 26 students. The researcher only choose one class as the subject of the research.

2. Finding and Selecting Materials

The researcher has chosen some of the materials from the students' book based on the syllabus. The materials were about finding missing information (shopping list), finding difference, and giving direction (complete the map). The researcher conducted three different topics with

three treatments in each meetings. in finding the effect of information gap technique to improve students' speaking skill.

### 3. Conducting treatment by using Information Gap

In this research, the treatments were administered in three meetings in which 90 minutes that conducted three different topics in every meeting. The topic used in the first treatment was about "Finding Missing Information" , the second topic was about "Finding Different", and the third topic was about "Giving Direction". In every treatment, the researcher asked the question related to the topic.

### 4. Analyzing the task Result

After scoring the students' performance, the researcher compared the result of each topic, to see the improvement of students' speaking skill from 1<sup>st</sup> topic until 3<sup>rd</sup> topic in each aspects of speaking that was pronunciation, vocabulary, and grammar.

### 5. Analyzing the quality and quantity of speaking

After scoring students' work and transcribing the students speaking, the researcher analyzed quality of speaking in terms of pronunciation, vocabulary, and grammar and quantity of speaking in terms of time of speaking and turn taking using SPSS Repeated measure T-Test or Paired Sample Test. The researcher analyzed the mean of every task by compare from each topic to find which task of information gap is more suitable to teaching speaking.

### **3.5 Instrument of The Research**

To gain the data, the researcher applied one kind of instrument:

#### **Speaking Task**

The instrument of this research was speaking task. The researcher conducted speaking task to find out how are the application of information gap to improve speaking skill. In conducting the task, the researcher provided three topics in three meetings. First, the researcher asked the students to divided class into two, group A and group B, after that they have choosen their partner. Then, the reseracher gave handout to each pairs and asked them to completed the task by doing conversation orally. Before their doing the tasks, the researcher asked students to put their mobile phone in their desk so the researcher could evaluated students by listened students' voice in voice recording during their doing the tasks, and the researcher gave 10 minutes to the students to completed the task and record it. The researcher asked students to speak clearly since the students' performance is being record during the test.

### **3.6. Validity and Reliability of the Instrument**

In fulfilling the criteria of a good test, validity and reliability of the test should be consider. They are as follows:

#### **3.6.1. Validity of the Instrument**

The test can be said valid if the test measures the objective to be measured and suitable with the criteria, to measure whether the test in this research have a good

quality or not. There are several types of validity but in this research the researcher only use two type of validity, they are construct validity and content validity.

#### 1. Content Validity

Content validity means that the test is good reflection of what has been taught and of the knowledge that the researcher wants her students to know, Here, the researcher correlated the test with syllabus and curriculum for Junior High School. If the table represents the material that the researcher wants to test, it can be said that it has content validity (Shohamy, 1985:74).

#### 2. Construct Validity

Construct validity is concern with whether the test is actually in line with the theory of what it means to know the language (Shohamy, 1985: 74) that is being measured, it will examine whether the test questions actually reflect what it means to know a language. Its means that the test would measure certain aspect based on the indicator. The researcher examined it by reffering the aspect that would be measured with the theories of those aspects (Pronunciation, Vocabulary, and Grammar).

### **3.6.2 Reliability of the Instrument**

In this research, reliability is defined as the stability or consistency of the test. One of the reliabilies purposed by Harris (1974:14) is reliability of the scoring of the test. Since the speaking test was a subjective test meaning the scoring process dominantly influenced by the scorer. There were two raters to reduce the

subjectively in judging the students' speaking skill. The ratters were the researcher herself and the second ratter was English teacher at that school. The raters worked collaboratively to judge students' performance. To know how reliable the scoring is the researcher used Spearman Rank

The statistical formula is:

$$R = 1 - \frac{6 \cdot \sum d^2}{N(N^2 - 1)}$$

Notes:

R : Reliability of the test

N : Number of students

$d^1$  : The difference between R1 and R2

$d^2$  : The Square of  $d^1$

1 – 6 : Constant number

(Shohamy, 1985: 213)

After finding the coefficient between raters, the researcher would analyzed the coefficient of realibity with the standart of reliability according to Slamet (1998:147) as follow:

The standard of reliability

A. a very low reliability ranges from 0.00 to 0.19

- B. a low reliability                      ranges from 0.20 to 0.39
- C. an average reliability                ranges from 0.40 to 0.59
- D. a high reliability                      ranges from 0.60 to 0.79
- E. a very high reliability                ranges from 0.80 to 0.100

In ensuring the reliability of the scorer, the writer used inter rater reliability that was by taking the scorer from two scorer. So, there are two scorer on each students' draft.

For example:

	Pronunciation	Vocabulary	Grammar	Total
Scorer 1	25	20	15	60
Scorer 2	20	25	15	60
				120:2
				So, the students' scorer is 60

### 3.7 Scoring Data

Three aspects that would be evaluated by the researcher: pronunciation, grammar, vocabulary. The researcher used computation as follows:

**Table 3.1 Scoring Data from Aspect of Speaking Test**

Aspects of speaking	Rating scales	Description
Pronunciation	31-35	Speech is fluent and effortless as that native speaker.
	26-30	Always intelligible though one is conscious of a



		definite accent.
	21-25	Pronunciation problems necessitate concentrated listening and Occasionally lead to understanding.
	16-20	Very hard to understand because of pronunciation problem most Frequently be asked to repeat.
	10-15	Pronunciation problem so severe as to make speech unintelligible.
<b>Vocabulary</b>	31-35	Use of vocabulary and idiom virtually that is of native speaker.
	26-30	Sometimes use inappropriate terms and must rephrase ideas, because of inadequate vocabulary.
	21-25	Frequently use the wrong word, conversation somewhat limited because of inadequate vocabulary.
	16-20	Misuse of words and very limited vocabulary make comprehension quite difficult.
	10-15	Vocabulary limitations so extreme as to make conversation virtually impossible.
<b>Grammar</b>	27-30	Grammar almost entirely in accurate phrases.
	23-26	Constant errors control of very few major patterns and frequently preventing communication.
	19-22	Frequent errors showing some major patterns uncontrolled and causing occasional irritation and misunderstanding.
	15-18	Few errors, with no patterns of failure.
	10-14	No more than two errors during the dialogue.

**Table 3.2 Rating Sheet Score**

<b>S' Code</b>	<b>Pron. (1-35)</b>	<b>Gram. (1-30)</b>	<b>Voc. (1-35)</b>	<b>Total (1-100)</b>
<b>1</b>				
<b>2</b>				
<b>3</b>				

### 3.8. Data Analysis

Data analysis has been done for the learning product, the researcher used speaking task to collect the data. There were some steps used to analyze the data got from the test

a. Transcribing the students' utterance

After the teacher recorded the students' utterance, the researcher transcribed the record into the written form. This is very useful in order to know how much time and word which is produce students and to give scores to the students and also to know the error mostly made by the students during speaking.

b. Scoring the students' speaking ability

Based on the transcription, the researcher could decide the score for the students' speaking test. The reseacrhер used the Analytic Rating Scale proposed by Shohamy (1985)

c. Tabulating the result of the test and finding the difference mean of each topic. The mean was calculating by appying Repeated Measured t-test or Pair Sample T-test by SPSS

d. Testing the Hypothesis

The hypothesis of this research is:

$H_1$ : There is a significant difference in students' speaking skill in term of Pronunciation, Vocabulary, and Grammar among three topic which are tested for application of Information Gap Technique

The hypothesis was statistically analyzed by using Repeated Measure T-Test. By seeing the probability level (p) which is shown by two tail

significance as the value of significance. We can draw the conclusion (Setiyadi, 2006:172). The researcher used significant level of 0,05. It means that the probability of errors in the hypothesis is only 5% from 100%, and the hypothesis was approved if  $p < 0,05$ .

### 3.9. The Schedule of the Research

Practically, the observation during finished this research is about 1 month and conducted 4 meetings. The table below shows the schedule of the research.

**Table 3.3 Schedule of the Research**

<b>NO</b>	<b>Date</b>	<b>Activity</b>	<b>Topic</b>
1	Friday, 8 May 2015	Pre-Observation	
2	Wednesday, 13 May 2015	Treatment 1	Finding Missing Information
3	Wednesday, 20 May 2015	Treatment 2	Finding Difference
4	Thursday, 22 May 2015	Treatment 3	Giving Direction