

CHAPTER III

RESEARCH METHOD

This chapter presents the research method. It discusses the method used in this study. It includes research design, subject of study, variables, research instrument, validity and reliability testing, normality and homogeneity testing, data collecting method, the description of treatment and data analysis technique.

A. Research Design

This study used quasi experimental design in the form of non randomized control group, pretest - posttest design. This design did not permit random assignment of subject to the experimental and control group (Ary, et. al 2010: 316). The researcher selected two intact group. The first group was given treatment, called experimental group and the other group was not given a treatment, called control group. Then, both of two groups would be given pretest to know the beginning condition that there were some differences between control group and experimental group. Moreover, this research conducted experimental treatment activities with the experimental group only, and then administered a posttest to asses the differences between the two groups (Creswell, 2012: 310). The research design in this research was explained at (Table 3.1), as follows:

Table 3.1 Nonrandomized Control Group, Pretest – Posttest Design Group

| Group | Pretest | Independent Variable | Posttest |
|-------|---------|----------------------|----------|
| A | Y1 | X | Y2 |
| B | Y3 | - | Y4 |

(Ary, et. al 2010 : 316)

Notes:

A : experimental group (A class)

B : control group (B class)

Y1 : pretest for experimental group

Y3 : pretest for control group

X : treatment, or taught narrative speaking by using Talking Stick Method

Y2 : posttest for experimental group

Y4 : posttest for control group

B. Population, Sampling, and Sample

1. Population

Population was the whole research subject. It was important that the research must be designed carefully and completely. The population in this research was the students of the 10th grade of MA At – Thohiriyah Ngantru in academic year 2017/2018. The number of populations were around 30 students divided into two classes, i.e : XA and XB. In this study, for the number of population was also used as a sample.

2. Sampling

In this research, the researcher used Purposive Sampling Technique to take the samples. In purposive sampling, which also referred to as judgment sampling, sample elements judged to be typical or representative are chosen from the population (Ary et. Al, 2010 : 156). The researcher took two classes of tenth grade at MA At – Thohiriyah Ngantru in academic year 2017/2018, they were XA class and XB class. In choosing the sample, the researcher used some considerations in which both of two classes had the same average proficiency in speaking skill.

3. Sample

The sample of this research was taken from the population which consists of two classes only. It was XA class as the experimental class, this class considered of 16 students and XB class as the control class, this class considered of 14 students. So the total number of sample was 30 as respondents in this research.

C. Variables

An other important part of research is variables. According to Ary et. al (2010), a variable was an attribute that regarded as reflecting or expressing some concept or construct. In this study there were two variables, independent variable and dependent variable. Independent variable was a variable that (probably) cause, influence, or affect outcomes. It was also called treatment, manipulated, antecedent, or predictor variables. Meanwhile, dependent variable was the outcome or result of the influence of the independent variable. Other names for dependent

variables were criterion, outcomes, and effect variables. In this study, Talking Stick Method was as independent variable and students' narrative speaking skill was as dependent variable.

D. Research Instrument

Research instrument was tool of collecting data that should be valid and reliable. According to Arikunto (2010:192) the device the researcher used to collect data called instrument. Instrument had important in this research. Developing an instrument was one of steps in conducting this research. The instruments used of this study were speaking tests (retell a narrative story). There were two kinds of test, they were pre - test and post - test.

Pretest taken before giving treatment and it was administered to experimental and control groups. After getting the result of pretest from experimental group and control group, the researcher gave treatment to teach narrative speaking skill for experimental group by using Talking Stick Method. Meanwhile, the researcher gave a Conventional Method teaching to teach narrative speaking skill for control group. After that, the researcher gave posttest to experimental group and control group. Posttest used to know the students' narrative speaking skill after being taught by using Talking Stick Method and those taught by using Conventional Method.

E. Validity and Reliability Testing

Reliability and Validity were two very important concepts used to determine whether or not the instruments were good (Ary et. al, 2010:224).

1. Validity Testing.

Brown (2000) stated that validity was the degree to which a test actually measures what it intended to measure. This test used to check whether the instrument was valid or not if the instrument applied in a subject of the research. According to Weir as cited in Isnawati (2014) Test validity presupposes that the writer can be explicit about what tested and took steps to assured that the test reflects realistic used of particular ability to be measured. A test should test what the writer wanted to test. To know the validity of instrument used to gather the data, the writer used content validity, construct validity and face validity. The explanation of content validity, construct validity, and face validity as follows;

a. Content validity

The test was said to have content validity if it was content constitutes a representative sample of the language skills, structure etc., being tested. Beside that the content of instrument had to relevant with the purpose of the test. The writer sure that the content of the test was appropriate with the students and should be suited with their level. In this research, the content of instruction in testing used instruction to read and retelling a narrative story with their own word.

It was suitable (in curriculum 2013) for the tenth grade students at MA At – Thohiriyah Ngantru.

In this study, the writer used content validity. This kind of validity depends on careful analysis of the language being tested and the particular treatment. The content validity in this research can be showed as follows:

Table 3.2 Matrix of Content Validity

| Syllabus | Indicator | Learning Material | Technique | Test Item |
|---|--|--|---|-------------|
| Basic Competence : Catch the meaning in the simple spoken and written narrative text, in form of simple legends. | Student can retell a narrative story (simple legend) in the form of oral based on what they have read by using their own word. | About (Personal Legend). Topic 1. ‘Onion and Garlic.’ Topic 2. ‘Golden Cucumber.’ Topic 3. ‘Malin Kundang.’ | Speaking Test. Retell a narrative story (simple legend) by using your own word. Duration 3 minutes to retell a story. | Pre – Test |
| | Student can retell a narrative story (simple legend) in the form of oral based on what they have read by using their own word. | About (The Legend of a Place) Topic 1. ‘The Legend of Surabaya.’ Topic 2. ‘The Legend of Prambanan Temple.’ Topic 3. ‘The Legend of Crying Stone’ | Speaking Test. Retell a narrative story (simple legend) by using your own word. Duration 3 minutes to retell a story. | Post – Test |

b. Construct Validity

A test said to have construct validity if it demonstrated that it measured just the ability which supposed to measure (Isnawati, 2014 : 29). Construct validity was capable of measuring certain specific characteristics in accordance with theory of language behavior and learning. In this study, the researcher tested the students' narrative speaking skill by speaking test and the technique of scoring the students' narrative speaking skill based on five aspects of speaking to narrative, they are: content, language feature, vocabulary, fluency, pronunciation. The criterion of scoring rubric adapted and modified by researcher from Hughes (1989). They were as follows:

Table 3.3 Construct Validity

| Aspect | Need Improvement 1 (1 – 8) | Satisfactory 2 (9 – 17) | Good 3 (18 – 25) | Excellent 4 (26 – 30) |
|-------------------------|---|--|---|---|
| Content (30) | Content was not clear, the student was not using the generic structure. | Content was clear, only one of generic structure are fulfilled, a few details. | Content was clear, some generic structure are fulfilled, only some details. | Content was very clear, all of generic structure are fulfilled, so the listener can easy to understand. |
| Aspect | Need improvement 1 (1 – 7) | Satisfactory 2 (8 – 11) | Good 3 (12 – 19) | Excellent 4 (20 – 25) |

| | | | | |
|------------------------------|---|---|--|--|
| Language Feature (25) | Weak language control, a few use past tense, and did not use conjunction, adverb of time, direct and indirect speech. | Adequate language control, a few use past tense, conjunction, adverb of time, direct and indirect speech. | Good language control, some use past tense, conjunction, adverb of time, direct and indirect speech. | Excellent control of language feature, use of past tense, use of conjunction, use adverb of time, use of direct and indirect speech. |
| Aspect | Need Improvement 1 (1 – 5) | Satisfactory 2 (6 – 12) | Good 3 (13 – 16) | Excellent 4 (17 – 20) |
| Vocabulary (20) | Student had inadequate vocabulary and didn't use their own words to retell a story. | Student was able to use a few of their own words to retell a story. | Students was able to use a lot of their own words to retell a story. | Student was able to use rich precise of their own words to retell a story. |
| Aspect | Need Improvement 1 (1 – 3) | Satisfactory 2 (4 – 6) | Good 3 (7 – 10) | Excellent 4 (11 – 15) |
| Fluency (15) | Speak was very slow, stumbling, nervous and difficult for a listener to understand. | Speak was slow and often hesitant but the student can continue. | Speak was mostly smooth, but with some hesitation. | Speak was effortless and smooth. |
| Aspect | Need Improvement 1 (1 - 2) | Satisfactory 2 (3 – 4) | Good 3 (5 -7) | Excellent 4 (8 – 10) |

| | | | | |
|---------------------------|---|---|---|---|
| Pronunciation (10) | Student had mistake in all their pronunciation. | Students had a lot of mistake in their pronunciation. | Student make a little mistake in their pronunciation. | Student had not any mistake in their pronunciation. |
|---------------------------|---|---|---|---|

c. Face Validity

In line with face validity, Ary et. al (2010) mentioned that face validity refers to the extent to which examines believe the instrument was measuring what supposed to measure. A test that did not face validity may be refused by the teacher and advisor. In this research, researcher had the face validity by consulting the experts (advisor and English teacher) and validated by the expert (English teacher).

2. Reliability

Reliability was a measure of accuracy, consistency, dependability of scores resulting from administration or particular examination.

According Ary et. al (2010) Reliability was the extent to which a test measures accurately and consistency. According to Arikunto as cited in Lestari (2017 : 36), reliability was enough instrument can believe to use as a tool to collect data, because this instrument was good. Instrument that was can believe, that reliable would the result of data that could also believe.

In this research the writer used inter - rater reliability where the two scorers did the scoring and the two sets of scores gotten from the two scorers were calculated to get the correlation coefficient. The two scorers were the researcher

herself and her partner who was from the same major. The researcher chooses the rater because he can understand every point in the scoring rubrics.

In this researcher, the researcher conducted the reliability test with try out (post – test) by using Pearson Product -Moment in IBM SPSS Statistics 16.0 for getting correlation coefficient. The criteria of reliability instrument in pearson product – moment divided into 5 classes, those are very reliable, reliable, enough reliable, rather reliable, and less reliable according to Ridwan (2004 : 136). The criteria of reliability can be showed as bellow :

Table 3.4 Criteria of Reliability

| Interval Coefficient | Correlation |
|-----------------------------|--------------------|
| 0.80 – 1.00 | Very reliable |
| 0.60 – 0.79 | Reliable |
| 0.40 – 0.59 | Enough reliable |
| 0.20 – 0.39 | Rather reliable |
| 0.00 – 0.19 | Less reliable |

The researcher only took 10 students to be a samples in conducting try out. The table of data on the (Table 3.5) was the score obtained from the tryout. Rater 1 was taken from the researcher and rater 2 was taken from her partner in conducting this research. After obtaining the two scores, the researcher did a reliability testing and got the result as presented on (Table 3.6.)

Table 3.5 The scores obtained from the try out (post – test)

| Subject | Rater 1 | Rater 2 |
|---------|---------|---------|
| A | 51 | 55 |
| B | 50 | 48 |
| C | 48 | 48 |
| D | 55 | 58 |
| E | 21 | 25 |
| F | 60 | 65 |
| G | 44 | 48 |
| H | 63 | 60 |
| I | 55 | 58 |
| J | 48 | 43 |

The result of reliability testing can be seen from table :

Table 3.6 The Result of Reliability**Correlations**

| | | Rater1 | Rater2 |
|--------|---------------------|--------|--------|
| Rater1 | Pearson Correlation | 1 | .953** |
| | Sig. (2-tailed) | | .000 |
| | N | 10 | 10 |
| Rater2 | Pearson Correlation | .953** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 10 | 10 |

** . Correlation is significant at the 0.01 level (2-tailed).

The result of calculation showed that reliability coefficient was 0.953 and the ideal reliability coefficient was 1. In this research, the calculation was comparable to 1, it means the instruments of this research was very reliable because 0.953 closer the reliability coefficient to 1.

F. Normality and Homogeneity Testing

1. Normality Testing

Normality testing used to determine whether the data gained was normal distribution or not. In this study, researcher used SPSS 16.0 with One - Sample Kolmogorov – Smirnov to test the normality of the data gained. The normality of the data can be seen based on the significant value (α) = 0.050 rules as follows:

- H_0 : If the value of significance > 0.050 , means data was normal distribution.
- H_a : If the value of significance < 0.050 , means the distribution data was not normal distribution.

2. Homogeneity Testing

Homogeneity testing conducted to know whether the data gained has a homogeneous variance or not. The computation of homogeneity testing uses Test of Homogeneity of Variances in SPSS 16.0 for windows by the value of significance (α) = 0.050. The homogeneity of data can be decided based on the hypothesis of homogeneity as follow:

- H_0 : If the value of significance > 0.050 , means data was homogeneous.
- H_a : If the value of significance < 0.050 , means data was not homogeneous

G. Data Collecting Method

Data collection played a very important role in the research. While, data collection was done by observing a situation, setting or interaction using constructed instrument Muijs (2004:56). To know more the details of the test accomplished, the researcher put in plain words below to collecting data :

a. Pre - Test

This test administered before the treatment. The pretest aimed to know the students' narrative speaking skill before the treatments carried out. It was done on Tuesday, April 17th 2018 (control class) and on Wednesday, April 18th 2018 (experimental class). The researcher came to the class, and explained the material also told to the students what they had to do. The researcher asked the students to retell a narrative story with their own word. There are three topic, students can choose one topic and retell it. The researcher gave time 3 minutes to every students.

b. Post - Test

The post test was given to the experimental class and control class. It was given in order to know students achievement after they were taught by using Talking Stick Method (experimental class) and those taught by using Conventional Method (control class). In this case, students asked to retell a narrative story with their own word. There were three topic, students could choose one topic and retell it with their own word. the result of the scoring then compared

with pretest. Post test conditioned on Wednesday, April 25th 2018 (control class) and on Thursday, April 26th 2018 (experimental class).

H. The Description of Treatment

Treatment was given after administering the pretest and before the posttest. The treatment conducted by researcher on April 18th , 25th , 26th 2018.

The procedure of treatment as follow:

1. The teaching and learning process were held for about 80 minutes
2. The activity consisted of 5 minutes it was introduction, 70 minutes it was main activity and 5 minutes for closing.
3. In the main activity there were some activities as follow :
 - a. The teacher asked the students to make a group, 16 students divided into 4 students in group.
 - b. The teacher gave a material about narrative text, the example of narrative text (simple legend form) different stories in every meeting.
 - c. The teacher explained the material about narrative text, first and second meeting about (definition, purpose of narrative, generic structure, language feature of narrative text), third meeting about simple past tense and direct indirect speech in narrative.
 - d. Asked the students to read and discuss with their group about story in the text.
 - e. The teacher gave 10 minutes to students to prepare their self.

- f. Students who form a circle in front of class.
- g. The first, teacher gave stick to leader in circle.
- h. Students sing a song while the stick moved one student to another until the teacher said 'stops'.
- i. When the song stopped the students who hold the stick must speak up and retell a narrative story with their own words until all the students speak up in circle. Students could develop stories (their vocabulary) from previous students.
- j. Teacher gave duration 3 minutes in each student to retell a narrative story with their own words.
- k. The teacher gave feedback on pronunciation and their grammar.

The complete steps of Talking Stick Method can be seen in lesson plan in **appendix 4**.

I. Data Analysis

Analyzing data was a process of analyzing the acquired from the result of the research. After all the data needed in this research have been collected in narrative speaking form. The researcher analyzed whether there was a significant difference between the ability in narrative speaking who were taught by using Talking Stick Method and those taught by using Conventional Method. To describe the students achievement in narrative speaking skill, the researcher in this research using SPSS 16 for windows with the independent Sample T - test. If the result of t – test was bigger than at the level of significance 0.05, the null

hypothesis could not be rejected, indicated that Talking Stick Method was not effective toward students' narrative speaking skill. By contrast, if significant level was lower than t – test at the level of significance 0.05, the null hypothesis could be rejected indicating that Talking Stick Method was effective toward students' narrative speaking skill.