

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

The design of this research was an experimental research. Gay, Mills, Airasian (2011; 250-251) states the only method of research that can test hypotheses about cause and effect is this experimental method. The writer wants to know the effect of using Round Robin technique in teaching speaking at seventh class of Islamic Junior High School 1 Padang.

In this research there were two classes. First, experimental class and the other is control class. Both of these classes should have the same topic and the same length of time in learning. The writer was teaching in experimental class and control class. This research held in six meetings, this meeting is considered enough to see the difference between the two classes. In this case, there are preliminary research data to see the base skill of students before teach and post-test after teach in the class.

The writer asks to the teacher about English test as the preliminary research data both classes after deciding experimental class or control class. Then, the writer continues the teaching by using Round Robin technique in experimental class and for the control class the writer teaching without using Round Robin technique.

Table 3.1
Research Design

Group	Independent Variable	Dependent Variable
E	X	O
C	Y	O

Note:

E = Experimental Group

C = Control group

X = Treatment teaching by Round Robin Technique

Y = No treatment by Pair Work

O = Post test

B. Population and Sample

1. Population

Gay, Mills, Airasian (2011: 129) states that testing a sample, especially in a quantitative study, can allow the researcher to make inferences about the performance of the larger group, which is known as the population. The writer takes the population who interest to writer, the group to which he would like the result of the study to be generalizing. In the other words, population is the total number of students on a research. The population of this research is the second year student of Islamic Junior High School 1 Padang. There were

eleven classes. The teacher, Dra. Heriyanti took two classes VIII 5 and VIII 6 as sample for the research.

Table 3.2. Population of the Research

CLASS	Total
VIII 5	31
VIII 6	31
Total	62

Source: English teacher at class VIII of Islamic Junior High School 1 Padang

2. Sample

Gay, Mills, Airasian (2011; 129) states that a sample is a group of individuals, items, or events that represents the characteristics of the larger group from which the sample is drawn. By using cluster sampling, Gay, Mills, Airasian (2011: 135) states that cluster sampling is intact groups, not individuals, are randomly selected with similar characteristics, the writer chose VIII 6 class is the sample of the research. To get the representative sample of this research the researcher does these steps:

- a. Collect the Mid Term Score of English Examination data from all students at the eighth classes.
- b. Test of Homogeneous Variances

The researcher analyzes the homogeneous variation test. This test has an objective as to know the sample homogeneity or not.

- c. After getting the classes, sample of this research consists of two groups: an experimental group and control group. Based on the five classes above, the researcher chooses two classes as the sample. In determining experimental group and control group, the researcher used cluster sampling. So, class VIII 5 is selected to be control class and class VIII 6 is selected to be experimental class.

Table 3.3. Sample of Research

No	Class	Male	Female	Total
1	VIII 5 (Control class)	12	19	31
2	VIII 6 (Experimental class)	10	21	31
	Total of Sample			62

C. Technique of Data Collection

1. Speaking Test

The data of this research was the students' score on their speaking tests. These scores are from the post-test. Each test lasted for 2-3 minutes and both will be apply to the experimental and control class.

2. Scoring

In scoring the students' speaking skill, the writer decides to choose the one constitute by Brown (2004: 172-173) for measurements of speaking skill as follows:

Indicator of Speaking Assessment according to Brown

	Grammar	Vocabulary	Comprehension
I	Errors in grammar are frequent, but speaker can be understood by a native speaker used to dealing with foreigners attempting to speak his language.	Speaking vocabulary inadequate to express anything but the most elementary needs.	Within the scope of his very limited language experience, can understand simple questions and statements if delivered with slowed speech, repetition, or paraphrase.
II	Can usually handle elementary constructions quite accurately but does not have thorough or confident control of the grammar.	Has speaking vocabulary sufficient to express himself simply with some circumlocutions.	Can get the gist of most conversations of non-technical subjects (i.e., topics that require no specialized knowledge).
III	Control of grammar is good. Able to speak the language with sufficient structural accuracy to participate effectively in most formal and informal conversations on practical, social, and professional topics.	Able to speak the language with sufficient vocabulary to participate effectively in most formal and informal conversations on practical, social, and professional topics. Vocabulary is broad enough that he rarely has to grope for a word.	Comprehension is quite complete at a normal rate of speech.
IV	Able to use the language accurately on all levels normally pertinent to professional needs. Errors in grammar are quite rare.	Can understand and participate in any conversation within the range of his experience with a high degree of precision of vocabulary.	Can understand any conversation within the range of his experience.
V	Equivalent to that of an educated native speaker.	Speech on all levels is fully accepted by educated native speakers in all its features including breadth of vocabulary and idioms, colloquialisms, and pertinent cultural references.	Equivalent to that of an educated native speaker.

Fluency	Pronunciation	Task
(No specific fluency description. Refer to other four language areas for implied level of fluency.)	Errors in pronunciation are frequent but can be understood by a native speaker used to dealing with foreigners attempting to speak his language.	Can ask and answer questions on topics very familiar to him. Able to satisfy routine travel needs and minimum courtesy requirements. (Should be able to order a simple meal, ask for shelter or lodging, ask and give simple directions, make purchases, and tell time.)
Can handle with confidence but not with facility most social situations, including introductions and casual conversations about current events, as well as work, family, and autobiographical information.	Accent is intelligible though often quite faulty.	Able to satisfy routine social demands and work requirements; needs help in handling any complication or difficulties.
Can discuss particular interests of competence with reasonable ease. Rarely has to grope for words.	Errors never interfere with understanding and rarely disturb the native speaker. Accent may be obviously foreign.	Can participate effectively in most formal and informal conversations on practical, social, and professional topics.
Able to use the language fluently on all levels normally pertinent to professional needs. Can participate in any conversation within the range of this experience with a high degree of fluency.	Errors in pronunciation are quite rare.	Would rarely be taken for a native speaker but can respond appropriately even in unfamiliar situations. Can handle informal interpreting from and into language.
Has complete fluency in the language such that his speech is fully accepted by educated native speakers.	Equivalent to and fully accepted by educated native speakers.	Speaking proficiency equivalent to that of an educated native speaker.

Source: Brown (2004: 172-173)

Table 3.4
Weighting Table

Student Code	COMPONENTS					Score ((A+G+V+F+C) x 4=100)
	Accent (0-5)	Grammar (0-5)	Vocabulary (0-5)	Fluency (0-5)	Competence (0-5)	
1						
2						
3						
4						
↓ 20						

D. Technique of Data Analysis

Using the score results of post-test for students' speaking skill, the writer first study the effect of Round Robin technique by using t-test formula, as states in Sudjana (2006: 305).

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

M_1 : Mean score of experimental class post-test

M_2 : Mean score of control class post-test

$\sum x_1$: Sum of standard deviation of experimental class post-test score

$\sum x_2$: Sum of standard deviation of control class post-test score

N : Number of cases

Furthermore, the Round Robin technique is said to be effective by consulting the calculation result of t-observed with the t-table value based on its df amount ($df = N - 1$). If the t-observed is larger than the value of t-table, then it is said that the technique is effective in improving students' speaking skill. But, if it is smaller, the technique then is said to be ineffective.

E. Research Instrument

The instrument of this research was a speaking test, which was produced by the writer himself. In this case, the writer used the achievement criteria for scoring instrument.

The writer gave oral test for the students to know the effect of teaching speaking by using Round Robin technique. The writer divided the score into five criteria, which are the scores of pronunciation, grammar, vocabulary, fluency and comprehension. Each criteria, then, is rated into five scale of rating scores.

After that, to get the mean, the scores from all criteria were sum and divided into five. Moreover, the post-test was giving after the treatment to the class.