

## CHAPTER III

### METHODOLOGY OF RESEARCH

#### A. The Method of Research

Research is equally important for social scientists in studying social relationship and in seeking answers to various social problem.<sup>1</sup>

According to Daniel Muijs stated that “The basis of the experimental method is the experiment, which can be defined as: *a test under controlled condition that is made to demonstrate a known truth or examine the validity of a hypothesis.*”<sup>2</sup> Similar to David Nunan, he stated that Experiment is a procedure for testing a hypothesis by setting up a situation in which the strength of the relationship between variables can be tested.<sup>3</sup> It means that experimental is a research method that test the hypothesis.

There are three kinds of experiment design, namely: Pre-Experimental Design (nondesign), True-Experimental Design and Quasi Experimental Design. In this research, the researcher uses quasi experimental design, because the aim of the research is to find the effectiveness of a technique. Creswell says that, “A quasi experiment is a design, which is widely used in educational setting, in which there is no random assignment of subjects because

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<sup>1</sup> C.R. Kothari, *Research Methodology : Method And Technique* ( New Delhi : New Age International, 1990,P 1

<sup>2</sup> Daniel Muijs, *Doing Quantitative Research In Education With SPSS*, (London : Sage Publication, 2004), 13

<sup>3</sup> David Nunan, *Research Methods In Language Learning*, (New York : Cambridge University Press ,1992), 230

randomly assigning subjects or students to the groups would disrupt classroom learning.”<sup>4</sup>

The researcher applied pre-test and post-test design approach to a quasi-experiment with nonequivalence design. The researcher used two classes in which one of them as experiment class and another as control class. Experiment class was class which got treatment or being taught by using comic media and control class was not taught by using comic media technique. Both classes were given a pre-test before teaching-learning activity and post-test after teaching- learning activity. The result of pre-test and post-test from both classes were compared and calculated to find out the effectiveness of comic media technique in teaching speaking skill. This design is represented as follow:

**Table. 3.1**  
**The Design of The Research**

<b>Group</b>	<b>Independent Variable</b>	<b>Dependent Variable</b>
Experimental group	Comic media model	Student speaking skill
Control group	Conventional technique	Student speaking skill

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<sup>4</sup> John W. Creswell, *Educational Research: Planning, Conducting, And Evaluating Quantitative And Qualitative Research 3rd Edition*, (Boston: Pearson Education, Inc., 2008), 313.

## B. Place And Time of Research

To examine the effect of comic media in student speaking skill, in this research took the location at Mts PII Salinggara - pandeglang on the second grade in the academic year 2018/2019. This school located at kp. Salinggara desa kadulimus, kecamatan banjar kabupaten pandeglang. The reason of choice this school is easy to be reached and the writer want to give contribution to this school. The researcher will conduct on the first semester in the academic 2018/2019.

## C. Population and Sample

### 1. Population

According to David Nunan, "Population is all cases, situation or individuals who share one more characteristic."<sup>5</sup> The population is taken of whole subject or person in study to get required data. The target population of this research is the students of the second grade of Mts PII Salinggara in academic years 2018/2019. The second grade there 3 classes A, B and C. Consist of class A 23 of student, consist of class B 23 of students' and consist of class C 24 of students'. So that, the total numbers of population are about 70 students.

**Table 3.2**

**The Table Of Population of The Research**

No	Class	Student
1	VIII A	23

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<sup>5</sup> David Nunan, *Research Method in Language Learning*, (New York: Cambridge University Press, 1992), 231.

2	VIII B	23
3	VIII C	24
TOTAL		70

## 2. Sample

Sample is important because in almost cases, it is not practical to study all the members of population. David Nunan state that, "Sample is a subset of individuals or cases from within a population."<sup>6</sup> Its mean that sample is a part or representative of population being research.

In this research, the writer will takes two classes on the second grade of Mts PII Salinggara. The class VIII B as the experiment class which consists of 23 students. The class VIII A as the control class which consists of 23 students as experimental class and the total consist of 46 student. The writer chooses these classes because both of them are common classes that will make this research perfectly.

### D. The Instrument of The Research

Research instrument is a facility that use by researcher in collecting data. The instrument is a process of selecting or developing device and method appropriate to give evaluation and getting the data. To know the effectiveness of using comic media in teaching students speaking skill, the researcher gives the speaking test to the students.

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<sup>6</sup> David Nunan, *Research Method in Language Learning*, (New York: Cambridge Universty Press, 1992), 232.

Test is method of measuring persons ability or knowledge in a given domain. To get data of students speaking skill, the researcher carries out pre-test before giving treatment and post-test after treatment.

## 1. Test

### a. Pre-test

Pre-test was used to collect the data about students, speaking skill using comic media, before getting treatment for experimental class and before getting no treatment for control class. The test was speaking skill, by oral presentation to speaking skill. It was administered to the second grade students at MTs PII salinggara Pandeglang.

### b. Post-test

Post-test was used to collect the data about students, speaking skill using comic media, after getting treatment for experimental as and before getting no treatment for control class. The test was speaking skill, by oral presentation to speaking skill. It was administered to the second grade students at MTs PII Salinggara Pandeglang. The writer took the total score from the result of the speaking skill.

## 2. Lesson plan

Lesson plan is used for treatment process. The purpose is to make systematical learning process. And this lesson plan is attached.

## 3. Scoring sheet

scoring sheet is used to make the researcher know about the skill of students speaking. After giving test to the students the

researcher has measure and scores the result of them by the purpose to analyze the test that was given by researcher. Based on FSI proficiently Ratings ( as cited in Higgs & Clifford, 1982 )<sup>7</sup> the scoring sheet as follow :

the rating sheet of speaking test

Name :.....

Class :.....

**Table 3.3**

**The Criteria Of Students Score**

**Conversational English Proficiency Weighting Table**

<b>Proficiently description</b>	<b>- &gt;</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>total</b>
Accent		0	1	2	2	3	4	
Grammar		6	12	18	24	30	36	
Vocabulary		4	8	12	16	20	24	
Fluency		2	4	6	8	10	12	
Comprehension		4	8	12	15	19	23	
Total								

Letter	Score	Description
A	83-99	Very Good
B	63-82	Good
C	43-62	Enough
D	26-42	Less

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<sup>7</sup> Jack C. Richards and Willy A .Renandya , *method ology in language teaching – An anthology of current practice* (Cambridge University Press, 2002 ) , 316

E	16-25	Low
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#### 4. Tape Recorder

Recording was used to record the students voice when they speak during the test. The researcher used a tape recorder like a hand phone. The purpose this recording is to analyzing the scoring rubric of speaking.

### **E. The Technique of Data Collecting**

The technique of collecting data is used by the researcher to collect necessary data. In this research the writer used quasi experiment nonequivalent control group design to know the effectiveness of comic media to improve student speaking skill.. The researcher decides to use observation and test as the technique of data collection of this research.

In this research, the researcher used two kind of instruments in gathering data. Those are test and observation:

#### 1. Observation

Observation is very effective way of finding out what people do in particular contacts, the routines and interactional patterns of their everyday live.<sup>8</sup> Observation can be defined as the process of watching or noting something or particular group carefully and comprehensively fro period of a time in order to obtain specific information about the object of research.

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<sup>8</sup> Yvonne drlington & Dorothy scott, qualitative research in practice stories from field, ( Australia : Allen & Unwin, 2002 ), P.74

The researcher observed teaching learning activities, the researcher made some list of observation aspect indicators which involve the constituent of the teacher, the students' and learning activities in the classroom.

## 2. Test

Test refers to the fact that when a person knows he or she being tested this fact can change his or performance on an exam.<sup>9</sup> Of the getting data student's speaking skill, the researcher gives pre-test before treatment and post-test after treatment. The aims of these test are to measure and compare students' achievement from both groups before and after giving treatment.

There are two kind of test based on response they are subjective and objective test.

### a. Subjective test

Subjective test is a test which are learners' ability performance are judged by examiners' opinion and judgment. The example of subjective test is using essay or short answer.

### b. Objective test

Objective test is a test in which learners' ability or performances are measured using specific set of answer, means there are two possible answer, right and wrong. In other word, the score is according to right answer. Types of objective test includes multiple choice test, true or false test, matching and problem based question.

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<sup>9</sup> Steven R. Terrell, writing a proposal for your dissertation, ( New York : the Guilford press,2016 ), 108.



In this research, the researcher take the subjective test as an instrument. The speaking test given to identify learners' speaking skill which consisted of pre-test and post-test. The pre-test was given before the treatment was conducted ; firstly, the pre-test was administered to find out the student speaking skill before treatment. The post-test was administered at the end of the treatment in order to find out the result of students' speaking skill after the treatment.

## F. The Technique of Data Analysis

The technique of analysis data in this research uses Test-t. According to Anas Sudijono test-t is used for testing the null hypothesis of the mean different of two samples.<sup>10</sup> Because the quasi experiment use pre-test and post-test then the writer uses test to measure the final test between the experiment class and control class the steps for statistic analyze that are.<sup>11</sup>

The formula is as follows:  $t_o =$

$$t_o = \frac{M1 - M2}{\sqrt{\frac{\{\sum x1^2 + \sum x2^2\} \{N1 + N2\}}{\{N1 + N2 - 2\} \{N1 \times N2\}}}}$$

The procedure of calculation as formula:

- a. Determining mean Variable X1 with formula:

$$M1 = \frac{\sum X1}{N1}$$

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<sup>10</sup> Anas Sudijono, *pengantar-statistik-pendidikan*. Jakarta: PT. Raja Grafindo, 2014.P.307

<sup>11</sup> Anas Sudijono, *pengantar-statistik-pendidikan*. Jakarta: PT. Raja Grafindo, 2014.P.314

b. Determining mean Variable X2 with formula:

$$M2 = \frac{\sum X2}{N}$$

c. Determining deviation Variable  $X1^{X_1}$  with formula:

$$X1^{X_1} = X1 - M1$$

d. Determining deviation Variable  $x2$  with formula:

$$X2^{X_2} = X2 - M2$$

After getting data from the experiment and control class, the writer used comparative technique. The comparative techniques to evaluate hypothesis concerning the differences between the two examined methods in teaching learning process by comic media technique and not use comic media. The researcher analyze it by using statistic calculation of t-test by using fisher formula with significant degree 5% and 1%. The formula is as follow :

notes:

M1 : Mean of post-test of experimental class

M2 : Mean of post-test of control class

$\sum X_1^2$  : Sum of square deviation square in the experimental class

$\sum X_2^2$  : Sum of square deviation square in the control class

N1 : Number of students of experimental class

N2 : Number of students of control class

2 : constants number

df : Degree of Freedom

df :  $N1 + N2 - 2$

## **G. Research Procedure**

In general, the procedure of this research can be describe as follow:

1. Provide pre-test of the experimental class and control class
2. Provide treatment to the experimental class using comic media and control class without comic media as follow :
  - a. Experimental Class
    - 1) Preparation
      - a) Preparing the lesson plan
      - b) Preparing the material
      - c) Preparing the projection and comic strip
    - 2) Implementation
      - a) Teacher explain the material
      - b) Teacher give the example
      - c) Teacher guide the students to make group, and practicing read the comic with friend of group.
      - d) Teacher guide students to speak and retelling the contents of the story on comic in front of class
  - b. Controlled Class
    - 1). Preparation
      - a) Preparing the lesson plan
      - b) Preparing the material
    - 2). Implementation
      - a) Teacher explain the material
      - b) Teacher give the example
      - c) Teacher ask students to speak in front of class
3. provide post-test of the experimental class and control class

4. Analyzing the data from pre-test and post-test
5. Drawing the interpretation based on the result of test and making conclusion.