

CHAPTER III

RESEARCH METHOD

A. Research Design

The design of this research was experimental research, because the researcher wants to know the effect and relationship by implementing the stimulus. According to Gay (2000: 367), the experimental method was the only method which can test truly hypothesis concerning cause and effect relationship. It represents the most valid approach to the solution or educational problems, both practical and theoretical, and to the advancement of education as a science. He also states that an experimental typically there are two groups; an experimental group and a control group.

In this research, the researcher used *posttest-only control design* (Sugiyono (2013: 114). The design of this research can be represented as:

Table 3.1 Research Design

	Treatment	Posttest
Experiment	X	Y
Control	-	Y

Where:

X = treatment of experimental group

Y = post-test

This design had two classes where the researcher randomly choosed. The first. One class is the experimental class that received a treatment (X) or Chain Drill technique in teaching speaking process, while another class was the control class that receives no treatment (Y). The effect

of giving treatment is posttest result (O_1 : O_2). In this research, the effect of chain drill technique was being statistically analyzed with t-test.

B. Location and Time of the Research

This research conducted at MTsN 1 Padang which is located in Lubuk Buaya, Koto tangah, Padang, West Sumatera. It was in ended of July and August 2017 and this research included in the implementation of curriculum.

C. Subject and Object of the Research

This research subject is the eight grade students at Islamic Junior High School 1 Padang. Whereas , the object was the effect of Chain Drill Technique in student's speaking ability.

D. Population and Sample

1. Population

Gay (1987: 102) says that population is a group to which the researcher would like the results of the study to be generalized and sampling is the processes of selecting a number of individuals for a study in such a way that the individuals represent the large group from which they are selected. In this research, the population is students in class VIII at Islamic Junior High School 1 Padang.

The population of this research was students of Islamic Junior High School 1 Padang which consist of 341 students were divided into 11 classes. The population of the students was shown on the table below:

Table 3.2. Population of the Research

No	Class	Total of Students
1	VIII 1	29
2	VIII 2	29
3	VIII 3	27
4	VIII 4	29
5	VIII 5	31
6	VIII 6	31
7	VIII 7	29
8	VIII 8	29
9	VIII 9	27
10	VIII 10	27
11	VIII 11	28
	Jumlah	316

Source: English teacher at class VIII MTsN 1 Padang

2. Sample

According to Gay (2000:121) sampling is the process of reflecting a number of individuals for a study in such way that the individual represent the large group which is selected. He also states that a good sample is the one that representative of the population from which is selected. To choose these classes which class would be a sample, the researcher chose cluster sampling technique.

Gay (2000: 129) stated that clustering sampling technique is sampling that select group or population as sample randomly. To get the representative sample of this research the researcher do these steps:

- a. Collect the Mid Term Score of English Examination data from all students at the second grades.
- b. Test of Normality

Normality test has an objective to know the population normal or not.

c. Test of Homogeneous Variances

After doing normality test, then researcher analyzed the homogeneous variation test. This test has an objective as to know the sample homogeneity or not.

- d. After getting the classes, sample of this research consisted of two groups: an experimental group and control group. Based on the class eight above, the researcher chose two classes as the sample. In determining experimental group and control group, the researcher used flapping a coin. So, class VIII 9 is selected to be control class and class VIII 10 is selected to be experimental class.

Table 3.3 Sample of Research

No	Class	Male	Female	. Total
1	VIII 10 (Experimental class)	10	17	27
2	VIII 9 (Control class)	12	15	27
	Total of Sample			54

E. Research Instrument

Instrument is a tool to collect data from the sample. The instrument of this research is test. Before giving the test, the researcher tried out the test to students in order to make sure whether they understood the instruction or not. A test must have content validity if it measures what is going to be measured. Arikunto (1991:64) says that one of the characteristics of test validity is content validity. It means the test is valid if it fixes with the material that has been given to the students and it is based on the Curriculum

and syllabus. The researcher used the Curriculum or syllabus and teaching material to construct the test.

F. Procedure of The Research

There were some steps to do the research such as preparation, application, and finishing.

1. Preparation

In this study, the writer chose two classes to collect the data. The researcher used the Chain Drill technique to teach the student in English activities for experimental class, and a conventional technique for control class. In this step, this research prepared the steps such as:

- a. Determining place and time of the research
- b. Determining population and sample of the research.
- c. Preparing the lesson plan arranged by curriculum.
- d. Explaining to the students about the planning in learning process.
- e. Preparing the post test

2. Application

The procedures of teaching speaking in the classroom can be seen as follow:

Table 3.4 The Procedures of Teaching

No	Learning Activities	Time
1.	<p>PRE TEACHING</p> <p>Apperception</p> <ol style="list-style-type: none"> 1. Greeting 2. Praying 3. Checking students attendance 4. Asking students about the last material <p>Motivation</p>	<i>10 minutes</i>

	<ol style="list-style-type: none"> 1. Students are given the picture 2. Encouraging students by asking questions with picture: <ol style="list-style-type: none"> a. Do you know about the picture? b. What do you think about the picture? 3. Students respond teachers' questions based on their experience. 4. Teacher introduces the learning objectives to students 5. Teacher tell the topic of the lesson 	
2.	<p>WHILST TEACHING</p> <p>Observing</p> <ol style="list-style-type: none"> 1. Teacher introduces topic based on the syllabus. 2. Teacher model the sentences by using picture. <p>Questioning</p> <ol style="list-style-type: none"> 3. Teacher leads student to give comment or ask questions based on the picture <p>Exploring</p> <ol style="list-style-type: none"> 4. The teacher greets and asks questions to a particular student (student A). 5. Then student A will respond the questions. 6. After that, student A takes turn to ask another student sitting next to him. 7. This activity will continuously work until the last turn of the last student. 8. At the end, the last student directs greeting and asking questions back to the teacher. <p>Associating</p> <ol style="list-style-type: none"> 9. Teacher divides the students (individually / group) 10. Teacher give some themes 11. Students select the theme of the topic 12. Students start to describe based on the topic their have choosen. 13. Teacher evaluates students' pronunciation, vocabulary, comprehension, content and fluency. <p>Communicating</p> <ol style="list-style-type: none"> 14. The teacher greets and asks questions to a particular student (student A). 15. Then student A will respond the questions. 16. After that, student A takes turn to ask another student sitting next to him. 17. This activity will continuously work until the last turn of the last student. 18. At the end, the last student directs greeting and asking questions back to the teacher 	<p><i>60 minutes</i></p> <p><i>5 minutes</i> <i>5 minutes</i></p> <p><i>5 minutes</i></p> <p><i>10 minutes</i></p> <p><i>25 minutes</i></p> <p><i>10 minutes</i></p>

3	POST TEACHING 1. Review and conclude the lesson with discussion. 2. Reinforcement 3. Praying and close the class	<i>10minutes</i>
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G. Data Collection

The data of this research was collected by giving speaking test. The test is given in post-test. Post-test is the process of identifying the students' speaking ability after giving the treatment. Treatment is the process of using chain drill as a technique in teaching and learning process to improve the student's speaking ability.

The class conducted for several meetings. And the material that is taught is a kind of the monologue text (descriptive text) by using chain drill technique.

While, Post-test was the process of giving the test after giving the treatment. It aimed to conclude the contribution of chain drill in teaching and learning speaking process to students' speaking ability.

Moreover, speaking test used to know the students' pronunciation, vocabulary, comprehension, content and fluency with chain drill technique.

H. Scoring technique

In giving scores to the students, the writer used analytic scale which categorized by some categories and the writer follows these scoring criteria for each category. This analytic score had five items and each item was scored five. So, the maximum score is 25. But it will be multiplied with 4, so the final maximum score will be 100. Analytic scoring of speaking could be seen on the following table:

Table 3.5 Analytic scoring of speaking

	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.

I. Data Analysis

The data was described quantitatively. Technique also used to analyze the data statistical procedures by using a set of test. It is used to see the different progress of the student's speaking those taught with chain drill as technique and conventional technique.

1. Descriptive analysis

To analyze the students' score on post-test, the researcher used t-test that take from Sudjana (2005:239) and Statistical Software Program SPSS version 20. In this case, T-test means a statistical procedure used to determine whether there are many significant differences between the mean of the two sets score from control and experiment class.

The researcher do normality and homogeneity test firstly before using t-test. Statistical procedure give a way to analyze the differences between the groups by using t-test techniques. T-test means a statistical procedure used to determine whether there is any significant different between the means of the two sets of scores. The purpose is to see difference of speaking skill between experimental and control classes. In analyzing data, the researcher used t- test formula as follows:

This formula applied to decide mean of students' test score in experimental and control classes;

$$\bar{X}_1 = \frac{\sum F_1 X_1}{\sum F_1} \text{ (Experimental class)}$$

$$\bar{X}_2 = \frac{\sum F_2 X_2}{\sum F_2} \text{ (Control class)}$$

This formula is used to decide standard deviation of experimental and control classes;

$$S_1 = \sqrt{\frac{\sum F_1 (X_1 - \bar{X}_1)^2}{\sum F_1}} \text{ (Experimental class)}$$

$$S_2 = \sqrt{\frac{\sum F_2 (X_2 - \bar{X}_2)^2}{\sum F_2}} \text{ (Control class)}$$

Furthermore, the data analyze by using t-test formula as suggest by Sudjana (2002: 239). And the formula of t-test is:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

Where:

t : The value of t calculated / observer / obtained

\bar{X}_1 : Mean score of experiment sample

\bar{X}_2 : Mean score of control sample

n_1 : The number of subject of experimental class

n_2 : The number of subject of control class

S_1^2 : Variance of experimental class

S_2^2 : Variance of control class

The t table was employed to see whether there is significant difference between the mean score of both experimental and control classes. The value of obtained is consulted with the value of t table at the degree of freedom $(n_1 - 1) + (n_2 - 1)$ and the level of confidence of $95\% = 0,05$

If the value of obtained is less than the value of t table, the null hypotheses is accepted. On the contrary, if the value of t- obtained is equal or bigger than the value of t table, the alternative one is not accepted.

2. Hypothesis testing

To know the use of chain drill technique gives significant effectively to students speaking in seventh grade student of Islamic Junior High School Lubuk Buaya, the estimation use is a t-test. The purpose is to find differences of speaking ability between experimental and control classes. If the obtained value (t-obser) is higher than the table value (t-table) with the level significance is 0.05, the proposed hypothesis is accepted.



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