

CHAPTER III

RESEARCH METHOD

In this chapter, the researcher presents the research design, the population, sample and sampling of the research, research instrument, validity and reliability testing, normality and homogeneity testing, data collecting method, and data analysis.

A. Research Design

To conduct this study the researcher uses quantitative research approach. Quantitative research is methodology to study phenomena by collecting numeric data in the field, then analyze it by using statistic program. According to Perry (2005:75) quantitative mainly comes from pshycology field and emphasis by statistic to make generealization from samples of populations.

In this case, the researcher uses pre-experimental design means using one class as single group who get the treatment and the group get pre-test and post-test to know the result of treatment. The pre-test and post-test are given to take the score of the students' ability before and after being taught using point-coubterpoint strategy. The researcher only uses one class as the subject of the study without control group. Furthermore, conforming to why using pre-experimental research because the researcher is not visible to have

random assignment to determine the sample of the research. That is why in this study the researcher just take one group or class and uses pre-test and post-test to see the result of the treatment.

Table 3.1 Pre-test and post-test pre-experimental research design Sample

Sample	Pre-test	Treatment	Post-test
Experimental Group	Y1	X1, X2, X3	Y2

Y1 : Students speaking achievement in pre-test

X : Treatment teaching speaking by using Point-Counterpoint

Y2 : Students speaking achievement in post-test

The procedures of experimental research that use one group pre-test and post-test design in this study are described as follows:

1. Administering a pre-test with a purpose of measuring speaking achievement of the second grade students at MA Terpadu Al Anwar before giving treatment
2. Applying the experimental treatment of teaching speaking by using point-counterpoint strategy of the second grade students at MA Terpadu Al Anwar. The first treatment had done on February 25th, 2019. In that date the researcher introduction of using point-counterpoint strategy and shared the material. The first material is full day school and the second material is social media for children. The second treatment had done on February 28th, 2019. In that date, the researcher divides the students in some groups.

The students discuss the first topic with the partner in group and after discuss the students explain the result of the discussion in the other group. The other group give a feed back about the opinion. The third treatment had done on March 4th, 2019. In that date, the students discuss about second material. The researcher divides the students in the some groups, then the students discuss the topic about social media for children with the partner in group. After discuss the students explain the result of discussion in the other groups. The other groups give a feed back about the opinion.

3. Administering a post-test with s purpose of measuring speaking achievement of the second grade students at MA Terpadu Al Anwar after giving treatment

This research intended to investigate the effectiveness of using point-counterpoint strategy towards students' speaking achievement at second grade of MA Terpadu Al Anwar. The use of the treatment is aimed at proving whether the increase scores possibly got by the researcher. Thus, the effectiveness of that treatment is known the increase score when the students taught using point-counterpoint strategy by comparing pre-test and post-test score.

B. Population, Sample and Sampling

1. Population

Population is entire subjects where data is collected. Seltman (2015) as cited in Dewi (2017: 39) states population as the entire set of actual or potential observational units. In other word, population is all subjects where the data will be gathered. In this research, the population of data is all of eleven grade students of MA Al Anwar in period 2018/2019 which consists of 115 students. Those are divided into four classrooms. Class A, B, C, D. It can be seen in the table 3.2 below:

Table 3.2 Population of Research

N O	Class	Gender	
		Male	Female
1.	Science	18 students	25 students
2.	Social	36 students	36 students
Total students		115udents	

2. Sample

Sample is some part of the total and characteristic that is has of the population based on Sugiyono (2011: 118). In this study, the researcher took one class as sample. The technique is using purposive sampling. According to Perry (2005:57) purposeful sampling strategy is used to indicate that the sample is chosen to aswer the research question as

relevant as possible. By using purposive sampling, the researcher considers some suggestions from certain people who know well which sample is appropriate to be chosen by giving qualification. That is why, one of the good criterion sample is class IX social, the total number of the students are 36 students. The reason because that class is suitable as subject of research. The other reason that class are cooperative enough and the characteristics of the students has assumed as homogeneous in speaking, means not too good and not too bad.

3. Sampling

Sampling is a process of selecting a number of the students who will be represent from the large group (Ary, 2010:155). To determining the one group of sample, the researcher used purposive sampling. Purposive sampling is a type of nonprobability sampling where the researcher consciously selects subjects for addition in a study so as to make sure that the elements will have certain characteristics pertinent to the study.

Purposive sampling is which is taken because the researcher believes that XI social could give sufficient information. The class consist of various english proficiency. Some of them are graduated from ordinary and excellent schools, any others some students joining in english course. Thus, the researcher believes that XI social class can give sufficient information to the researcher because its heterogenous class.

C. Research Instrument

Instrument is needed to collect the data collection. The instrument was used to achieve the accuracy of the data and can indicate that researcher was successfully in this research. The researcher used an oral test to get students' speaking score. The researcher give test to the students twice, those are pre-test and posttest. Pretest was given before giving the treatment and post-test was given after giving the treatment. The instrument that was used in this research was speaking test. To the pre-test instruments, the researcher provided one topic. The students must choose one word and then explain the word in four sentences with their own words. The researcher conducted pre-test with the topic with instrument's try out. Pre-test finished within a week before giving the treatment. Then, the researcher gave the treatment. It finished a week before post-test. It means that, the researcher was done treatment spend three meetings. And then, post-test finish immediately after giving treatment.

Then to assess students' speaking, the researcher set up analytic scoring rubric which include the criteria such as vocabulary, fluency, pronunciation, and grammar. The reason to vocabulary in number one, the vocabulary was very influential in speaking. If the students do not have vocabulary, so they cannot speak. Beside, fluency was important too in speak clarity. So, the success of student's speaking can be seen from speak fluency.

And then is pronunciation. It is very important too, if the students have good pronunciation the speaker will be understand what they talking about clearly. And the last was accuracy, it was focus on grammar. Actually, the accuracy was not most important to speak, but if the students used good grammatical so theirs speaking can be seen well and prefect. To asses students' speaking skill the researcher used scoring rubric as follows:

Table 3.3 Speaking Scoring Rubric

Speaking Rubric	4	3	2	1
Vocabulary	Uses varied vocabulary	Uses adequated vocabulary : some word usage irregular	Uses limited vocabulary	Uses less vocabulary and it's not express anything
Fluency	Speaks fluently, any hesitations do not interfere with communication	In pronouncing the words are mostly very good, there is little wrong in pronouncing the words	In pronouncing the words are incorrectly, but just some of the words	In pronouncing the word are incorectly, still have many wrong to pronounce the words
Pronunciation	In pronouncing the words are perfect, there is no any wrong in pronouncing the words	In pronouncing the words are mostly very good, there is little wrong in pronouncing the words	In pronouncing the words are incorrectly, but just some of the words	In pronouncing the words are incorrectly, still have many wrong to pronounce the words
Grammar	Uses simple present and past tense and	Uses simple present and past tense	Uses simple present and past tense	Uses simple present and past tense

	conjunction in telling the experience, limited mistake acceptable	and conjunction in telling the experience, but there are several mistake	and conjunction in telling the experience, many significant mistake	and conjunction in telling the experience, it totally wrong
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D. Validity and Reliability Testing

1. Validity

Validity is measuring what it is designed to be measured. In language testing, Brown (2004) defines validity as the extent to which inference made from assesment results are appropriate, meaningful, and useful in terms of the purpose of assesment. There are types of validity as follows :

a. Content Validity

Content validity is a kind of validity which depends on careful analysis of the language being tested and of particular test. The researcher adjusted the test with the learning syllabus that contains of standard competence and basic competence.

Content validity is relevant. It means that the items or tasks in the test match what the test as a whole is supposed to assess. Where the objectives of the programmer are set out in detail, for example in a syllabus that lists skills or functions, then the content validity can be assessed by comparing the kind of language generated in the test against the syllabus (Underhill, 2006 : 106).

The instrument of study had content validity because the items were materials used for teaching speaking at the second grade of MA Al Anwar. Also, the content validity since the tests was designed based on main competence and basic competence in syllabus Curriculum of 2013 since the school implements the Curriculum of 2013 in the time the researcher conducted this research.

Table 3.4 Shows the main and basic competence in the curriculum 2013

Main Competence	Basic Competence
4. Mengolah, menalar, dan menyaji dalam ranah konkret dan ranah abstrak terkait dengan pengembangan dari yang dipelajarinya di sekolah secara mandiri, bertindak secara efektif dan kreatif, serta mampu menggunakan metode sesuai kaidah keilmuan.	4.8. Menangkap makna secara kontekstual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks explanation lisan dan tulis, terkait gejala alam atau sosial yang tercakup dalam mata pelajaran lain di kelas XI

b. Construct Validity

Construct validity is one kind of validity that is measure the ability which is supposed to measure. For speaking test it should having such of knowledge of speaking such as vocabulary, pronunciation, fluency. Construct validity is any theory, hypothesis, or model that attempts to explain observed phenomena in our universe of

perception (Brown 2004:25). The pre-test and the post-test used oral test. In pre-test the students were asked to tell their opinion based on the word. In post-test the students were asked to tell their opinion based on the picture. The pre-test and post-test has similiar topic. It can be said that these test has construct validity because the product test is in the form of speaking.

c. Face Validity

Besides checking the validity of the test using content validity, researcher also hade face validity. Face validity deals with the definition of the concept seems valid “on the face of it”, given prevailing cultural standart. The essential problem with face validity is that it assumes, rather than proves, that the content of a measure is obvious (Paul, et.al, 2007:66).

In line with face validity, Ary (2010) mentioned that face validity refers to the extent to which examines believe the instrument is measuring what is supposed to measure. A test that does not have face validity may be refused by the teacher and advisor.

In this study, researcher had the face validity by consulting the expert. After getting feedback from the expert, researcher made some revisions on the instrument. The view point that should be revised about instruction in test.

2. Reliability

Reliability tests consistent and dependable data Brown, (2004). This statement suggests if you give the same test to the same or matched students on two different occasions, the test should yield similar result. Cohen et al (2000) suggests four main factors that might affect reliability: the range of the group that is being tested, the groups level of proficiency, the length of the measure (the longer the test the greater the chance of errors), and the way in which reliability is calculated. In this case, the researcher use SPSS to measure the reliability of the test.

The researcher conducted a tryout for the test but in different subject before truly conducting this sample of research. It was done on Wednesday, 20th February 2019 in the XI-Science class. Then, the researcher to find out the reliability of students score which will calculated of score the test in *Person Product Moment* in IBM SPSS Statistics 16.

Table 3.5 Shows the Reliability Testing

Correlations			
		Pretest	Posttest
Pretest	Pearson Correlation	1	,852**
	Sig. (2-tailed)		,000
	N	25	25
Posttest	Pearson Correlation	,852**	1
	Sig. (2-tailed)	,000	
	N	25	25
**Correlation is significant at the 0.01 level (2-tailed).			

Based on the table showed that the result of Pearson Correlation is 0.852. It is conclude that the instrument was strong the positive correlation. From the result of statistical correlation, the instrument indicating that the correlation was strong respective positive, it could be concluded that the instrument were reliable.

E. Normality and Homogeneity Testing

Normality and homogeneity testing are calculated and analysed to determine either parametric or non-parametric testing. In order with the result of both tests can be seen in chapter 4.

1. Normality testing

Normality testing is very important testing that was conducted by the researcher before analyzing the data. Normality is one of the testing data that assumes the data is parametric or non-parametric test; the researcher should determine the normality of the data. The researcher using formula *One-Sample Kolmogorov-Smirnow* test in

SPSS IBM 16.0 by significant level (0.050). It is supported by Lubis (2008) who point out that normality testing of distribution data was conducted by using kolmogorov smirnov statistical which the tool has been available in spss. Testing of the normality is conducted by the rules below:

- a. If the significant value > 0.050 , it means that the data distribution is normal
- b. If the significant value < 0.050 , it means that the data distribution is not normal
- c. If the data distribution is normal, next the researcher goes to homogeneity testing

2. Homogeneity testing

Homogeneity testing is conducted to know whether the gotten data has a homogeneous variance or not. Homogeneity testing is intended to make sure that the collected manipulation data in analysis is truly taken from population which is too different each other. To know the homogeneity, the researcher used *Levene* statistic with IBM SPSS Stastitic 16.0.

F. Data Collection Method

The data collecting method and instrument are needed to obtain the research data. The data were collected from the pre-test and post-test. The pre-

test was administered before the treatment and the post-test was administered after the treatment. In this research, the researcher used oral test to know the students' score of speaking achievement.

1. Pre-Test

The purpose of doing pre-test is to get speaking score before doing the treatment. Pre-test was designed for the purpose of diagnosing pre-existing students' achievement in speaking skill; furthermore, it was administered before the treatment was given to the students. Pre-test was used to measure the students' speaking ability before new strategy applied. The researcher conducted pre-test in the beginning of study. The researcher gives a word to the student. Then the students tell their experience based on the word with their own words in four sentences. Before starting practice speaking, students must think first about the possible vocabulary to help the students in expressing ideas. In pre-test, the students started expression their ideas without using Point-Counterpoint strategy in the classroom. This test is given in order to know how far the students' speaking ability.

2. Post-Test

The purpose of the post-test is to get speaking score after doing the treatment. Post-test was one kind of test which given after gaining the score in pre-test and conducting treatments. It was purpose to known the result of the new strategy given is there effective or not.

Post-test it was conducted within once meeting. The teacher divides the student in some groups. The teacher gives a picture to the student. The student discuss with the partner in group about the topic from the picture. Then the students tell their experience based on the picture with their own words to the other groups. Then the other group give a feed back about the opinion. Before starting practice speaking in front class, identify about possible vocabulary used to describe the clue was also conducted in classroom to help the students in expressing their ideas when practice speaking.

G. Data Analysis

In this research, the writer used quantitative data analysis. The quantitative data of this research would be analyzed by using statistical method. This technique was used to find the significant difference on the students' achievement before and after being taught by applying Point –Counterpoint Strategy. To analyze the data, the researcher applied paired sample T- test at IBM SPSS Statistic 16. In this case, discussing the relationship between significant value and significant level. Significant values is the output of calculating hypothesis by Paired Samples T-Test. Meanwhile, significant level refers to standard level of hypothesis, it is 0.050. After analyze the data from tests. The researcher would know the effective or not of Point-Counterpoint

Strategy toward students' speaking achievement at second grade of
MA Terpadu Al Anwar.