

CHAPTER III

METHODOLOGY

A. Research Design

Research design is the plan of the research that will be conducted.¹ In this research the writer uses quantitative research, specifically quasi experimental design. According to Arikunto, experimental research is the way to find a causal relationship (relationship clause) between the two factors that are deliberately caused by the researcher by reducing or setting aside other factors that interfere. Experiments are always done with the intent to see a treatment.² Quasi experiment design is often used in classroom experiments when experimental and control groups are such naturally assembled groups as intact classes which may be similar.

Pretests are administered before the application of the experimental and control treatments and posttests at the end of the treatment period. Gain scores will be compared and subjected to a test of significance of the difference between two means. Based on this statement, the writer gives the pretest to both groups. The writer gives a treatment, i.e. teaching pronunciation through reading aloud, to the experiment group as an alternative way of improving pronunciation through reading aloud. Their own English teacher teaches the control group with non reading aloud.

¹Suharismi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktek* (Jakarta: PT. Rineka Cipta, 2006), 51

²Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktek*, (Jakarta: Bina Aksara, 1987), 3

B. Research Hypothesis

According to William,³ Hypothesis is a specific statement of prediction. Meanwhile, Best and Khan state,⁴ Hypothesis is a formal affirmative statement predicting a single research outcome, a tentative explanation of the relationship between two or more variables.

The hypothesis of this research can be seen as follow:

Ho : There is no significant improvement in pronunciation by using Reading Loud at 8th Grade of SMP Kyai Hasyim Surabaya.

Ha : There is a significant improvement in pronunciation by using Reading Aloud at 8th Grade of SMP Kyai Hasyim Surabaya.

C. Setting of the Study

This research takes place at SMP Kyai Hasyim Surabaya. SMP Kyai Hasyim Surabaya is Islamic school that teaches English as one of the important lesson. The students have great potential to master English language but they think that English is hard to learn because their teacher strategies to teach is too monotone, they only give the vocabulary then translate the material to Bahasa Indonesia without using any other material or strategies. Most of students' pronunciation is not good, they only know the word but they cannot pronounce it well.⁵ The students need another

³ William M. K. Trochim, *The Research Methods Knowledge Base (2nd edition)* (Ithaca, New York: Cornell Custom Publishing, 1999), 9

⁴ John W. Best - James V. Khan. *Research in Education (7th edition)* (New Delhi: Prenticed of India Private Limited, 1995), 11-12

⁵ Based on preliminary research on October 29th, 2013

teaching method, an active and communicative teaching method to increase their interest to learn English more. Therefore, the writer decided to choose this school based on this consideration.

D. Data and Source of Data

1. Population

Population is any group of individuals that has one or more characteristics in common that are of interest to the researcher⁶. The population of this study is the 8th grade students of SMP Kyai Hasyim Surabaya in the academic year of 2013/2014. The reason for choosing the 8th grade of SMP Kyai Hasyim Surabaya is because they have enough knowledge and great interest in language learning. The writer does not choose the students at 9th grade is because they taught by different teacher and they have different score, and the writer does not choose students at 7th grade is because they just learn about English, the material they learn is only to introduce them the basic of English language.

2. Sample

According to William, sampling is the process of selecting units (such as people and organizations) from a population of interest so that by studying the sample you can fairly generalize your result to the population from which the units is

⁶ John W. Best - James V. Khan. *Research in Education (7th edition)* (New Delhi: Prenticed of India Private Limited, 1995), 13

chosen.⁷ Best and Khan state, sample is a small proportion of population selected for observation and analysis.⁸ In selecting sample, the writer chooses VIII A and VIII B. The reasons why the writer chooses these two classes because the averages of the English scores are not significantly different and the same English teacher teach these two classes. The writer chooses VIII A as experiment class and VIII B as control class. The writer does not take all of the students both in VIII.A and VIII.B classes for efficiency and practical reasons.

E. Variable

A variable is essentially what we can observe or quantity of the human characteristics or abilities involved. According to Best and Kahn⁹ states that variables are the conditions or characteristics that the experimenter manipulates, controls, or observes. In experimental study, variables are classified into two:

1. Dependent variable

Dependent variable is the conditions or characteristics that appears, disappears or change as the experimenter introduces, removes, or change the independent variable.¹⁰ It can be defined as a variable affected or expected to be effected. Based on the definition, the dependent variable of this study is the students'

⁷ William M. K. Trochim, *The Research Methods Knowledge Base (2nd edition)* (Ithaca, New York: Cornell Custom Publishing, 1999), p. 41

⁸ John W. Best - James V. Khan. *Research in Education (7th edition)* (New Delhi: Prenticed of India Private Limited, 1995), 13

⁹ John W. Best - James V. Khan. *Research in Education (7th edition)* (New Delhi: Prenticed of India Private Limited, 1995), 9

¹⁰ Ibid.

achievement. The students' score of oral test indicates the students' achievement

2. Independent variable

Independent variable is the conditions or characteristics that the experimenter manipulates or controls in his or her attempt to ascertain their relationship to observed phenomena.¹¹ In another word, independent variable is variable that can be manipulated by the investigator. Based on the definition, the independent variable of this study is the use of Reading Aloud in teaching pronunciation.

F. Data Collection Technique

To collect the data appropriately, it needs to use the appropriate technique. In this research, the researcher uses a test to collect the data about students' pronunciation. According to Arikunto, the test is used to measure or asses the result of the students' learning.¹² Therefore, the researcher uses this instrument to know and measure the students' pronunciation. The writer uses oral reading test that conducted on pretest-posttest to collect the data for the research. The test is administered to experimental class and control class.

After collecting the data through the test, the researcher uses questionnaires to collect the data about the students' response toward the use of reading aloud to teach

¹¹ Ibid.,

¹² Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik* (Jakarta: PT. Rineka Cipta, 2010), p. 266

them pronunciation. The researcher copied the questionnaire sheets in suitable with the number of students. This instrument is given to the student at the last of meeting at 16th November 2013. The students must choose one of multiple choices according to their opinion. It can be seen from the data in appendix V.

G. Research Instrument

1. Test

The researcher uses a test to collect the data about students' pronunciation score before and after the treatment conducted. The test will be done twice; pre-test and post-test. The test is made by the researcher according to the English teacher that teaches VIII A class and VIII B class and he validates it. The test is taken from several students' textbook for 8th grade.

a. Pretest

Pre-test is given to both control group and experiment group before getting the treatment pre test has been given on November 4th, 2013.

b. Posttest

Post-test is given to the students on control group and experiment group after getting the treatment especially in experiment group and it is contributed on November 16th, 2013.

2. Questionnaire

The second instrument used in this study is questionnaire. A questionnaire is a form which is prepared and distributed for the purpose of securing responses.¹³ This activity is used to know the students' responses about the method. Researcher used end-of-session questionnaires from the participant reaction. The researcher gave this instrument in the last meeting. The students were given some questions with four alternative answers which have to be chosen.

3. Rating Scale

The writer uses a rating scale proposed by Arthur Hughes¹⁴ to score the students' result in oral test and the researcher only use the pronunciation criteria since the researcher only assess students' pronunciation through reading. This is a 5-level rating scale. This rating scale measures the students' pronunciation skills. The rating scales for the oral test modified from Arthur Hughes can be seen as follow:

Table 3.1
Rating Scale

| Score | Criteria |
|----------|-------------------------------------------------------|
| 80 – 100 | Reading consist of almost appropriate pronunciation |
| 61 – 80 | Reading consist of hardly incorrect pronunciation |
| 41 – 60 | Reading consist of some inappropriate pronunciation |
| 21 – 40 | Reading consist of mostly inappropriate pronunciation |
| 0 – 20 | Reading consist of very poor pronunciation |

¹³Yogesh Kumar Singh, *Fundamental of Research Methodology and Statistics* (New Age International(P) Limited,2006),191.

¹⁴ Arthur Hughes, *Testing for Language Teachers* (Cambridge: University Press, 2003), 128-130

H. Procedure of The Research

Research procedure is a series of research process.¹⁵ The procedure of this research is described below:

1. Preparation step

Preparation step is the first step which is done before doing the research. Those are:

a. Making the research proposal

Making proposal is the first step of doing the research.

b. Choosing the research setting

In this research, the researcher is chosen the research setting at SMP Kyai Hasyim Surabaya.

c. Making research instrument

Research instrument is very important in the research. By using instrument, the research data will be easier to be collected based on the requirement. In this research, the instrument is oral test.

2. The Research Implementation Step

a. Doing Pretest

The researcher gives pretest to know student's pronunciation before the researcher gives treatment. Pretest is given for the

¹⁵Narbuko cholid – Achmadi Abu, *Metodologi Penelitian* (Jakarta: PT Bumi Aksara, 2009), 57

students which has purpose to know the students' pronunciation before the treatment. The pretest is oral test. The text for the test is chosen by the English teacher. The pretest is held on November 4th, 2013.

b. Giving Treatment

After conducting the pre-test, the writer conducts a treatment. The researcher teaches pronunciation through reading aloud in experimental group and theirs' own teacher teaches the control group. After conducting the treatment, the writer gives the students post test.

The treatment for experiment group is taught by the researcher for 3 times. It is done on November 7th, 2013 (treatment 1), November 11th, 2013 (treatment 2), and on November 14th, 2013 (treatment 3). For the first treatment, the researcher uses short story entitled " Bayuwangi". It is taken from Scaffolding Grade VIII page 154. The second is about "The Legend of Nyi Roro Kidul" also taken from Scaffolding Grade VIII page 149 – 150. Meanwhile, the third treatment is short story about "The Prince and His Best Friends" taken from English in Focus 2 page 92-93. During the treatment teacher always involving in reading aloud by ask them to

follow the researcher's reading aloud and sometime drill the students some vocabulary that troubled them.

Meanwhile, the control group is also given the material 3 times but they taught by their own teacher. It is done on November 8th, 2013, November 12th, 2013 and on November 14th, 2013. The materials and topics are the same with the treatment group. During the class, the teacher only gives students the related vocabulary then reads the text and explains it. The teacher is not involving the students during the lesson and he is not practice reading it with appropriate pronunciation.

c. Doing Posttest

Posttest is given for the students which has purpose to know the improvement of students' English pronunciation after giving treatment. The posttest is also an oral test. The text for the test is chosen by the English teacher. The posttest is conducted on November 16th, 2013.

d. Giving Questionnaire

For last step, the researcher is giving questionnaire to the experiment group that related to the reading aloud. The researcher used close-end questionnaire.

3. The Ending Step

a. Analyzing the research result

The researcher analyzes the data by using t-test to calculate the research result and to test the hypothesis.

b. Writing the report of the research result

After the researcher gets and analyzes the data, the researcher writes the report of the research result. All about the result in this research is written in the report.

I. Data Analysis Technique

The data is gathered from pretest and posttest of experiment group and control group to answer the research question. After collecting the data of pretest and post test from the experimental group and control group, then the researcher measures the score differences from pretest and post test of experimental group and control group by the statistical calculation. In this study, the researcher uses t – test formula to find out whether the mean differenced between them are significant or not. The researcher uses the t-test formula as follow:

$$t = \frac{Me - Mc}{\sqrt{\left(\frac{Sse + Ssc}{Ne + Nc - 2}\right) \left(\left(\frac{1}{Ne}\right) + \left(\frac{1}{Nc}\right)\right)}}$$

Where:

t : t-test

Me : the mean difference of the experiment group

Mc : the mean difference of control group

Sse : sum of quadrate deviation of the experiment group

Ssc : sum of quadrate deviation of the control group

Ne : the number of experiment group

Nc : the number of control group

Before calculating the t-test the researcher calculates mean, variance, and standard deviation.

1. Mean

Mean is the average value of the scores.¹⁶ In order to know the significant difference of the experiment could be seen through the difference of the two means; the mean of the experiment and the mean of the control group. Mean is calculated by using the formula:

$$\bar{X} = \frac{\sum X}{N}$$

Where:

X : mean

$\sum X$: sum of scores

N : number of scores

¹⁶ William M. K. Trochim, *The Research Methods Knowledge Base (2nd edition)* (Ithaca, New York: Cornell Custom Publishing, 1999), 270

2. Variance

Variance is used to find out the average of the squared differences from the mean.¹⁷ The variance of a group of scores is calculated by using the following formula:

$$S^2 = \frac{\sum X^2 - \frac{(\sum X)^2}{N}}{N - 1}$$

Where:

S^2 : variance

X : individual scores

N : number of scores in the group

3. Standard Deviation

Standard deviation is used to find out the square root of the variance.¹⁸

The standard deviation of a group of scores is calculated by using the

following formula

$$S = \sqrt{\frac{\sum X^2 - \frac{(\sum X)^2}{N}}{N - 1}}$$

Where:

S : standard deviation

X : individual scores

N : number of scores in group

¹⁷ Sugiyono, *Statistika Untuk Penelitian*, (Bandung: CV. Alfabeta, 2007), 56

¹⁸ William M. K. Trochim, *The Research Methods Knowledge Base (2nd edition)* (Ithaca, New York: Cornell Custom Publishing, 1999), 271

After calculating the pretest and posttest data of experiment group and control group, the researcher calculates the questionnaire result using the following formula:

$$\frac{n}{N} \times 100\%$$

Where:

n : the number of the students who choose certain option.

N : the number of all students