

CHAPTER III

METHDOLOGY OF RESEARCH

A. The Method Of Research

Research is equally important for social scientists in studying social relationships and in seeking answers to various social problems.¹ In this research, the writer uses experimental research. When hearing the term experimental designs, most of us think back to school experiments in science.

the experiment : as the only means for settling disputes regarding educational practice, as the only way of verifying educational improvements, and as the only way of establishing a cumulative tradition in which improvements can be introduced without the danger of a faddish discard of old wisdom in favor of inferior

¹ C.R. Kothari, *Research Methodology: Method and Techniques* (New Delhi : New Age International, 1990, p 1.

novelties.²

Nunan stated “Experiment is a procedure for testing and hypothesis by setting up a situation in which the strength of the relationship between variable can be tested. A true experiment consists of control and experiment groups to which subjects have been randomly assigned, and in which all subject are tested before and after the intervention or treatment under investigation has been administrated to the experiment group.”³ It means that experimental is a research method that test the hypothesis.

In this research the writer uses quasi-experimental research, because the aim of the method is to find the influence of a method. So there is two classes which are equal in their ability. Sample decision is conducted do not have randomly and the result is decided

² Donalt T. CampbellL and Julian C. Stanley, *Experimental And Quasi Experimental Designs For Research*, (U.S.A.: Houghton Mifflin Company,1963), 2.

³ David Nunan, *Research Method In Language Learning*, (New York : Cambridge University Press,1992),230.

from pre-test and post-test from both control and experimental class. In order the writer want to know further the improvement of using macromedia flash 8 in teaching speaking skill. Beside that to get the data the writer uses pre-test and post-test toward the subject of research.

The research is aimed at capturing phenomena at students speaking ability in introduce them self by English pre-service teacher. Therefore, this study employed quantitative approach, particularly experimental method. The experimental method was chosen in this study since writers study has same characteristic which are the same with experimental method and this research conducted at the first of MTsN 2 KOTA CILEGON .

The first characteristic as in the experimental method is the research done in a large scale and would not make any generalization again. The second characteristic that was investigated in the natural

background : the setting of this study were classes where pre-service teaching program occurred, the participant involved in the research were and experience in learning introduce my self.

B. Place and Time of the Research

This research will be conducted at MTsN 2 KOTA CILEGON which is located at street Kerenceng, Kebonsari, Citangkil, Cilegon –Banten. The writer will hold the research on 16 April 2018- 30 April 2018. The writer chooses this place, because the writer wants to try to use macromedia flash 8 in teaching speaking. The writer hopes that use in this media can encrease their speaking skills.

C. The Population And Sample

1. Population

According to Suharsimi Arikunto, a population is a set (or collection of all elements processing one or more

attributes of interest.⁴ The population of this research is the first grade student of MTsN 2 KOTA CILEGON which has been chosen based on intuition consideration. There are six classes of first years. One class has around 31 students and other 40 students. The number of first grades population is about 215 students.

2. Sample

Sample is important because in almost cases. It is not practical to study all the members of population. Nunan state, that sample is subset of individual of cases from within population.⁵ This research will be conducted based on nonrandom sampling/cluster sampling method. Common nonrandom methods include systematic, convenience, and purposive sampling.

The writer takes the sample part of first grades' students MTsN 2 KOTA CILEGON as the sample. The

⁴ Suharsimi Arikunto, *Prosedur Penelitian*, (Jakarta: Rineka Cipta. 2010, p. 173

⁵ David Nunan, *Research Method And Language Learning*, (New York : Cambridge University Press, 1992) P, 232

writer takes the sample two classes. They consist of 215 students. The writer takes 15%, so the researcher takes 63 students as the sample, the first for experiment class and the second for control class. This enable the writer take 31 students from class VII B And 32 from student class VII C. So, the researcher uses nonequivalent control group design of quasi-experimental design.

The writer uses cluster sampling technique in selecting the sample from the whole population. The writer takes class VII B and VII C as a sample. These classes, as a sample of research, have been recommended by the teacher. Since the teacher expects that they will have same quality and intelligent quotation. The teacher hopes that the student will be motivated. Those will need more affective teaching and learning activity. The writer will observe 63 students, from which 31 students come from VII B and 32 students from class VII C. class VII B is consider as experimental class meanwhile class VII C as control class.

D. The Research Instrument

1. Test

a. Pre-test

Before applying the macromedia flash 8 in experimental class, the researcher gives the pre-test to experiment and control class in the first meeting to know the initial students' speaking skill.

b. Post-test

Both experiment and control class will face the post-test after giving the treatment for experimental class. It will be used to measure the encreasing of using macromedia flash 8 in teaching speaking.

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 ability of students in 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 Proficiency Ratings (as cited in Higgs & Clifford, 1982)⁶ the scoring sheet as follow:

The rating sheet of speaking test

Name :

Class :

⁶ Jack C. Richards and Willy A. Renandya, *Methodology in Language Teaching – An Anthology of Current Practice* (Cambridge: Cambridge University Press, 2002), P, 316.

Table 3.1

The Criteria of Students' Score
Conversational English Proficiency Weighting

Table

Proficiency Description	- >	1	2	3	4	5	6	Total
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
E	16 – 25	Low

4. Tape Recorder

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

E. Techniques of Data Collecting

The technique of data collecting in this research is test. In order to get the valid information that will support the researcher. She uses test to for knowing the result study of speaking before and after using macromedia flash 8. The data collection process is nothing other than doubling of primary data for research purposes. In accordance with the necessary

data in this study, the technique data collection in this study includes:

1. Test

Test is an instrument or procedure designed to elicit performance from learners with the purpose of measuring their attainment of specifies criteria.

- a. Pre- test

The writer uses pre-test for knowing the skill of the students before using macromedia flash 8, the students have to practice introduce themselves in front of the class one by one.

- b. Post-test

Both experiment and control class will face the post-test after giving the treatment for experimental class. It will be used to measure the increasing of using macromedia flash 8 in teaching speaking.

c. Documentation

Documentation was collecting data to see a report that is available. This method is taken some pictures, record video and audio. Both the test is assessed by two raters by the researcher and her friends. It is doing to keep the validity and reliability.

F. The Technique Of Analysis Data

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 differences of two samples.⁷ Because the quasi experiment use pre-test and post-test then the writer uses this test to measure the final test between experiment class and control class.

⁷Anas Sudijono, *Pengantar Statistik Pendidikan*. Jakarta: PT Raja Grafindo, 2014. P. 307

- a. Determine mean of score experiment class (MX),
with formula:

$$MX = \frac{\Sigma X}{N}$$

- b. Determine mean of control class (MY), with
formula:

$$MY = \frac{\Sigma Y}{N}$$

- c. Determine the total square of error in experiment
class (X), with formula:

$$\Sigma X^2 = \Sigma X^2 - \frac{\Sigma X^2}{N}$$

- d. Determine the total square of error in control class
(Y), with formula:

$$\Sigma Y^2 = \Sigma Y^2 - \frac{\Sigma Y^2}{N}$$

- e. Determine the degree of freedom, with formula:

$$Df = N_x + N_y - 2$$

- f. Calculation T-Test

$$t = \frac{Mx - My}{\sqrt{\left(\frac{\Sigma x^2 + Y^2}{N_x + N_y - 2}\right) \left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

Notes:

M_x = Mean of experiment class

M_y = Mean of control class

ΣX^2 = the total square of error in experiment class

ΣY^2 = the total square of error in control class

N = the number of subject

Df = Degree of freedom