

CHAPTER III

RESEARCH METHOD

A. Research Design

This research focuses on improving students speaking skill in descriptive text. Considering the purpose of the research and the nature of the problems, it is a quantitative one. A scientific research has to use methodology the method used in an absorptive of the study and can be counted as scientific. The research uses experiment design to identify the effectiveness of active learning through “Who is in the Class Strategy” for teaching speaking descriptive text at the tenth grade students of MA NU Nurul Huda Semarang in the academic year of 2011/2012.

According to Suharsimi Arikunto, experiment is the way to look for the cause of relationship “causeability” between experiment class and control class.¹ This experiment aims at identifying increase the effectiveness of active learning through “Who is in the Class Strategy” for teaching speaking descriptive. An experimental research involved two groups: experimental group and control group. The experimental and control group are consisting of tenth grade students of MA NU Nurul Huda Semarang. An experimental group received a new treatment while control group received a usual treatment.

B. Research Setting

This research is only conducted in MA NU Nurul Huda Semarang in The Academic of 2011/2012. The participant of this research is the tenth grade students. This school was selected as the research setting because of two major reasons. Firstly, its location is the easiest place to be accessed. The second reason why it is selected to be the research setting is the students usually feel afraid and unmotivated when they have to speak English. It causes student cannot improve their speaking skill. These influence students’ English mastering process on the whole. On the other hand, this school is in trying to develop the quality of

¹Suharsimi Arikunto, *Prosedure Penelitian Suatu Pendekatan Praktik*, (Jakarta: PT Rineka Cipta, 2006), p. 3.

teaching and learning in the school, so that students' learning result can be improved. This condition matches to the application of active learning through "Who is in the Class Strategy" which is considered can make students active in the class and break the rigidity of class atmosphere, so that the students can increase their motivation and engagement to speak English.

The data was collected by doing some efforts. The steps of collecting the data includes preliminary visit, contact the headmaster, ask the data about the students as participants, give pre-test, give the treatments, and give the post-test.

1. Preliminary Visit. The first step was visiting the school to get information about the students and teacher as participants. And then, ask the information to the administration officer whether the school can be used as the setting of research or not by describing the research intention and asked for information about setting and participants.
2. Contacting the Headmaster. Having got the information about setting and participant, the second visit was done to meet the headmaster of the school. The research permission letter was given to do the research.
3. Contacting the English Teacher. After receiving research permission from the headmaster of the school, the English teacher was met. The data of students was asked and negotiated what the class should become the participants that were the control and experimental group.
4. Giving Pre-test. In this session, the pre-test of speaking in descriptive text was given. Both experimental and control group are given this kind of test. This test was to ensure that both two groups were the same in speaking ability.
5. Giving the Treatment. In this session, the experimental group is given the treatment and taught by using "Who is in the Class Strategy". The control group is taught by the same teacher and material using non-"Who is in the Class Strategy".
6. Giving Post-test. The post-test of speaking in descriptive text was given for the second time. Both experimental and control group are given this kind of

test. The post-test is given to measure students' achievement in speaking skill after giving the treatment.

C. Population and Sample of the Research

Population of this research is the tenth grade students of MA NU Nurul Huda Semarang in the academic of 2011/2012. This grade is divided into three classes. Two classes will be taken (experimental group and control group) from the tenth grade students of MA NU Nurul Huda Semarang in the academic of 2011/2012 as a sample.

Research is almost always only conducted on a sample, not on population. But the conclusions of the research on the sample will be generalized on the population.² Sampling is the selection of a certain number of whole populations.³ In this research, the object of research was taken using random sampling. It is an equal chance to be chosen for each individual or unit in whole populations.⁴ The population in this research is all the tenth grade students of MA NU Nurul Huda Semarang in the academic year of 2011/2012. The samples are two classes chosen from the whole classes where one class will be experimental group and one class will be the control group.

D. Variables and Indicators of the Research

According to Fred N. Kerlingert as 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).⁵

Variable refers to the object of research that becomes research focus. There are two variables in this research, independent and dependent. Independent

²Sumadi Suryabrata, *Metodologi Penelitian*, (Jakarta: PT Rajagrafindo Persada, 2006), p. 35.

³S. Nasution, *Metode Research*, (Jakarta: PT Bumi Aksara, 2011), p. 86.

⁴S. Nasution, *Metode Research*, (Jakarta: PT Bumi Aksara, 2011), p. 87.

⁵Suharsimi Arikunto, *Prosedure Penelitian Suatu Pendekatan Praktik*, (Jakarta: PT Rineka Cipta, 2006), p. 119.

variable refers to the learning method that “Who is in the Class Strategy”. Dependent variable refers to the achievement of the students.

Success indicators of using active learning through “Who is in the Class Strategy” for teaching speaking descriptive text are as follows:

1. The improvement of student’s speaking skill in descriptive text through the use of “Who is in the Class Strategy”.
2. Student’s speaking achievement with the minimum standard of score speaking.

E. Technique of Data Collection

In gaining the data, these following techniques are attempted to be done.

1. Documentation. In the use of documentation, researcher investigates the written objects such as books, magazines, documents, diaries, and etc.⁶ The document related to the object research such as; students name list and their English score in previous time will be functioned. Before the sample is determined, a homogeneity and normality test should be conducted by choosing two classes with cluster random sampling to know the legality of the sample. Students’ English score in previous time was used to do those tests.
2. Test. Test is a set of question and exercises used to measure skill, knowledge, or ability of the individual or group.⁷ This method is used to get data about score of the pre-test and post-test was given for both of groups, the experiment group and control group. The test was done to know the difference of learning result between the experiment group that was taught by “Who is in the Class Strategy” and the control group that was taught without using “Who is in the Class Strategy”, so that can be known that the use of the strategy is effective or not. The test in this research is an oral test. The oral test will be conducted in describing person. The form of the test is direct speaking test

⁶Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik*, (Jakarta: PT Rineka Cipta, 2006), p. 158.

⁷Suharsimi Arikunto, *Prosedure Penelitian Suatu Pendekatan Praktik*, (Jakarta: PT Rineka Cipta, 2006), p. 150.

and the teacher gives scores on pronunciation, grammar, vocabulary, and fluency.

- a. Pre-test. Before the teacher gives new material by using “Who is in the Class Strategy”, the teacher will give a test to the students. Pre-test is given to the experiment group and the control group. This test is given before the experiment was run. It is to see the starting points of the two groups.
- b. Post-test. Post-test is given to the experiment group and the control group. The test is given in order to know the improvement of students’ speaking skill in descriptive text. The post-test will be given to the experiment group and control group after receive treatment. The experiment group is taught descriptive text by “Who is in the Class Strategy” and the control group is taught without using “Who is in the Class Strategy”.

F. Scoring Technique

The speaking test was given to the students to analyze their scores on pronunciation, grammar, vocabulary, and fluency. In giving scores to the students, the analytic scale which categorized by some categories was used and these scoring criteria is followed for each category. This analytic score has four items and each item scores five. So the maximum score is 20. It will be multiplied with 5, so the final maximum score will be 100.

Analytical scoring of speaking could be seen on the following figures:

Aspects	Score	Description
Vocabulary	1	Speaking vocabulary inadequate to express anything but the most elementary needs.
	2	Has speaking vocabulary sufficient to express himself simply with some circumlocutions.
	3	Able to speak the language with sufficient vocabulary.
	4	Can understand and participate with a high degree of precision of vocabulary.
	5	Speech on all levels is fully accepted.
Grammar	1	Error in grammar are frequent but can be understood.
	2	Can usually handle elementary construction quite accurately but doesn’t have through or confidence

		control of grammar.
	3	Control of grammar is good.
	4	Able to use of language accurately and error in grammar are quite rare.
	5	Equivalent.
Pronunciation	1	Errors in pronunciation are frequent but can be understood.
	2	Accent is intelligible though often quite faulty.
	3	Errors never interfere with understanding and rarely disturb.
	4	Error in pronunciation is rare.
	5	Equivalent to and fully accepted.
Fluency	1	No specific fluency description.
	2	Can handle with confidence but not with social situation.
	3	Rarely has to grope words.
	4	Able to use the language fluency on all level.
	5	Has complete fluency in the language.

Based on “*Language Assessment: Principles and Classroom Practices*”⁸

G. Technique of Data Analysis

1. Pre-requisite Test

Before the sample is determined, a homogeneity test should be conducted by choosing two classes with cluster random sampling. Before testing the hypothesis that is to compare the difference of students’ academic achievement using t-test formula, there is a prerequisite test to know the legality of the sample. Here, the normality and homogeneity test are employed.

This test conducted to determine whether the data are homogenous or not. After conducted 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:

- a. Normality Test. The first step that had to be done before doing the research was to test the data normality. It is used to know the normality of

⁸H. Douglas Brown, *Language Assessment: Principles and Classroom Practices*, (New York: Pearson Education, 2004), p. 173.

the data that is going to be analyzed whether both groups have normal distribution or not. Chi square is used here.⁹

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

Notice:

- χ^2 : chi square
- O_i : frequency from observation
- E_i : expected frequency
- k : the sum of interval class

Calculation result of X^2 is compared with X^2_{table} by 5% degree of significance. If X^2 is lower than X^2_{table} , the distribution list is normal.

- b. Homogeneity Test. It is used to know whether experimental group and control group, that are decided, come from population that has relatively same variant or not. The formula is:¹⁰

$$F = \frac{Vb}{Vk}$$

Notice:

- Vb : bigger varian
- Vk : smaller varian

The hypotheses in homogeneity test are:

- Ho : homogeny variant: $\sigma_1^2 = \sigma_2^2$
- Ha : non homogeny variant: $\sigma_1^2 \neq \sigma_2^2$

If calculation result of F is lower than F_{table} by 5% degree of significance, Ho is accepted. It means both groups have same variant.

2. Hypothesis Test

The result of the test of the two groups is compared here. This step was done to prove hypothesis about the difference of students' achievement on the speaking descriptive text between the students are taught using "Who is in the

⁹ Sujana, *Metode Statistika*, (Bandung: Tarsito, 1996), p. 273.

¹⁰ Sujana, *Metode Statistika*, (Bandung: Tarsito 1996), p. 250.

Class Strategy” from those are taught using non-“Who is in the Class Strategy”.

Firstly, the test was done in both groups, experimental and control group. Secondly, the result of the test was scored by using analytic scale. Thirdly, the means score of the two groups were determined. Finally, the two means were compared by applying t-test formula. T-test was used to differentiate if the students’ result of students’ speaking skill in descriptive text by using “Who is in the Class Strategy” and without using “Who is in the Class Strategy” was significant or not. The formula used is as follows:¹¹

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

Where:

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

$\overline{X}_1$: The mean score of the experimental group

$\overline{X}_2$: The mean score of the control group

n_1 : The number of experiment group

n_2 : The number of control group

S : Standard deviation

S_1^2 : Variant of experiment group

S_2^2 : Variant of control group

The hypotheses are:

$H_o : \mu_1 = \mu_2$

$H_a : \mu_1 \neq \mu_2$

If calculation result of t is bigger than t_{table} , H_o is rejected and there is difference of average value from both of groups. Moreover, the other way if t is lower than t_{table} , H_o is accepted and there is no significant difference of average value from both of groups.

¹¹ Sujana, *Metode Statistika*, (Bandung: Tarsito 1996), p. 239.