

CHAPTER III

RESEARCH METHOD

A. Research Design

This research used true experimental design, pre-test – post test control group design. There were two groups in experimental research, experimental group and control group. Experimental group received new treatment while control group received conventional treatment.

Reffering to this research, experimental group received new treatment by Two Stay Two Stray to teach writing of narrative text while control class was conventionally. Both experimental and control group consist of eighth grade students of MTs N 02 Semarang.

Experimental design are core method of the research model that uses a quantitative approach.¹ Quantitative methods involve the processes of collecting, analyzing, interpreting, and writing the results of a study.² The resercher used pre test – post

¹ Trianto, *Pengantar Penelitian Pendidikan Bagi Pengembangan Pofesi Pendidikan & Tenaga Kependidikan*, (Jakarta: Prenada Media Group,2011), p. 203

² Creswell, *Research Design*, (Los Angeles: Sage Publications, 2014), p.xxiv

test design experimental and control group design. This scheme could be described as follows:³

Pattern:

| | | | |
|----------------------|----------------------|----------|----------------------|
| R₁ | O₁ | X | O₂ |
| R₂ | O₃ | - | O₄ |

R1 : Experimental group

R2 : Control group

O1 : Pre-test for experimental group

O2 : Post-test for experimental group

O3 : Pre-test for control group

O4 : Post-test for control group

X : Treatment by using Two Stay Two Stray for experimental class and Conventional method for control class.

Subject of the research was classified as experimental group (top line) and control group (bottom line). Both experimental and control group were given pre-test (O₁ and O₃) to measure quality of them. Then, experimental group was given treatment (X) in teaching narrative text by using Two Stay Two Stray while control group was taught conventionally. After that, post-test was given to both experimental and control class.

³ Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*, (Bandung: Alfabeta, 2012), p. 76.

B. Research Setting

1. Subject and place of the research

This research was conducted in MTs N 02 Semarang. The subjects of this study were the eighth grade students of MTs N 02 Semarang in the academic year of 2015/2016. The researcher chose MTs N 02 Semarang as the subject of the research because, most of the teachers there still used conventional method. They have not applied some active learning techniques yet in their teaching learning activities. So, the researcher wanted to make something new by applying Two Stay Two Stray to teach writing of narrative text. Besides, the researcher wanted to prove whether Two Stay Two Stray technique was appropriate technique for the students there so that the students would have new atmosphere in teaching learning process.

2. Time of the research

This research was conducted from March 21st to April 12th, 2016 which counted since the proposal was submitted until the end of the research.

3. Procedures of the research

In collecting data, there were some steps of the research, those steps were:

a. Preliminary visit

The researcher visited the school. At the first, the researcher met administration office to gain the

information about teacher and students as participants of this research.

b. Contact the headmaster

The researcher asked permission to the headmaster of MTs N 02 Semarang by giving the permission letter.

c. Contact the English teacher

After receiving research permission from the headmaster of the school, the researcher met the English teacher, her named is Mr. Ahmad Muhtadi S. Ag. Researcher asked him for the data of students. The researcher explained about test and material that would be given to the students.

d. Give the pre-test

In this section, the researcher gave the pre-test to the experimental and control class. The researcher gave an assignment to the students to rewrite the text which was given by the researcher using their own words. The researcher gave the students 60 minutes to do it.

e. Give the treatment

In this step, the researcher give new treatment for experimental using Two Stay Two Stray and control group using conventionally to teach writing of narrative text.

f. Give the post-test

The last step, the researcher gave the post-test to students about narrative text. The researcher gave an assignment to rewrite the text which was given by the researcher using their own words. The researcher gave the students 60 minutes to do the test. Students had to pay attention to the five aspects of writing which would be used in the assessment.

The procedures of collecting the data could be seen in the following table:

Table 3.1
Schedule of the Researcher

| No | Task | What to prepare | Date |
|----|--|-------------------------|---|
| 1 | Preliminary visit (met the administration officer) | Letter or Pre-research. | Saturday, September 05, 2015. |
| 2 | Contact the headmaster | Letter of research. | Friday, October 16, 2015. |
| 3 | Contact the English teacher | Discussion | Sunday, October 18, 2015. |
| 4 | Give the pre-test | Pre-test worksheet. | <i>Control Class:</i> Monday, March 21, 2016. <i>Experimental Class:</i> Monday, March 21, 2016. |
| 5 | Give | Lesson | <i>Control Class:</i> |

| No | Task | What to prepare | Date |
|----|------------------------|---|--|
| | the treatment | plan, handout, worksheet, teaching materials. | first meting: Saturday, March 26, 2016. Second meeting: Saturday, April 2, 2016. <i>Experimental Class:</i> First meeting: Saturday, March 26, 2016. Second meeting: Saturday, April 2,2016. |
| 6 | Give the post- test | Post-test worksheet | <i>Control Class:</i> Wednesday, April 11, 2016. <i>Experimental Class:</i> Thursday, April 12, 2016. |

C. Population and Sample

Population was all of the subjects of the research.⁴ The population of this research was the eighth grade students of MTs N 02 Semarang in the academic year of 2015/2016. The total number of population was two hundred and twenty four students which were divided into six classes.

⁴ Arikunto, Suharsimi, *Prosedur Penelitian Suatu Pendekatan Praktek*, Jakarta: Rineka Cipta, 2010, p. 130.

Table 3.2
List of the Population

| No | Class | Number |
|-------|--------|--------|
| 1 | VIII A | 32 |
| 2 | VIII B | 32 |
| 3 | VIII C | 40 |
| 4 | VIII D | 40 |
| 5 | VIII E | 40 |
| 6 | VIII F | 40 |
| Total | | 224 |

Sample was part of total and characteristics which was had by population which was chosen as source of data.⁵ It was called sample research when we wanted to generalize the sample research result.⁶

Sampling was the process done to choose and take sample correctly from population so that could be used as valid representative to the population.⁷ The researcher will observe not at all of classes but only a class, that the eight grade. To determine the two classes, the researcher used purposive sampling technique. This technique was done by taking the subject/ sample which is

⁵ Sugiyono, *Metode Penelitian Kuantitatif Kualitatif dan R&D*, (Bandung: CV. ALFABETA, 2008), P.81.

⁶ Arikunto, *Prosedur Peraktik Penelitian Suatu Pendekatan Praktik*, p. 131.

⁷ Sugiyono, *Statistik untuk Penelitian*, (Bandung: CV. ALFABETA, 2007). p.62.

not based on strata, random or area but it is based on consideration of a certain purpose.⁸

The consideration that the researcher tried to complete in preliminary research was the sample that will be chosen has to be homogeny, so that the research will be a good and valid research. Because we know that something that can be compared is something that has the similar characteristic.

D. Variable of Research

Variable is the object of research or something that become the concern of research. There are two types of variables, dependent variable (Y) and independent variable (X). The dependent variable is the variable of focus or the central variable on which other variables will act if there is any relationship. Independent variable is selected by researcher to determine the relationship with the dependent variable.

In this research, there were two variables, those variables were:

1. The Independent Variable (X)

Independent variable is variable that influences or becomes the cause of change or emergence the dependent variable. Independent variable in this research was the use of teams games tournament as a learning model in teaching descriptive text reading. The experimental group taught

⁸ Arikunto, Suharsimi, *Prosedur Penelitian Suatu Pendekatan Praktek*, Jakarta: Rineka Cipta, 2010, p. 139.

descriptive text reading using teams games tournament while the control group taught descriptive text reading without the aid of teams games tournament.

2. Dependent Variable (Y)

In other dependent variable has same mention with output variable. Dependent variable is a variable which influenced or become effect because of independent variable. Dependent variable in this research is students' achievement in language learning reading descriptive text.

E. Techniques of Data Collection

To get the accurate data used two ways in the collecting the data, they were documentation and test. Firstly researcher was documentation. Documentation was a piece of written materials used to investigate the written or printed materials such as books, magazine, document, regulations, diaries, etc. It referred to the archives data that helped the writer to collect the needed data. In this study, this method was used to get data that related to the object research such as students name list were included in the population. This case, data was gained by the help of English teacher.⁹

Secondly, researcher was test. Test was a set of question and exercise used to measure the achievement or capability of the

⁹ Arikunto, Suharsimi, *Prosedur Penelitian Suatu Pendekatan Praktik*, p. 149

individual or group.¹⁰ The researcher would collect the data by analyzing the test of writing of narrative texts by the student. The researcher gave the test twice (pre-test and post-test) in both the experimental and the control groups. Pre test was given before the students got the treatment or explanation about the materials by using TSTS technique, while the post-test was given after receiving treatment. This test was given in order to know the improvement of students' ability in writing narrative text. In post test, the experimental class taught in writing narrative texts by using Two Stay Two Stray technique. While the control class using conventional method. The test in this study was an essay test. In both pre-test and post-test the researcher gave an assignment to rewrite the text which was given by the researcher gave the students 60 minutes to do the test. The students had to pay attention to the five aspects of writing which would be used in the assessment. These five aspects were as follow, content, organization, vocabulary, grammar and mechanic.

F. Technique of Data Analysis

The researcher analyzed the data through giving test to the students. It needed some steps in analyzing of the data. The following were the steps had been taken by the writer

1. Technique of scoring test

¹⁰ Arikunto, Suharsimi, *Prosedur Penelitian Suatu Pendekatan Praktik*, p. 150.

In this study, the researcher used a writing test to measure students' ability in writing narrative texts. To score the test paper, the researcher used analytic score which categorized by some categories. Brown stated that, there were five major items or categories in analytic scoring writing test, namely content, organization, vocabulary, syntax (grammar), and mechanic.¹¹ The percentage of the elements of writing can be seen in the table 3.4.

Table 3.3
Percentage of The Element of Writing

| Element of writing | Score |
|---------------------------------|-------|
| 1. The content mastery | 30 |
| 2. The organization mastery | 20 |
| 3. The vocabulary mastery | 20 |
| 4. The syntax (grammar) mastery | 25 |
| 5. The mechanic mastery | 5 |
| Total of score | 100 |

Explanation

Content : The substance of writing, the ideas expressed.

Organization : The organization of the content.

Vocabulary : The choice of idioms, words and lexical item to give a particular tone or flavor to writing.

¹¹ Douglas and Brown, *Language Assessment: Principles and Classroom Practices*, (New York: Longman, 2001), p.246.

Grammar : The employing grammatical and syntactic forms.

Mechanic : The use of graphic convention of the language.

Based on the purpose of the research, the researcher employed scoring guidance criteria by Arthur Huges. Which, it was included by some aspects. Those were content, organization, vocabulary, syntax (grammar), and mechanic. To the detail data could be seen in the table 3.5.

Table 3.4
Scoring Guidance and the Explain of Criteria¹²

| Categories | Score | Criteria |
|------------|-------|--|
| Content | 30-27 | Excellent to very good: knowledgeable; substantive; thorough; development of thesis; relevant to assigned topic. |
| | 26-22 | Good to average: some knowledge of subject; adequate range; limited development of thesis; mostly relevant to topic, but lack detail. |
| | 21-17 | Fair to poor: limited knowledge of subject; little substance; inadequate development of topic |

¹² Hughes, Arthur, *Testing for Language Teachers*, (New York: Cambridge University Press, 2003), p. 104.

| Categories | Score | Criteria |
|--------------|-------|---|
| Organization | 16-13 | Very poor: does not show knowledge of subject; non-substantive; not pertinent. |
| | 20-18 | Excellent to very good: fluent expression; ideas clearly stated/supported; succinct; well-organized; logical sequencing; cohesive. |
| | 17-14 | Good to Average: somewhat copy, loosely organized but main ideas stand out; limited support; logical but incomplete sequencing. |
| | 13-10 | Fair to poor: non-fluent; ideas confused or disconnected; lacks logical sequencing and development. |
| | 9-7 | Very poor: does not communicate; no organization |
| Vocabulary | 20-18 | Excellent to very good : sophisticated range; effective word/idiom choice and usage; word from mastery; appropriate register. |
| | 17-14 | Good to average: adequate range; occasional errors of word/idiom form ; choice; usage but meaning not obscured. |
| | 13-10 | Fair to poor: limited range; frequent errors of word/idiom |

| Categories | Score | Criteria |
|--------------------------|-------|---|
| Language use/ grammar | | form; choice usage; meaning confused or obscured. |
| | 9-7 | Very poor: essentially translation; little knowledge of English vocabulary, idioms, word form. |
| | 25-22 | Excellent to very good: effective complex construction; few errors of agreement, tense, number, word order/function, articles, pronouns, prepositions. |
| | 21-18 | Good to average: effective but simple constructions; minor problem in complex constructions; several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions but meaning seldom obscured. |
| | 17-11 | Fair to poor: major problems in simple/complex constructions; frequent errors of negation, agreement, tense number, word order/function, articles, pronouns, preposition and fragments, deletions; meaning confused or obscured. |
| | 10-5 | Very poor: virtually no mastery of sentence construction rules; dominated by errors; does not communicate. |

| Categories | Score | Criteria |
|------------|-------|--|
| Mechanics | 5 | Excellent to very good: demonstrates mastery of conventions; few errors of spelling, punctuation, capitalization, paragraphing. |
| | 4 | Good to average: occasional errors of spelling, punctuation, capitalization, paragraphing, but meaning not obscured. |
| | 3 | Fair to poor: frequent errors of spelling, punctuation, capitalization, paragraphing; poor handwriting; meaning confused. |
| | 2 | Very poor: no mastery of conventions; dominated by errors of spelling, punctuation, capitalization, etc. Paragraphing; handwriting illegible. |

From the explanation above, the researcher concluded a test needed to measure students' ability in writing test. In technique scoring test, there were five components in writing test. Those were contain, organization, vocabulary, syntax(grammar), mechanic. And all of them would be analyzed in this research.

2. Pre-Test

Data analysis was carried out before the test requirements are normality test and homogeneity of variance

test. Normality test aims to determine whether the data used in the study came from a sample of normal distribution or not. Homogeneity test aims to determine whether the variance in each group homogeneous or not.

The data was analyzed through giving test to the students. It needed some steps in analyzing of the data. The following steps were taken by researcher.

a. Normality Test

Normality test used to determine whether a population of normal distribution of data or not. This test is usually used to measure the data ordinal scale, interval, or ratio.¹³

Test for normality in this study using *the Kolmogorov Smirnov Lilliefors*.

b. Homogeneity Test

Homogeneity was used to know whether the decided the experimental group and the control group, came from population that had relative same variant or not.¹⁴

Homogeneity test conducted by *test levene's test homogeneity of variance*.

c. Test of the Average

¹³ Sugiyono, *Statistik untuk Penelitian*, (Bandung: ALFABETA, 2007) p.156

¹⁴ Sugiyono, *Statistik untuk Penelitian*,p.156

It was used to examine average whether experimental and control group that had been decided having significant different average.

Test of the average conducted by *independent sample test*.

3. End phase Analysis

To examine the hypothesis that had been stated, these following steps were used.

a. Normality Test

Steps normality second step was the same as the normality test on the initial data.

b. Homogeneity Test

Step homogeneity second step was the same as the normality test on the initial data.

c. Hypothesis Test

Proposed hyphotetical test in average similarity with right test was follows:

The hypothesis tasted:

Ho: there is no difference between the average achievements of learning to read experimental group with the control group

Ha: there is a difference between the average achievement of learning to read experimental group with the control group

The Basis for a decision:

- 1) If the value $\text{sig (2-tailed)} > 0.05$ then H_0 is accepted and H_a rejected
- 2) If the value $\text{sig (2-tailed)} < 0.05$ then H_0 is rejected and H_a accepted