

## CHAPTER III

### RESEARCH METHODOLOGY

#### A. Research Method

Methodology is systematic and scientific way of teaching any subject.<sup>1</sup> In writing this paper the writer uses quantitative approach. The method applied in this research is experimental method. The writer using the experimental research to know the real data that got from the respondent. Experiment are carry out in or relationship between two variable. Experimental method is used here design to collect data in such away that threats to the reliability and validity.

The experimental method is the primier method, all others being ‘ground clearing’ operations, that is, preliminary data collection and interpretation exercises to prepare for a formal experiment.<sup>2</sup>

The writer uses quasi experiment research (pre-test and post-test non-equivalent group design) to conduct the study. It has two group the first group obtain treatment, while the second group is control.

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<sup>1</sup> Dr. m.f. fatel, Praveen m. jain, English language teaching (methods, tools & techniques), (sunrise publishers & distributors, 2008), p. 71.

<sup>2</sup> David nunan, exploring second language classroom research: a comprehensive guide, (heindle: cengage learning, 2009), p. 83.

## **B. Time and Place of The Research**

In this research, the researcher chooses students second grade at SMP PLUS SALSABILA as the field of the research because it is easy to reach, and the student has low score in English ability. Especially in speaking, many student lazy to write, read also speak English. The writer tried Coop-Dis-Q strategy to improve student speaking ability.

The research investigation whether there are two kinds variable; the variable of using Coop-Dis-Q strategy that supposed giving effects on speaking ability. In this research, the writer uses an experimental method to know the real data that got from respondent.

## **C. The Population and Sample**

According to sugiyono the population is area that has certain characteristics by the researcher to learn and then drag the conclusion.<sup>3</sup> Population is all cases, situation or individual who share one more characteristics. A population is a set or collection of all elements processing one or more attributes of interest.

The population of this research is students in the second grade of SMP PLUS SALSABILA are 42 students.

The sample of this study will take class VIII A and VIII B. They are divided into two class. The writer takes subject as the sample in this

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<sup>3</sup> Sugiyono, methodology penelitian kuantitatif, kualitatif dan R&D (bandung : alfabeta:2009), p. 117.

research as 42 students, 22 students as experiment class and 20 students as control class. In this case, VIII A is an Experimental class and VIII B is a control class.

#### **D. The Research Instruments**

The instrument is important to collect data on the research.

##### **1. Speaking pre-test and post-test**

According to brown test is method of measuring a person's ability, knowledge, or performance in a given domain.<sup>4</sup> The writer uses test to get the data and information from the students' value. In this research, the writer gives the students two test consists pre-test and post-test.

###### **a. Pre-test**

The test that given to both of control class and experiment class before giving the treatment of Cooperative-Discussion-Questioning (Coop-Dis-Q) strategy.

###### **b. Post-test**

The test that given to both of control class and experiment class after giving the treatment of Cooperative-Discussion-Questioning (Coop-Dis-Q) strategy .

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<sup>4</sup> H. douglas brown, language assessments principles and classroom practice, (longman:2004), p.140

## 2. Rubric of Speaking Assessment

There are five components to measure score speaking, there are :<sup>5</sup>

No	Component	Score
1	Pronunciation	
	• Has few trace of foreign accent	20
	• Always intelligible, though one is conscious of a definite accent	15
	• Pronunciation problems necessitate concentrated and occasionally had to misunderstanding	10
	• Very hard to understand because of pronunciation problem must frequently the asked to repeat	5
2	• Pronunciation frequently unintelligible.	0
	Grammar	
	• Makes a few noticeable errors of grammar or word order	20
	• Occasionally makes grammatically or word order errors which do not, however, obscure, meaning.	15
	• Makes frequent errors of grammar and word order which occasionally obscure meaning	10
• Grammar and word order errors make comprehension	5	

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<sup>5</sup> Arthur huges, testing for language teacher, (new York : Cambridge university press, 1989) p. 111.

	<p>difficult, must often rephrases often sentence and for restrict himself to basic pattern</p> <ul style="list-style-type: none"> <li>• Grammar almost entirely inaccurate phrase</li> </ul>	0
3	<p>Vocabulary</p> <ul style="list-style-type: none"> <li>• Use vocabulary and idioms are virtually that of a native speaker</li> <li>• Sometimes uses inappropriate terms and or must rephrase ideas because of lexical inadequacies</li> <li>• Frequently uses the wrong words, conversation somewhat limited because of inadequate vocabulary</li> <li>• Misuse of words and very limited vocabulary make comprehension</li> <li>• Vocabulary inadequate for even the simple conversation.</li> </ul>	<p>20</p> <p>15</p> <p>10</p> <p>5</p> <p>0</p>
4	<p>Fluency</p> <ul style="list-style-type: none"> <li>• Speech as fluent and effortless as that of a native speaker</li> <li>• Speed of speech seems to be slightly affected by language problems</li> <li>• Speed and fluency are rather strongly affected by language problems</li> <li>• Usually hesitate often forced into silence of language</li> </ul>	<p>20</p> <p>15</p> <p>10</p> <p>5</p>

	<p>limitation</p> <ul style="list-style-type: none"> <li>• Speech is so halting and conversation is virtually</li> </ul>	0
5	<p>Comprehension</p> <ul style="list-style-type: none"> <li>• Appears to understand everything without difficulty</li> <li>• Understand nearly everything at normal speed, although occasional repetition may be necessary</li> <li>• Understand most of what is said at slower than normal speed and normal repetition</li> <li>• Has great difficult following what is said, can comprehend only “social conversation” spoken slowly and with frequent repetitions</li> <li>• Understand too little for the simple type of conversation.</li> </ul>	<p>20</p> <p>15</p> <p>10</p> <p>5</p> <p>0</p>

## E. Data Collection

Test is a method of measuring person’s ability or knowledge in a given domain To get data of students’ speaking ability. The collecting of data is systematic procedure and standard obtain the necessary data. For collecting the data in this research, the researcher uses tests (pre-test and post-test).

### 1. Pre-test

Before applying Coop-Dis-Q strategy in experimental class, the researcher gives the pre-test to experiment and control class in the first meeting to know the initial students' speaking ability.

## 2. Post-test

Both experimental and control class have the post-test after giving the treatment for experimental class. It is used to measure the effect of Coop-Dis-Q strategy on speaking ability in interpersonal conversation.

## **F. Data Analysis**

After collecting data, the writer process, analyze, interpret, and finally conclude. This data is analyzed by statistic.

Before the writer analyze the data of the students speaking ability, the writer wants to describe the rating scales used in this research, its purpose to know the learners' speaking ability each other, what the typical learner at each level can do, so it's easier for the teacher to decide score. The teacher should give to each learner through their pronunciation, grammar, vocabulary, fluency, and comprehension. Here is the rating scale used by the writer in this research.

### The rating scale of oral English

No	Criteria	Comment	Score
1	Pronunciation, grammar, vocabulary, fluency and comprehension	Very good	(5) 90-100
2	Pronunciation, grammar, vocabulary, fluency and comprehension	Good	(4) 80-89
3	Pronunciation, grammar, vocabulary, fluency and comprehension	Enough	(3) 70-79
4	Pronunciation, grammar, vocabulary, fluency and comprehension	Less	(2) 60-69
5	Pronunciation, grammar, vocabulary, fluency and comprehension	Low	(1) 50-59

In analyzing the result of the final test statistics of t-test is used with significant degree 5% and 1% as follows<sup>6</sup> :

$$t_o = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

$M_1$  = Mean score of the experiment class

$M_2$  = Mean score of the control class

$\sum x_1^2$  = Sum of square deviation score in experiment class

$\sum x_2^2$  = Sum of square deviation score in control class

$N_1$  = Number of students of experiment class

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<sup>6</sup> AnasSudjiono, *Pengantar statistic Pendidikan*(Jakarta: RajawaliPers, 2012, 317.



$N_2$  = Number of students of control class

2 = Constant number

df = Degree of Freedom ( $df = N_1 + N_2 - 2$ )

Next the writer will take the square root of the result:

1. Determine Mean of Variable  $X_1$ :

$$M_{1} = \frac{\sum X_1}{N_1}$$

2. Determine Mean of Variable  $X_2$ :

$$M_{2} = \frac{\sum X_2}{N_2}$$

3. Determine score deviation of Variable  $X_1$  :

$$x_{1} = X_1 - M_1$$

4. Determine score deviation of Variable  $X_2$ :

$$x_{2} = X_2 - M_2$$

5. The squaring of  $X_1$ , then add up; obtained  $x_1^2$

6. The squaring of  $X_2$ , then add up; obtained  $x_2^2$

7. Determine  $t_0$  :

$$\frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

8. Determining t-table in significance level 5% and 1% with df:

$$df = (N_1 + N_2) - 2$$

