**CHAPTER III**

**METHOD OF THE RESEARCH**

1. **Research Method**

Method of the research is the way which is used by the writer in collecting data of the research. In this research, the writer used experimental research, especially quasi experimental design. Experiments are carried out in order to explore the students of relationships between variables. A variable, as a term itself suggest, is anything which does not remain constant.[[1]](#footnote-1) According to Brown as quoted by Nunan, experimental research should exhibit sever key characteristics. It should be systematic, logical, tangible, replicable, and reductive, and one should be cautions of any not exhibiting these characteristics.[[2]](#footnote-2)

In this research the writer takes the quasi experimental design because it is good design that have class control as compared class experiment and increase of students speaking skill thought the IOC (Inside Outside Circle) technique. In this research the writer takes two classes. The experimental class consists of the students who are given IOC technique and control class without IOC technique.

These research consist of two variables: IOC technique and speaking learning. IOC techniques is defined as the students media to improve speaking skill. Speaking learning is the activity or process of gaining speaking skill by studying, practicing, being taught, or experiencing something.

Substantively, IOC technique especially to improve speaking skill. In this research is treated as independent variable Y, then speaking learning as variable signed by X as dependent variable.

Since the research, is also aimed at revealing the relationship between IOC technique and speaking learning. They are to correlate the following diagrams show the relationship between the variable.

X Y

X : speaking learning

Y : IOC technique

1. **Population and Sample**
2. Population

Population is whole units to be searched according to Arikunto, population is whole subject[[3]](#footnote-3). The Population is the entire group of entities or person to which the result of the study are interested.[[4]](#footnote-4)

The population in this research is taken from all the student of second grade of SMP YP Fatahillah Cilegon. Second grade of SMP YP Fatahillah Cilegon has two classes, class VIII A has 30 students and VIII B has 30 students. The quantity at second grade has 60 students, and every class has not excellent class.

1. Sample

Sample is a sub group of the population. This group represent the characteristic of the population. According to Arikunto, sample is representative of the population that is investigated.[[5]](#footnote-5)

In this research, the researcher consider that the characteristics of students from all of classes are equal. So, it will be taken two class which is consists of 60 students as sample and divided into two groups, each group consist of 30 students they are class A as experimental class and class B as control class.

1. **The Research Instrument**

The research instrument is a process of selecting or developing devices and method appropriate to give evaluation. To know the effectiveness of Inside-Outside Circle (IOC) Technique in speaking learning, the writer gives oral test to the students. The writer divides the score into five criteria, which are the score of grammar, vocabulary, comprehension, fluency, and accent. The research instrument used in this study is pre-test and post-test. Pre-test is the test that given before giving instrument, and post-test is that given after giving treatment.

1. **Technique of Collecting Data**

Data is an absolute requirement of research. Data are the means of proving the hypothesis. To collect the data about the effectiveness of IOC technique in speaking learning, the writer used test as the research instrument. In this research the writer used some technique to collect the data, as follows:

1. Test

The writer takes the objective test as one of instrument used. Test is systematic procedure for measuring student’s knowledge. Person states “test are formal”, systematic procedures or instrument for measuring a sample of student knowledge and skill. In carrying out the research, the writer uses oral test that made by herself. The test divided into pre-test and post-test. The type of test that is given to the students is work sheet.

1. Pre-test

The test conducts as the oral test to answered questions in worksheet orally, which is about the daily life and narrative text. It will become evidence of the effectiveness of IOC method in speaking learning.

1. Post-test

Post-test used to check the difference between two classes, control class without a treatment and experiment class using IOC technique. The procedure of post-test is almost similar with the pre-test, the students must answered questions in worksheet orally, which is about the daily life and narrative text, then tell the narrative story in front of class.

1. Observation

The writer do the observation by interviewing the English teacher and attending the English teaching learning process to observe directly in the class, how the teacher use English as teaching speaking learning.

In this technique, the observation as strengthen/description of the test results, and are not included in the quantification of the data.

1. **Data Analysis**

After conducting the test and taking back the test, the researcher did scoring and classifying it into some categories. The scores are needed to interpret the result of the teaching and learning process and are used to depict the students’ level of achievement; they were analyzed and processed by using static calculation of T-test. T-test formula was applied to see whether there was a significant difference between a pre-test and post-test.

The writer got two data. The first data is the result of pre-test and the Second data is the result of post-test. The technique of analyzing data, the writer used step as follows:

1. The result of post-test in experiment class is named variable ($x\_{2}$)
2. The result of post-test in control class is named variable ($y\_{2}$)

After getting the data from pre-test and post-test, Analyzing data use product moment formula, there are several steps in analyzing the result of the test:[[6]](#footnote-6)

1. Investigating students’ worksheet gives describe score in table
2. Determine mean variable X1 with formula:

*M1 =*

c*.* Determine mean variable Y1 with formula

*M2 = *

Determine deviation score variable X1 with formula:

*X1 = X1-M1*

e. Determine deviation score variable X2 with formula:

*X2 = X2-M2*

f. Analyzing the result by using calculation of the t-test as follow:

to =$=\frac{Mx-My}{\sqrt{\left\{\frac{\sum\_{}^{}x^{2}+y^{2}}{Nx+Ny-2}\right\}\left\{\frac{1}{Nx}+\frac{1}{Ny} \right\}}}$ **

The explanation:

to : t observation

M1  : the average score of experiment class

M2 : the average score of control class

X1 : sum of the squared deviation score of experimental class

Y1 : sum of the squared deviation score of control class

N1 : the numbers of experimental class

N2 : the numbers of students control class

2 : consonant number

1. **The Hypothesis of Study**

The writer's hypothesis is there is significant effect in speaking learning by using IOC technique at the second grade of SMP YP Fatahillah Cilegon.

1. **Research Procedure**

To obtaining the data, in this study the writer uses the test as an instrument. The writer uses the pre-test and post-test to measure the ability of students before and after treatment. Procedure of this research they are:

1. Preparing instrument for pre-test and post-test
2. Giving pre-test for both classes
3. Calculate the score of both classes
4. Analysing the data of pre-test
5. Do treatment for experiment class
6. Giving post-test for both classes
7. Calculate the score of both classes
8. Analysing and interpreting the data.
1. David Nunan, *Research Method in Language Learning* (Cambridge: Cambridge University Press, 1992), p.24 [↑](#footnote-ref-1)
2. David Nunan, *Research Method in Language Learning* (Cambridge: Cambridge University Press, 1992), p.9 [↑](#footnote-ref-2)
3. Suharsimi Arikunto, Prosedur Penelitian Suatu Pendekatan Praktik (Jakarta: Rineka Cipta, 2006), p.130 [↑](#footnote-ref-3)
4. Johnson M. Donna, Approach to Research in Second Language Learning (Longman: Publisher, 1985), p.117 [↑](#footnote-ref-4)
5. Suharsimi Arikunto, Prosedur Penelitian Suatu Pendekatan Praktik (Jakarta: Rineka Cipta, 2006), p.131 [↑](#footnote-ref-5)
6. Supardi & Darwyan Syah, *Pengantar Statistik Pendidikan*, (Jakarta: Diadit Media, 2009), 135. [↑](#footnote-ref-6)