CHAPTER III

METHODOLOGY OF THE 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]

.   Explaining the definition of experimental research, Nunan said 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 stated''.[2] Then the writer use quasi experiment, in which the research give certain treatment to experimental class to find whether or not there are significant of difference of students' speaking skill after being treated by using multiple intelligences activity.

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[1] C.R. Kothari, *Research Methodology: Method and Techniques* (New Delhi : New Age International, 1990, p 1.
[2] David Nunan, *Research Method in Language Learning* (New York: Cambridge University Press, 1992, p. 230.

Table 3.1 The Design of the Research

group	independent variable	dependent variable
experimental group	multiple intelligences model	students' speaking ability
control group	conventional techniques	students' speaking ability

B.   Placed and Time

To examine the effect of multiple intelligences activities in students' speaking skill, in this research the researcher took the location MTsN 5 SERANG. It is located at Jl. Ki M idris Sumuranja Puloampel, Serang, Banten . This research will conduct on the second semester in the academic year 2017/2018.

C. Population

According to Suharsimi Arikunto, a population is a set (or collection of all elements processing one or more attributes of interest.[3] So the population is taken of whole subject or person in study to get required data. The population of these study students of second grade of MTsN 5 SERANG is 192 students from 6 classes.

Table 3.2

The table of population of the research

No.	CLASS	STUDENTS
1	VIII A	28
2	VIII B	28
3	VIII C	27
4	VIII D	28

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[3] Suharsimi Arikunto, *Prosedur Penelitian*, (Jakarta: Rineka Cipta. 2010, p. 173

5	VIII E	28
6	VIII F	27
TOTAL		**166**

D. Sample

Sample is collecting data with small amount of population that tested at the research. Nunan stated that "sample is a subject of individual or cases from within the population".[4]

In taking sample the researcher use no random technique, because it is one of the characteristic from quasi-experiment.

The researcher took two classes as the samples of research; they are students in class A as control class which consists of 27 Students and they were taught without multiple intelligences activities. While students in class B as experimental class that consists of 28

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[4] Nunan, *research method in language* learning,231

students, they were taught using multiple intelligence activities.

E. The Research Instrument

1. Test

a. Pre-test

Before applying the multiple intelligences model 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 effect of multiple intelligences activities toward students' speaking ability.

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)[5] the scoring sheet as follow:

The rating sheet of speaking test

Name : ………………

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

Class : ………………

Table 3.3

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.

F. Technique 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 chain pictures. 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 use pre-test for knowing the skill of the students before use multiple intelligence activities, the students have to make their daily activities and the students practice in front of the class.

   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 effect of multiple intelligences activities toward students' speaking ability.

2. 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 three raters; by the researcher and her two friends. It is doing to keep the validity and reliability.

G. 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.[6] 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.

The steps for statistic analyze that are[7] :

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[6]AnasSudijono, *PengantarStatistikPendidikan*. Jakarta: PT Raja Grafindo, 2014. P. 307

[7]AnasSudijono, *PengantarStatistikPendidikan*. P. 314

a. Determining mean of variable X1 with formula :

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

b. Determining mean of variable x2 with formula :

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

c. Determining derivation score variable x1 with formula

:

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

d. Determining derivation score variable x2 with formula

:

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

After collecting the data from pre-test and post-test, the researcher analyze it by using statistic calculation of t-test by using fisher formula with significance degree 5% and 1%. The formula is as follow:

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

Notes:

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

N_2 = Number of students of control class

2   = Constant number

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

H. Research Procedure

In general, the procedure of this research can be described as follows :

1. Provide pre-test of the experimental class and control class.

2. Provide treatment to the experimental class using multiple intelligence activity(snake ladder, who am I?, scrabble)

control class without multiple intelligence activity as follow :

a. **Experimental Class**

   1) Preparation

      a) Preparing the lesson plan

      b) Preparing the material

      c) Preparing snake ladder , flash card (who am I game), scrabble

   2) Implementation

      a) Teacher explain the material

      b) Teacher gives the example

      c) Teacher guide students to make group and discuss the material and give the multiple intelligence activity

      d) Teacher guide students to speak the result of discussion.

b. **Controlled Class**

   1) Preparation

      a) Preparing the lesson plan

       b) Preparing the material

    2) Implementation

       a) Teacher explain the material

       b) Teacher gives the example

       c) Teacher ask the 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.