CHAPTER III
RESEARCH METHODOLOGY

A. The Method of Research

This research is quasi experiment in which the experimental class and controlled class were conducted by the writer. In this research, the writer taught the students in experimental class by using discussion technique and controlled class by using traditional Method.

To get the data of examining the speaking skill using short story through audio material, the researcher uses quasi experiment method, Nunan has stated that " A quasi experiment has both pre- and post-tests, experiment and control groups, but no random assignment of subjects".[1]

Based on the statement above a quasi experiment has divided two; pre-test and post-test or experiment class and control class

The writer use a quasi-experimental method with nonequivalent control group design.

B. Place And Time Of Research

The research conducted the research at Class VIII of SMPN 2 Kota Serang. The school is located on Jl.Moh Yusuf Martadilaga No. 8, Kotabaru, kec. Serang, Banten. The researcher chooses this

[1] David Nunan, *Research Method In Language Learning*, (New York: Cambridge University Press, 1992), 24-25

school because many students from this class do not confidence to practice the material of English in front of the audience and do not understand about English language.

C. Population and Sample

1. Population

The population in this research is the students at Class VIII of SMPN 2 Kota Serang, it consists of 150 students and divided into three classes.

2. Sample

The sample in this research was taken too classes of second grade with 68 students, VIII D as experiment class and VIII B as control class, it is amount of each classes are 34 students it have class control and class experiment.

3. The purpose of Sample

The writer take this class VIII D as experimental class is the English still low especially speaking skill. And than the writer should to improve students class VIII D as experimental class in their speaking skill using giving treatment by using short story through audio material.

D. Research Instruments

This study used as instrument to collect the data as follow:

1. Pre-test
2. Post-test

The traditional experimental design, known as the pre-test and post-test are placed into two groups, the experimental and the

control groups. The experimental will receive the treatment, the control group will not, both groups will receive on whatever instrument is used to assess the efect of the experimental.[2]

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E. Technique of Collecting Data

The writer use the instrument for colecting the data, there is Test. Test divide in two test. There are:

1. Pre-test

   Pre-test was carried out for the initial equivalence of the quasi experiment and control groups. The test was given to the group, both did the test on the same day

2. Post-test

   Post-test was carried out to in order to check the differences between learning using strategy and wihtout strategy.

F. Technique of Analyzing Data

The technique of data analysis that used by the researcher here is quantitative analysis. The researcher used a statistical calculation of the t-test to determine the final calculation of two t_o (observation) that is done to measure the last score of the resesrch test.

[2]Brown, *Language Assessment Principles And Classroom* (San Fransisco State University, 2004), 43

The researcher 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 follow:

1. preparing the material in conducting the test (pre-test) and (post-test) that included experiment and control classes
2. the assessing of spoken language has evolved drammatically over the last several decades from test of oral grammar and pronunciation to interview and, more recently, to multiple task, often collected over time, we will start by considering standard interview, proceed to modified interviews task, consider semi-direct task, and finally refer to other multiple measure, with our focus on role play aimed assessing the ability to perform speech and other language functions.[3]

In this research, the writer used oral test to gain some information and data about the topic of this research before the data were analyzed. This research highlights speaking skill, the test used as instrument in this research are oral test, which were divided into pre-test and post-test. Moreover, for the materials, the writer adapted with the school based Curriculum Development. The components that are measured: grammar, vocabulary,

[3]Andrew D. Cohen, *Assessing Lngauge Ability in Classroom, Second Edition*, Boston, Massachusetts: Heinle&Heinly publisher, 1994, page 293.

pronunciation, fluency and comprehension. To give objective mark, the writer used speaking scoring categories.[4]

The Speaking Scoring Categories

NO	Aspect	Criteria	Score
1.	Grammar	• Error in grammar are frequent but student can be understood by native speaker used to dealing with foreigners attempting to speak his/her language. • Control of grammar is good. Able to speak the language with sufficient structural accuracy to participate effectively in most formal and informal conversation on practical, social, and professional topics. • Able to use the language accurately on all level pertinent to professional need. Error in grammar is quite rare. • Equivalent to that of an educated native speaker.	5 10 15 20
		• Has speaking vocabulary sufficient to express him/her simply with some	5

[4] Brown, H.Douglas. 2007. *Teaching by Principles:* An Interactive Approach to Language Pedagogy 3rd ed. New York: Pearson Education.

2.	Vocabulary	circumlocution. • Able to speak the language with sufficient vocabulary. • Vocabulary is board enough that he/she rarely has to grope for a word. • Speech on all levels is fully accepted by educated native speaker in all its features including breath of vocabulary and idioms, colloquialisms and pertinent cultural references	10 15 20
3.	Comprehension	• Within the scope of his/her very limited language experience, can understand simple question and statements if delivered with slowed speech repetition, or paraphrase. • Comprehension is quite complete at a normal rate of speech. • Can understand any conversation within the range of his/her experience. • Equivalent to that of an educated native speaker.	5 10 15 20
		• Can handle with confident but not with facility most social situations, including introductions and casual	5

4.	Fluency	conversations about current events, as well as work, family, and autobiographical information. • Can discuss particular interest of competence with reasonable case. Rarely has to grope for words. • Able to use the language fluently on all levels normally pertinent to professional needs. Can participate in any conversation within the range of this experience with a high degree of fluency. • Has complete fluency in the language such that his/her speech in fully accepted by educated native speakers.	10 15 20
5.	Pronunciation	• Accent intelligible though often quite faulty. • Errors never interfere with understanding and rarely disturb the native speaker. Accent may be obviously foreign. • Errors in pronunciation quite rare. • Equivalent to fully accept by educated native speakers.	5 10 15 20

To analyze the data, the writer used statistical computation, including scoring the result of the test, calculating the mean of both experimental and control group. Besides, the writer calculated the Standard Deviation of each group and then finds out the significant differences by using **t-test.**

The writer used the following formula according to Burns (1996:231).

1. The mean of Experimental and Control Class

$$Mx = \frac{\sum x}{Nx} \qquad My = \frac{\sum y}{Ny}$$

Where:

Mx : Mean of experimental group

$\sum x$: The Sum of Sample at Experimental Class

Nx : The Number of Sample at Experimental Class

My : Mean of Control Class

$\sum y$: The Sum of Sample at Control Class

Ny : The Number of Sample at Control Class

2. The Standard Deviation

Standard Deviation of Experimental and Control Class

$$M\,x = \sum x^2 - \left(\frac{\sum x}{Nx}\right)^2 \qquad My = \sum y^2 - \left(\frac{\sum y}{Ny}\right)^2$$

$\sum X^2$: The Standard Deviation of Experimental Class

x : Gain result of Experimental Class

Nx : The Number of the Sample at Experimental Class

$\sum y^2$: The Standard Deviation of Control Class

y : Gain result of Control Class

Ny : The Number of Sample of Control Class

3. Significant Test (t-test)

$$t = \frac{Mx - My}{\sqrt{\left(\frac{\sum x^2 + \sum y^2}{Nx^2 + N - 2}\right)\left(\frac{1}{Nx} + \frac{1}{Ny}\right)}}$$

Where:

t : The result of the two means

Mx : The average of score experiment group

My : The average of score control group

N : The number of the subject

x : Deviation of each score x^2 and y1

y : Deviation of score y^2 and y1

$\sum x^2$: Some of square deviation of control class

$\sum y^2$: Some of squared deviation of control class

Nx : Subject of experiment class

Ny : Subject of control class

4. T-Table

The writer after that found the t-count the writer calculated db (Drajat Bersih) or df (Degree of Freedom), which is formulated as follow :

df : (Nx + Ny – 2)

df : Degree of Freedom

Nx : Number of the students in the Control Class

Ny : Number of the students in Experimental Class