# CHAPTER III METHOD OF RESEARCH

## I. Source of Data

Source of data is very important for the researcher. Arikunto states that source of data are subjects from whom the data is taken.<sup>1</sup> In this research, the source of data was from students' speaking test of descriptive style in control and experimental class of eighth grade of SMP Cokroaminoto Banjarmangu Banjarnegara in academic year of 2010/2011. The control class was a class which was given treatments without movie while the experimental class was a class which was given treatments using movie as media. At the beginning of the research, both two groups were given a pre-test to know the students' initial capacity before getting treatments. Both two classes were given a post-test at the end of the research.

## **II.** Success Indicators

The indicators of speaking teaching learning are as follow:

- A. The improvement of students' speaking skill in descriptive style through the use of movie.
- B. Students' speaking achievement with the minimum standard of score (KKM) speaking 5.8.

#### **III.** Methods of Collecting Data

## A. Test

Tests may be constructed primarily as devices to reinforce learning and to motivate the students, or primarily as a means of assessing the students' performance in the language.<sup>2</sup> The researcher conducted non

<sup>&</sup>lt;sup>1</sup>Suharsimi Arikunto, *Prosedur penelitian Suatu Pendekatan Praktik*, (Jakarta: PT Rineka Cipta, 2006), p. 129.

<sup>&</sup>lt;sup>2</sup>J. B. Heaton, Writing *English Language Tests*, (London: Longman, 1975), p. 3.

verbal test in teaching learning process. The researcher asked the students to perform their speaking in front of class one by one. The topic was describing people. The researcher analyzed the result of the test and gave score. The test conducted to both control class and experimental class which consist of 22 students of control class and 22 students of experiment class. In scoring technique, the researcher measured four elements of speaking; they are pronunciation, grammar, vocabulary and fluency. Test is used to measure the student's competence and to achieve the objective. The data was collected by giving speaking test which was conducted twice, they are pre-test and post-test.

#### 2. Documentation

The researcher needed another data to help her run the research. In this research, data was collected through documentation of the students' previous examination score from the school. It was used to validate the sample.

#### **IV. Subject and Setting of The Research**

In this research, the participants were the students of eighth grade of SMP Cokroaminoto Banjarmangu Banjarnegara in academic year of 2010/2011. This research conducted in first semester. The researcher took two classes. The first class was a control class and the second class was an experimental class. The researcher gave pre-test to both classes to know how understand the students in the lesson. In treatment, the researcher taught the control class by using conventional method and experimental class by using movie. The researcher gave the treatment twice to both classes. After doing treatment, the researcher gave both classes post-test with the same instruments.

## A. Population

According to Encyclopedia of Educational Evaluation as cited by Arikunto, population is a set (or collection) of all elements possessing one or more attributes of interest.<sup>3</sup> The population of this research was the eighth grade of SMP Cokroaminoto Banjarmangu Banjarnegara in academic year of 2010/2011 which consisting of three classes. The total numbers of population were 66 students and divided into three classes.

B. Sample

Sample is a part that can represent all the population observed. It is called sample research when we want to generalize the sample research result.<sup>4</sup> The researcher took two classes as the samples of research, they are students in class A as control class and they were taught without movie. While students in class B as experimental class, they were taught using movie.

#### V. Research Design

Research design is very important because the quality of research depended on the design. In this research, the researcher used the form of quantitative approach to analyze the data. According to Michael J Wallace, quantitative is broadly used to describe what can be counted or measured and can therefore be considered objective.<sup>5</sup>

A. Experimental Research

There are two groups or classes in experimental research. They are: control class and experimental class. An experimental class received a new treatment while control class received a usual treatment. The control class is class A of the eighth grade of SMP Cokroaminoto Banjarmangu Banjarnegara in academic year of 2010/2011, and the experimental class is class B. This research the researcher gave pre-test and post-test to both classes to collect data.

<sup>&</sup>lt;sup>3</sup>*Op.Cit*, p. 130.

<sup>&</sup>lt;sup>4</sup>*Ibid*, p. 131.

<sup>&</sup>lt;sup>5</sup>Michael J Wallace, *Action Research for Language Teacher*, (Cambridge: Cambridge University Press, 1998), p. 38.

The design of the experiment could be described as follow:

| E | 01 | Х | 02 |  |
|---|----|---|----|--|
| С | 03 | Υ | 04 |  |

Adopted from Arikunto.<sup>6</sup>

Where:

E = experimental class

C = control class

01 = pre-test for experimental class

02 = post-test for experimental class

03 = pre-test for control class

04 = post-test for control class

X = treatment by using movie

Y = treatment without movie

From the design above, subjects of research were grouped into an experimental class (top line) and a control class (bottom line). The quality of subjects was first checked by pre-testing them (01 and 03). Then, the experimental treatment (taught by using movie) was applied to the experimental class, while the control class was taught without movie. The test was held in the form of composition. The results of post-test (02 and 04) were then computed statistically.

# **VI. Research Variable**

This research had two variables, because the researcher used movie as media in speaking descriptive style teaching. According to Fred N. Kerlingert that was cited by Arikunto, that all experiments have one fundamental idea behind them; to test the effect of one or more independent variables on a dependent variable (it is possible to have more than one dependent variable in experiments).<sup>7</sup> The two variables were:

<sup>&</sup>lt;sup>6</sup>Suharsimi Arikunto, *op.cit.*, p. 86. <sup>7</sup>*Ibid*, p. 119.

A. The Independent Variable

The independent variable is the major variable you hope to investigate. It is the variable which is selected, manipulated, and measured by the researcher.<sup>8</sup> The independent variable in this research is the use of movie in speaking descriptive style teaching.

#### B. The Dependent Variable

The dependent variable is the variable which you observe and measure to determine the effect of the independent variable.<sup>9</sup> The dependent variable of this research is the students' achievement.

## **VII. Instruments**

The researcher used test to collect data in this research. The researcher conducted the test to measure students' achievement. The test, which was conducted before the treatments, called pre-test. It was used to find out the initial condition of students before treatment. And the test which was done after all treatments is post-test.

A. The Activities of Control Class

1. Pre-test

Pre-test was given before the treatments. The researcher came to the class, explained the material and told them what they had to do. Finally, she asked the students to describe someone in front of class orally and individually.

2. Activities for control class

There were some activities in control class (class VIII A) as follow:

| No | Activities |         |      |     | Time    |    |           |
|----|------------|---------|------|-----|---------|----|-----------|
|    |            |         |      |     |         |    | Allotment |
| 1  | 1)         | Teacher | gave | the | example | of | 2x45'     |

<sup>&</sup>lt;sup>8</sup>Evelyn Hatch and Hossein Farhady, *Research Design And Statistics for AppliedLinguistics*, (Massachusetts: Newbury House Publishers, Inc, 1982), p. 15. <sup>9</sup>*Ibid*, p. 15.

|   | descriptive text and explained it.    |
|---|---------------------------------------|
|   | 2) Teacher invited students to        |
|   | describe someone in writing.          |
|   | 3) Teacher asked students to practice |
|   | describing someone in front of        |
|   | class orally and individually.        |
| 2 | 1) Teacher gave the example of 2x45'  |
|   | descriptive text and explained it.    |
|   | 2) Teacher invited students to        |
|   | describe someone in writing.          |
|   | 3) Teacher asked students to practice |
|   | describing someone in front of        |
|   | class orally and individually.        |

3. Post-test

Post-test was given after all treatments were conducted. This test was used to measure students' achievement after giving the treatments.

- B. The Activities of Experimental Class
  - 1. Pre-test

Pre-test was given before the treatments. The researcher came to the class, explained the material and told them what they had to do. Finally, she asked the students to describe someone in front of class orally and individually.

2. Activities in Experimental Class

There were some activities in experimental class (Class VIII B) as follow:

| No | Activities                     | Time      |
|----|--------------------------------|-----------|
|    |                                | Allotment |
| 1  | 1) Teacher gave the example of | 2x45'     |

|   |    | descriptive text and explained it. |       |
|---|----|------------------------------------|-------|
|   | 2) | Teacher invited students to        |       |
|   |    | describe someone in the movie      |       |
|   |    | in writing.                        |       |
|   | 3) | Teacher asked students to          |       |
|   |    | practice describing someone in     |       |
|   |    | front of class orally and          |       |
|   |    | individually.                      |       |
| 2 | 2) | Teacher gave the example of        | 2x45' |
|   |    | descriptive text and explained it. |       |
|   | 3) | Teacher invited students to        |       |
|   |    | describe someone in the movie      |       |
|   |    | in writing.                        |       |
|   | 4) | Teacher asked students to          |       |
|   |    | practice describing someone in     |       |
|   |    | front of class orally and          |       |
|   |    | individually.                      |       |
| 1 |    |                                    |       |

3. Post-test

Post-test was given after all treatments were conducted. This test was used to measure students' achievement after giving the treatments.

# VIII. Scoring Technique

In scoring technique, the researcher used the direct test which measured four elements of speaking; they are pronunciation, grammar, vocabulary and fluency. The researcher used analytic scale that categorized by some categories. The analytic score has five items and each item scores five. So, the maximum score is 25. To get the maximum score, it was multiplied with 5. According to David P. Haris, those are scoring system of speaking:<sup>10</sup>

| Aspects       | Score | Description                               |
|---------------|-------|---|
|               | 5     | Have few traces of foreign accent.        |
|               | 4     | Always intelligible, though one is        |
|               |       | conscious of a definite accent            |
|               | 3     | Pronunciation problem necessitate         |
|               |       | concentrated listening and occasionally   |
| Pronunciation |       | lead to misunderstanding.                 |
|               | 2     | Very hard to understand because of        |
|               |       | pronunciation problems, must frequently   |
|               |       | be asked to repeat.                       |
|               | 1     | Pronunciation problems so severe as to    |
|               |       | make speech virtually unintelligible.     |
|               | 5     | Makes few (if any) noticeable errors of   |
|               |       | grammar and word order.                   |
|               | 4     | Occasionally makes grammatical and/or     |
|               |       | word order errors which do not, however   |
| Grammar       |       | obscure the meaning.                      |
|               | 3     | Make frequent errors of grammar and       |
|               |       | word order which occasionally obscure     |
|               |       | meaning.                                  |
|               | 2     | Grammar and word order errors make        |
|               |       | comprehension difficult. Must often       |
|               |       | rephrase sentences and/or restrict him to |
|               |       | basic patterns.                           |
|               | 1     | Errors in grammar and word order as       |

<sup>&</sup>lt;sup>10</sup>David P. Haris, *Testing English as a Second Language*, (Washington, DC: Georgetown University, 1969). p. 84.

|            |   | severe as to make speech virtually          |  |  |
|------------|---|---|--|--|
|            |   | unintelligible.                             |  |  |
|            | 5 | Use of vocabulary and idioms is virtually   |  |  |
|            |   | that of a native speaker.                   |  |  |
|            | 4 | Sometime uses inappropriate terms           |  |  |
|            |   | and/or must rephrase the idea because of    |  |  |
|            |   | lexical inadequate                          |  |  |
|            | 3 | Frequently uses the wrong words;            |  |  |
| Vocabulary |   | conversation somewhat limited because       |  |  |
|            |   | of inadequate vocabulary.                   |  |  |
|            | 2 | Misuse of word and very limited             |  |  |
|            |   | vocabulary make comprehension quite         |  |  |
|            |   | difficult.                                  |  |  |
|            | 1 | Vocabulary limitations so extreme as to     |  |  |
|            |   | make conversation virtually impossible.     |  |  |
|            | 5 | Speed as fluent and effortless as that of a |  |  |
|            |   | native speaker.                             |  |  |
|            | 4 | Speed of the speech seems to be slightly    |  |  |
|            |   | affected by language problem.               |  |  |
|            | 3 | Speed and fluency are rather strongly       |  |  |
| Fluency    |   | affected by language problems.              |  |  |
|            | 2 | Usually hesitant; often forced into silent  |  |  |
|            |   | by language limitations.                    |  |  |
|            | 1 | Speech is as halting and fragmentary as     |  |  |
|            |   | to make conversation virtually              |  |  |
|            |   | impossible.                                 |  |  |

### **IX.** Methods of Data Analysis

There were two kinds of test that were held in this research, they were pre-requisite test and hypothesis test. So there must be two process of analyzing the data collected from test.

A. Pre-requisite Test

Before determining the sample, the researcher should conduct a normality and homogeneity test by choosing two classes with purposive sample. This test conducted to determine whether the data are homogenous or not. After conducting the test, data analysis was carried out to find out the data normality and the homogeneity of sample. It was meant to check if the research result met the requirement of good research or not. Data analysis discussed two main things:

1. Test of Data Normality

Before doing the research, the first step that had to be done was testing the data normality. It was aimed to know whether the data came from normal distribution or not. The researcher used Chi-Square formula, as follow:

$$X^{2} = \sum_{i=1}^{k} \frac{(Oi - Ei)^{2}}{Ei}$$

Adopted from Sudjana.<sup>11</sup>

Where:

 $X^{2}$  = Chi-Square  $O_{i}$  = Frequency that was obtained from data  $E_{i}$  = Frequency that was hoped k = the sum of interval class

<sup>&</sup>lt;sup>11</sup>Sudjana, Metoda Statistika, (Bandung: Tarsito, 2002). p. 273.

If the obtained score was lower than t-table score by using 5% alpha of significance, Ho was accepted. It was meant that Ha was rejected.

Test of Homogeneity 2.

> Test of homogeneity was meant to get the assumption that sample of research came from a same condition or homogenous.

The researcher used the formula as follow:

 $F = \frac{Biggest \ Variance}{Smallest \ Variance}$ 

Adopted from Sugiono.<sup>12</sup>

Hypothesis Test B.

> After doing test in both classes, scoring the result of the test using analytic scale and the means score of the two classes were determined, the two means were compared by applying t-test formula. T-test was used to differentiate the students' result of speaking descriptive style by using movie and without using movie was significant or not.

$$t = \frac{x_1 - x_2}{s\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Where:

$$s = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}}$$

Adopted from Sudjana.<sup>13</sup>

Where:

= the mean score of the experimental class  $x_1$ 

= the mean score of control class  $x_2$ 

<sup>&</sup>lt;sup>12</sup>Sugiyono, *Statistika Untuk Penelitian*, (Bandung: Alfabeta, 2007), p. 140.
<sup>13</sup>Sudjana, *op.cit.*, p. 239.

- $n_1$  = the number of the experimental class
- $n_2$  = the number of the control class
- s = standard deviation
- $s^2$  = variance

If the obtained score was higher than t-table score by using 5% alpha of significance, Ho was rejected. It meant that Ha was accepted: There was a significant difference in speaking achievement between control and experimental class.

C. Limitation of Research

The researcher realized that there were some hindrances and barriers in doing this research. The hindrances and barriers occurred was not caused by inability of the researcher but caused by the limitation of the research like time, fund, and equipment of research.