

CHAPTER III

RESEARCH METHOD

In this chapter the writer presents research method that used in this research. It includes research design, variable of the research, population and sample, research instrument, validity and reliability testing, normality and homogeneity testing, treatment procedure, method of collecting data and data analysis. Each of the items is discussed as follows.

A. Research Design

The research employed Quasi-experimental research design. This research was conducted by comparing the score of experimental group and control group. The control group is the class that was taught by using Questioning Answering Technique. While, the class which was taught by using 3-2-1 Reflection Technique is the experimental group. This research used Quasi-experimental research design because the school that will be observed does not allow to do true experimental research design there.

The design used in this research was adopted from Ary as follows:²⁵

Table 3.1
The Illustration of Research Design

Group	Pre-test	Independent Variable	Post-test
E	Y_1	X_1	Y_2
C	Y_1	X_2	Y_2

Note :

E : Experimental group

C : Control group

Y_1 : Pre-test for both of groups

²⁵ D. Ary, L. Jacob, C. Sorensen, & A. Razavier, *Introduction to Research in Education* (Canada: Thomson Wadsworth, 2010).

- X₁ : Treatment for experimental group (3-2-1 Reflection Technique)
 X₂ : Treatment for control group (Questioning Answering Technique)
 Y₂ : Post-test for both of groups

From the Table 3.1 above, this research took two classes to be studied. One class was an experiment class and another class was a control class. The experiment class was given pre-test, treatment and post-test. The treatment was 3-2-1 Reflection Technique. Meanwhile, for control class, was given pre-test, treatment and post-test. The treatment was Questioning Answering Technique.

B. Variable of The Research

In this research there are two variables. They are independent variable and dependent variable.

1. Independent Variable

The independent variable is a variable that cannot be affected by the other variable but it can influence other variable. As Creswell stated that, "An independent variable was an attribute or characteristic that influences or affects an outcome or dependent variable."²⁶ The independent variable of this research is teaching technique. Those are 3-2-1 Reflection Technique and Questioning Answering Technique.

2. Dependent Variable

The dependent variable is not manipulated by the researcher, but it is affected by the independent variable. As Creswell stated that, "A dependent variable was an attribute or characteristic that was dependent on or influenced by the independent variable."²⁷ The dependent variable of this research is the students' achievement in reading comprehension on recount text.

²⁶ J. W. Creswell, *Educational Research* (Boston, MA: Pearson, 2012), 116.

²⁷ *Ibid.*, 115.

C. Population and Sample

1. Population

A population can be defined as all member of any well-defined class of people, event or object. As Ary stated that population was the larger group about which the generalization was made.²⁸ Based on the description above, the writer takes conclusion that the population was whole research subject used by the writer. The population in this research was the second grade students of SMPN 6 Kediri in the academic year of 2020/2021. There were eight classes in the second grade: VIII A, VIII B, VIII C, VIII D, VIII E, VIII F, VIII G and VIII H. Each class consists of 30 until 32 students and the total quantity more less 300 students.

2. Sample

Sample is a group of subject or participant (students) is chosen from the populations to be a representative. A sample is selected because the population is too large to be studied in its entirety therefore the sample must be taken from population in order it can be representative of the general population. As Ary stated that sampling is a process of selecting a number of the students who will be represent from the large group.²⁹ In selecting the sample, this research used two classes based on direction from the English teacher at SMPN 6 Kediri. Those were VIII A as experimental class and VIII B as control class. The teacher chose those classes based on consideration of the average reading ability which almost the same between them.

²⁸ Ary et al., *Introduction to Research*, 148.

²⁹ *Ibid.*, 155.

D. Research Instrument

This research used test in the form of reading test as the instrument to collect the data about students' achievement in reading comprehension skill on recount text. The form of reading test in this research was multiple choices. The test consists of 25 questions. It also has been tried out before it was used in this research. Students have been given the same questions on pre-test and post-test but in different arrangement.

a. Pre-test

Pre-test have been given to the both of classes before getting treatment. The form of pre-test was reading test of recount text about holiday experience. Students will do the test for 60 minutes.

b. Post-test

Post-test have been given to the both of classes after getting treatment. The form of post-test was reading test of recount text about holiday experience. Students will do the test for 60 minutes.

The instrument of reading test can be seen on appendix 3. While, the guide to construct the test items will be showed on table 3.2 below:

Table 3.2 Blue Print of Reading Test

Basic Competence	Indicators	Items of test	Total
<ul style="list-style-type: none"> • BC 4.14 Capture the meaning of oral and written recount text, short and simple, about activities, incidents, 	1. Students are able to identify linguistic elements of recount text about holiday experience.	4, 8, 21, 22, 25	5
	2. Students are able to identify the main idea in paragraph of recount text about	17	1

events	holiday experience.		
	3. Students are able to identify the whole story of recount text about holiday experience.	1, 2, 3, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19,20, 23, 24	19
Total			25

Further, the level difficulties of this instrument showed on the table 3.3 below:

Table 3.3 Level Difficulties of Instrument

Question	Level Difficulties	Decision
1	0,63	middle
2	0,60	middle
3	0,60	middle
4	0,17	high
5	0,63	middle
6	0,83	low
7	0,80	low
8	0,60	middle
9	0,53	middle
10	0,57	middle
11	0,60	middle
12	0,77	low
13	0,60	middle

14	0,13	high
15	0,60	middle
16	0,60	middle
17	0,53	middle
18	0,77	low
19	0,63	middle
20	0,17	high
21	0,60	middle
22	0,77	low
23	0,60	middle
24	0,60	middle
25	0,60	middle

E. Validity and Reliability Testing

1. Validity

The writer used validity to know whether the research instrument was valid or not. As Brown said that, “Validity was the extent to inferences made from assessment result. Those are appropriate, meaningful, and useful in terms of the purpose of the assessment.”³⁰ The measure whether the test has a good validity, the writer analyzed the test from face validity and content validity.

Ary as cited in Khoiriyah mentioned that “Face validity refers to the extent to which examines believe the instrument was measuring what was

³⁰ H. Douglas Brown, *Language Assessment: Principles and Classroom Practices* (New York: Pearson Education, 2004), 22.

supposed to measure.”³¹ While, content validity was relevant if the items or tasks in the test match with the test as a whole was supposed to assess. As Widoyoko stated that content validity can measure particular aim that equal with the lesson content.³² In this research, the writer had the face validity and the content validity by consulting the expert (English teachers) that the subject of the research it was appropriate with the basic competence on syllabus (*see appendix 5*).

2. Reliability

Brown stated a reliable test was consistent and dependable.³³ Additionally, Lodico reliability refers to consistency of score, that was, an instrument’s ability to produce “approximately” the same score for individual over repeated testing or across different raters.³⁴ It means that reliability of instrument was needed to make sure that the instrument can be consistent if used in other time. Therefore, the instrument as the test was reliable. Reliability was used to know whether the test was consistent and reliable.

To know the reliability of the reading test, the writer used test retest method and conducted tryout to get score of students’ achievement in reading recount text on Tuesday, 16th March 2021 and on Tuesday, 30th March 2021. As Azwar said, “Test retest is a test that given two times with different respites time.”³⁵ To test the reliability of the data the writer use *Cronbach’s Alpha* in SPSS 16.0 version. If the result was closer to 1, the data were reliable.

³¹ Umamil Nila Khoiriyah, “The Effectiveness of using Inside Outside Circle Technique (IOC) Speaking of The Eighth Grade Students at MTs Sunan Kalijogo Rejosari Kalidawir”, (Skripsi Sarjana, IAIN Tulugagung, Tulungagung, 2017), 30.

³² E. P. Widoyoko, *Evaluasi Program Pembelajaran: Panduan Praktis Bagi Pendidik dan Calon Pendidik* (Yogyakarta: Pustaka Pelajar, 2009), 129.

³³ H. Douglas Brown, *Language Assessment: Principles and Classroom Practices* (New York: Pearson Education, 2004), 20.

³⁴ Marguerite G Lodico, et al, *Methods in Educational Research: From Theory to Practice* (San Francisco: Jossey Bass A Wiley Imprint, 2006), 87.

³⁵ S. Azwar, *Reliabilitas dan Validitas edisi 4* (Yogyakarta: Pustaka Pelajar, 2012), 34.

F. Normality and Homogeneity Testing

1. Normality Testing

Normality testing was used to test whether the data was normal or not. Normal here means if the data have a normal distribution. To test the normality of the data the writer use the *One Sample Kolmogorov-Smirnov* test with the provision that if the value of *Kolmogorov-Smirnov Z* > 0.05 the data were distributed normally. The hypotheses for normality testing are:

- a. H_0 : If the value of *Kolmogorov-Smirnov Z* < 0.05 , it means that data was not normal distribution.
- b. H_a : If the value of *Kolmogorov-Smirnov Z* > 0.05 , it means that data was normal distribution.

2. Homogeneity Testing

Homogeneity testing was conducted to know whether the gotten data has a homogeneous variance or not. To know the homogeneity, the writer used *One-Way ANOVA* test with SPSS.16 by the value of *Levene Statistic* > 0.05 . The hypotheses for homogeneity testing are:

- a. H_0 : If the value of *Levene Statistic* < 0.05 , it means that data was not homogeneity.
- b. H_a : If the value of *Levene Statistic* > 0.05 , it means that data was homogeneity.

G. Treatment Procedure

The procedure of the treatment in this research showed on the table 3.4 below:

Table 3.4 Treatment Procedure

Meeting	Experimental Group	Control Group
1.	Pre-Test	Pre-Test
2.	3-2-1 Reflection Technique	Questioning Answering Technique
3.	3-2-1 Reflection Technique	Questioning Answering Technique
4.	3-2-1 Reflection Technique	Questioning Answering Technique
5.	Post-Test	Post-Test

The writer applied 3-2-1 Reflection Technique as treatment in experiment class. In other hand, the writer applied Questioning Answering Technique as treatment in control class. Both of classes have gotten the treatment for three times. First meeting was done on Thursday, 22th April 2021 with online class. Second meeting was done on Thursday, 29th April 2021 with offline class. The last meeting was done on Thursday, 6th May 2021 with offline class. The form of students' worksheet can be seen on appendix 4.

In addition, the procedure of technique in experiment class with online class can be seen on table 3.5 below:

Table 3.5 Procedure of 3-2-1 Reflection Technique in Experiment Class with Online Class

No	Step	Teacher activity	Students activity
1	Opening	<ul style="list-style-type: none"> Greeting Praying 	<ul style="list-style-type: none"> Students answer greeting.

		<ul style="list-style-type: none"> • Checking attendance list using Whatsapp group. • The teacher reviews the material. 	<ul style="list-style-type: none"> • Students pray together. • Students confirm their attendance using Whatsapp group. • The students pay attention for review material
2	Main teaching	<ul style="list-style-type: none"> • Teacher gives a text and student worksheet using google form. • Teacher asks students discover three items in the text that they read. • Teacher asks students share two interesting items in the text. • Teacher asks students write one question about the text. 	<ul style="list-style-type: none"> • Students discover three items in the text that they read. • Students share two interesting items in the text. • Students write one question about the text.
3.	Closing	<ul style="list-style-type: none"> • The teacher gives conclusion about what have been studied. • Teacher ends the class and asks students to pray. 	<ul style="list-style-type: none"> • Students listen the teacher's conclusion. • Students pray together.

While, the procedure of technique in control class with online class can be seen on table 3.6 below:

Table 3.6 Procedure of Questioning Answering Technique in Control Class with Online Class

No	Step	Teacher activity	Students activity
1	Opening	<ul style="list-style-type: none"> • Greeting • Praying • Checking attendance list using Whatsapp group. • The teacher reviews the material. 	<ul style="list-style-type: none"> • Students answer greeting. • Students pray together. • Students confirm their attendance using Whatsapp group. • The students pay attention for review material
2	Main teaching	<ul style="list-style-type: none"> • Teacher gives a text and student worksheet using google form. • Teacher asks students answer some questions based on the text. 	<ul style="list-style-type: none"> • Students answer some questions based on the text.
3.	Closing	<ul style="list-style-type: none"> • The teacher gives conclusion about what have been studied. • Teacher ends the class and asks students to pray. 	<ul style="list-style-type: none"> • Students listen the teacher's conclusion. • Students pray together.

Next, the procedure of technique in experiment class with offline class can be seen on table 3.7 below:

Table 3.7 Procedure of 3-2-1 Reflection Technique in Experiment Class with Offline Class

No	Step	Teacher activity	Students activity
1	Opening	<ul style="list-style-type: none"> • Greeting • Praying • Checking attendance list. • The teacher reviews the material. 	<ul style="list-style-type: none"> • Students answer greeting. • Students pray together. • Students confirm their attendance. • The students pay attention for review material
2	Main teaching	<ul style="list-style-type: none"> • Teacher gives a text and student worksheet. • Teacher asks students discover three items in the text that they read. • Teacher asks students share two interesting items in the text. • Teacher asks students write one question about the text. 	<ul style="list-style-type: none"> • Students discover three items in the text that they read. • Students share two interesting items in the text. • Students write one question about the text.
3.	Closing	<ul style="list-style-type: none"> • The teacher gives conclusion about what have been studied. • Teacher ends the class and asks students to pray. 	<ul style="list-style-type: none"> • Students listen the teacher's conclusion. • Students pray together.

While, the procedure of technique in control class with offline class can be seen on table 3.8 below:

Table 3.8 Procedure of Questioning Answering Technique in Control Class with Offline Class

No	Step	Teacher activity	Students activity
1	Opening	<ul style="list-style-type: none"> • Greeting • Praying • Checking attendance list. • The teacher reviews the material. 	<ul style="list-style-type: none"> • Students answer greeting. • Students pray together. • Students confirm their attendance. • The students pay attention for review material
2	Main teaching	<ul style="list-style-type: none"> • Teacher gives a text and student worksheet. • Teacher asks students answer some questions based on the text. 	<ul style="list-style-type: none"> • Students answer some questions based on the text.
3.	Closing	<ul style="list-style-type: none"> • The teacher gives conclusion about what have been studied. • Teacher ends the class and asks students to pray. 	<ul style="list-style-type: none"> • Students listen the teacher's conclusion. • Students pray together.

Further, the differences between 3-2-1 Reflection Technique and Questioning Answering Technique can be seen on table 3.9 below:

Table 3.9 The Differences between 3-2-1 Reflection Technique and Questioning Answering Technique

3-2-1 REFLECTION TECHNIQUE	QUESTIONING ANSWERING TECHNIQUE
1. More flexible to answering the questions.	1. Focus on the questions.
2. Helps students to read comprehensively.	2. Focus on some parts of the text.
3. Develops students creativity.	3. Students cannot develop their creativity.
4. Student centered.	4. Teacher centered.

H. Method of Collecting Data

The method of collecting data that was used in this research was reading test. This research used reading test to measure students' achievement in reading comprehension of recount text. The total questions are 25 questions. In scoring the test, each incorrect answer got 0, and correct answer got score 1. The top total score is 25 points. Students' score is total score multiplied with 4. Hence, the top students' score is 100.

Further, The pre-test has been given to the both of classes on Thursday, 8th April 2021. It conducted with online class. It used WhatsApp group. One group for experimental class and one group again for control class. In addition, the students' worksheet used google form.

Furthermore, the post-test has been given to the both of classes on Tuesday, 15th June 2021. It conducted with offline class. In post-test, one class was divided into two classes with a percentage of 50:50. Moreover, one class was splitted into two sections time. Additionally, each lesson has time more less 30 minutes.

I. Data Analysis

This research used a quantitative data analysis technique. The quantitative data of this research has been analyzed by using statistical method. This research used ANCOVA through SPSS 16.0 for windows to support the result of this research. The data for ANCOVA were collected from pre-test's scores in experiment and control class, and post-test's scores in experiment and control class. The post-test's scores as dependent variable, 3-2-1 Reflection Technique as independent variable, and the pre-test's scores as covariate. If the result of class's significant value is bigger than the level of significant 0.050, it means there is no significant difference between students that taught by using 3-2-1 Reflection Technique and students that taught by using Questioning Answering Technique. Equally, if the result of class's significant value is lower than the level of significance 0.050, it means there is significant difference between students that taught by using 3-2-1 Reflection Technique and students that taught by using Questioning Answering Technique. Then, in output of parameter estimates we are able to know the effectiveness of 3-2-1 Reflection Technique in teaching reading comprehension of recount text. If the result of class's significant value is bigger than the level of significant 0.050, it means 3-2-1 Reflection Technique is effective to use in teaching reading comprehension of recount text. Equally, if the result of class's significant value is lower than the level of significance 0.050, it means 3-2-1 Reflection Technique is effective to use in teaching reading comprehension of recount text. This research also used *Independent Sample Test* through SPSS 16.0 for windows to investigate the effectiveness of 3-2-1 Reflection Technique in teaching reading comprehension of recount text. The data for *Independent Sample Test* were collected from pre-test before students taught by using 3-2-1 Reflection Technique in experiment class and Questioning Answering Technique in control class and post-test after students are taught by using 3-2-1 Reflection Technique in experiment class and Questioning Answering Technique in control class. If the result of t-test is bigger than the level of significant 0.050, the null hypothesis could not be

rejected, it was indicated that 3-2-1 Reflection Technique is not effective in teaching reading comprehension of recount text. Equally, if the significant level is lower than t-test at the level of significance 0.050, the null hypothesis could be rejected indicating that 3-2-1 Reflection Technique is effective in teaching reading comprehension of recount text.