

## CHAPTER III

### RESEARCH METHODOLOGY

#### A. Research Design

This research is a kind of an experimental research. It is the only type of research that can test hypotheses to establish cause-and-effect relationship. It states the strongest chain of reasoning about the relationship between variables.<sup>1</sup> The method in this research is a quasi-experimental research. Research design was nonrandomized control group pretest-posttest design. There were two variables used in this research. The first was Using Fluency Workshop Technique (X) and the second was Students' Speaking Ability in Performing Monolog (Y). It involved two groups, an experimental group and a control group.

The researcher tried to find out the effect of using Fluency Workshop Technique toward students' speaking ability in performing monolog of second year at MAN 1 Pekanbaru. In this research, the experimental group means that the students who were given the treatment by using Fluency Workshop Technique. The treatment was given for six meetings two times a week. The method used in this research was quasi-experimental research. Research design which was used

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<sup>1</sup> L.R. Gay and Peter Airasian. *Educational Research: Competencies for Analysis and Application, Sixth Edition*. (Prentice Hall Inc: New Jersey, 2000), P.367.

in this research was Non Equivalent-Control Group design.<sup>2</sup> Both experimental and control group took a pre-test and a post-test.<sup>3</sup>

**Table III.1**  
**Research Design**

Group	Pre-test	Independent Variable	Post-test
Experimental	Y <sub>1</sub>	X	Y <sub>2</sub>
Control	Y <sub>1</sub>	—	Y <sub>2</sub>

Y<sub>1</sub> : Pre-test for experimental and control group

X : Treatment for experimental group

Y<sub>2</sub> : Post-test for experimental and control group

— : No treatment for control group

#### **B. The Subject and Object of The Research**

The subject of this research was the second year students of MAN 1 Pekanbaru. The object of this research was the effect of using Fluency Workshop Technique toward students' speaking ability in performing monolog of second year at MAN 1 Pekanbaru.

#### **C. The Location and Time of The Research**

The research was carried out at MAN 1 Pekanbaru. It is located on Bandeng Street, Pekanbaru. In addition, the research was conducted from September to October 2013.

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<sup>2</sup> John W. Cresswell. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. (New Jersey: Prentice Hall, 2008), P.314.

<sup>3</sup> Gall, Meredith D, *Educational Research: An introduction*. (New York: Longman Publisher USA, 1996), P.507.

#### D. The Population and Sample

The population of this research was the whole students in the second year students of MAN 1 Pekanbaru. The total population was 254 students which consisted of nine classes. The specification of the population can be seen on the table below:

The number of the population can be seen in the following table:

**Table III.2**

No	CLASS	The number of students
1	XI IPA C <sub>1</sub>	30
2	XI IPA C <sub>2</sub>	24
3	XI IPA <sub>1</sub>	24
4	XI IPA <sub>2</sub>	26
5	XI IPA <sub>3</sub>	26
6	XI IPA <sub>4</sub>	28
7	XI IPS C	32
8	XI IPS <sub>1</sub>	34
9	XI IPS <sub>2</sub>	30
TOTAL		254

The writer used clustering sampling as the technique sampling of the research. According to Gay and Petter Airasian, cluster sampling is sampling in which group, not individually; it can be communities, school district, and so on.<sup>4</sup> Then, the writer chose class XI Science 2 and XI Science 3 as sample because the students' speaking ability is homogenous and the students are the same level, both have the similar material and teacher. The sample class XI Science 2 consisted of 26 students and class XI Science 3 consisted of 26 students.

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<sup>4</sup> L. R. Gay & Petter Airasian , *Op Cit.* P. 127

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

The researcher used a technique in collecting the data. It was Oral Presentation Test. The test consisted of a topic of speech that was taken from the students' text book and other sources. The speaking test should consist of five components. They are accent, grammar, vocabulary, fluency, and comprehension.

The test consisted of pre test and post test. The pre test was carried out to know background knowledge of students' speaking ability in performing monolog for both experimental and control group. The researcher had given treatment to the students in the experimental class before the researcher gave post test based on the procedures of Fluency Workshop Technique. The treatment was given to know the effect of using Fluency Workshop Technique toward students' speaking ability in performing monolog. Furthermore, there was no treatment in control class, so the researcher used the conventional technique that was used by the English teacher. At last, the researcher gave post test to the experimental and control class. The result of post test was as the final data in this research.

### **F. Procedures of Research**

In conducting the experimental research, the researcher did some research procedures for both experimental and control groups. The research was carried out for eight meetings. The research procedures are as follows:

### 1. Conducting Pre-test

The pre-test was carried out to know the basic of students' speaking ability in performing monolog to both experimental and control group. The test was presenting the speech based on the text from the teacher.

### 2. Conducting Treatment

The treatment was given only to the experimental group. The treatment was given based on the Fluency Workshop Technique procedures. The treatment was given as follows:

- a. The teacher divided students into two groups and asked students to stand in a circle
- b. The teacher asked the first group as speakers and the second group as listeners. The listeners were in inner circle and the speakers were in outer circle
- c. The teacher gave a discussion topic to the speakers. For the first round, students were given 4 minutes for discussion
- d. The teacher asked the speakers to move and got a new partner of listener to discuss the topic. The students only had two minutes.
- e. The teacher instructed the speaker changed partner and discussed again in one minute
- f. The teacher asked the listeners reported what they had heard

- g. The teacher instructed to change their function, the speakers became the listeners and vice versa
- h. The teacher asked students to discuss how their speaking ability level differed in the three rounds of conversation

### 3. Conducting Post-test

The researcher gave the post test to both experimental and control groups after conducting the treatment for eight meetings for experimental group. The post-test was conducted to know the improvement of students' speaking ability in performing monolog after practicing Fluency Workshop Technique. The post-test was the similar model to the pre-test to know the students' speaking ability

**Table III.3**  
**Topic of the Teaching Speaking in Each Meeting**

No	Meeting	Topic
1	I	The Legend of The Kesodo Ceremony
2	II	Dove and Ant
3	III	The Legend of Rawa Pening
4	IV	The Black Cat
5	V	Tumble Wood
6	VI	The Hare and The Tortoise
7	VII	Pak Belalang
8	VIII	Snow White

## G. Validity and Reliability of the Test

### 1. Validity of the Test

According to Brown<sup>5</sup>, a test is a method of measuring a person's ability, knowledge, or performance in a given domain. According to Gronlund (in Brown), validity is the extent to which inferences made from assessment result are appropriate, meaningful, and useful in terms on the purpose of the assessment. According to Hughes<sup>6</sup>, a test is said to be valid if it measures accurately what it is intended to measure. Based on some experts above, the researcher concludes that a test can be said valid if it is really measured person's ability appropriately. Furthermore, Gay states that there are three kinds of validity. They are content validity, criterion-related validity, and construct validity.<sup>7</sup>

In this research, the researcher used content validity. Each topic was established by experienced teacher and supervisor. Brown states that content validity is if a test actually samples the subject matter about which conclusions are to be drawn, and if it requires the test taker to perform the behavior that is being measured.<sup>8</sup> In conclusion, the test was given to the students based on the material that they have learned.

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<sup>5</sup> H. Douglas Brown, *Language Assessment: Principles and Classroom Practices*, (San Francisco:San Francisco State University, 2003), p. 3.

<sup>6</sup> Arthur Hughes, *Testing for Language Teacher*, (Cambridge: Cambridge University Press, 2005), p. 26.

<sup>7</sup> L.R. Gay and Peter Airasian, *Op. Cit.*, pp. 163-167.

<sup>8</sup> H. Douglas Brown, *Op Cit.*, p. 22.

## 2. Reliability of the Test

Reliability is the measuring of test that is consistent and dependable.<sup>9</sup> It means that the test should consistently measure the person's ability. Furthermore, Brown states that there are two scoring processed in reliability. They are inter-rater reliability and intra-rater reliability. Inter-rater reliability occurs when two or more scores yield inconsistent scores of the same test. Intra-rater reliability is common occurrences for classroom teachers because of the unclear scoring criteria, bias toward particular 'good' and 'bad' students, or simple carelessness.

In this research, the researcher used inter-rater reliability. It means that the scores of the test were evaluated more than one person. The students' speaking scores were evaluated by two raters.

## H. The Technique of Analyzing of Data

In this research, the data were analyzed by using statistical method. First, in order to answer the first and second question of formulation of the problem, the writer used students' scores of the experimental and the control group as the data of the research which were measured by two raters. In order to analyze the category of speaking ability, the writer used the category standard as follows<sup>10</sup>:

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<sup>9</sup> H. Douglas Brown, *Ibid.*, p. 20.

<sup>10</sup> Suharsimi Arikunto, *Dasar-Dasar Evaluasi Pendidikan*, (Jakarta: Bumi Aksara, 2013), P.281.

1. 80-100 = very good
2. 66-79 = good
3. 56-65 = enough
4. 40-55 = less
5. 30-39 = bad

Also, in order to answer the third question of formulation of the problem, the writer analyzed the data by using t-test<sup>11</sup> to know whether the result of the research is statistically significant the data were calculated by using SPSS 16.0. First, the writer found the difference between post-test score and pre-test score in order to know the gain of each group.<sup>12</sup> Post-test score was subtracted pre-test score and it was equivalent with gain score. After that, the writer should find the t-score to analyze the data. After computing t-test, it is necessary to obtain the degree of freedom that was used to determined whether the t-score is significant or not. The t-obtained value was consulted with the value of t-table by using degree of freedom. The formula of degree of freedom is as follows:<sup>13</sup>

$$df = (N_x + N_y) - 2$$

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<sup>11</sup> Hartono, *Statistik Untuk Penelitian*, (Yogyakarta: Pustaka Pelajar, 2010), P. 178.

<sup>12</sup> Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik*, (Jakarta: Rineka Cipta, 2010), PP.350-352.

<sup>13</sup> *Ibid*, P. 206.

Where:

df : the degree of freedom

$N_x$  : the number of students in experimental class

$N_y$  : the number of students in experimental class

If the writer had consulted the  $t$ -obtained value with  $t$ -table by using degree of freedom, the writer concluded that if  $t_0 < t$ -table,  $H_0$  is accepted. It represents that there is no significant effect of using Fluency Workshop Technique toward students' speaking ability in performing monolog of second year at MAN 1 Pekanbaru. If  $t_0 > t$ -table,  $H_a$  is accepted. It means that there is a significant effect of using Fluency Workshop Technique toward students' speaking ability in performing monolog of second year at MAN 1 Pekanbaru