

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, data collecting method and data analysis.

A. Research Design

Before conducting research, the researcher should identify what kind of the research and need to make plan how the research would be conducted. This research uses an experimental research design especially used pre-experimental design with quantitative approach. The design of this research used one group pretest-posttest design.

In this case, the researcher used pre-experimental design means using one class as single group who get the treatment and the group get pre-test and post-test. The pre- test and post-test were given to make the score of the students' ability before and after being taught using peer correction technique in writing recount text. The researcher only uses one class as the subject of the study without control group or comparison group. Furthermore, the researcher uses pre-experimental research design because the researcher wants to examine the effectiveness of peer correction technique for students' writing recount text at the first grade of MA Terpadu Al Anwar Durenan. The requirement of this design is stated by Ary et al (2010:302), pre-experimental design does not have random assignment of subjects to groups or other

strategies to control extraneous variables. It means in this research, the researcher does not have an authority to chose the sample.

Thus, the effectiveness of that treatment is known by increasing students' score when they was taught by peer correction technique by comparing pre-test and post-test score.

The One Group Pretest – Posttest Design as follows:

Table 3.1: The Illustration of Research Design One Group Pre Test Post-Test

Pre-test	Treatment	Post-test
Y1 (DV)	X (IV)	Y2 (DV)

X : Peer Correction Technique (Independent Variable)

Y1 : Students' achievement in writing recount text before taught by using peer correction technique (Dependent Variable)

Y2 : Students' achievement in writing recount text after taught by using peer correction technique (Dependent Variable)

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

1. Administering pre-test (Y1) with a purpose of measuring students' writing recount text ability before applying peer correction technique.
2. Applying experimental treatment teaching writing recount text by using peer correction technique.
3. Administering post-test (Y2) with a purpose of measuring students' writing recount text after applying peer correction technique.

B. Description of Treatment

In conducting the treatment, the researcher adopted some steps from the previous studies. Teaching Peer Correction Technique consisted of some steps. The steps in teaching students' writing recount text through Peer Correction Technique are as follows:

- a. First, teacher gives an explanation of the peer correction technique and practices it in the classroom, as in the next activity.
- b. Second, students must read the recount text that has been done by a peer.
- c. Third, students read the recount text in stages by reading and understanding each paragraph.
- d. Forth, students must pay attention to the writing components of their peer as following: (1) generic structure must describe clear information such as who was involved in the story, where the story happened, when the story happened, and the sequence of events must be sequential and easy to understand by the reader, (2) language Use must use the correct grammar that is past tense (simple past tense, past tense continuouse, past perfect tense and past perfect continuous tense) and correct vocab such as spelling, capitalization, and punctuation that are clear, correct, and easily understood according to the rules, (3) content must be in accordance with the theme and correct. In a sense, do not make up a fabricated story.

- e. Fifth, students are given the freedom to find peers (consisting of 2 students in 1 group), one of whom has a higher ability than the other so that students with higher abilities can share their knowledge with students of lower ability.
- f. Sixth, the teacher submits a blank sheet that students will use to work on the recount text writing test to students.
- g. Seventh, students are asked to observe the themes and instructions on the sheet given by the teacher in writing recount text carefully and thoroughly.
- h. Eighth, students make the recount text on the sheet given by the teacher by the theme "students' first experience when they came to the Anwarul Haromain boarding school" for 60 minutes individually.
- i. Ninth, students exchange their worksheets with their peer.
- j. Tenth, the teacher instructs again how to do peer correction to focus the correction on content, organization, and language use in the writing test.
- k. Eleventh, students are allowed to use dictionaries, grammar books, and other notebooks that support learning material to provide clear corrections and good input (not to give negative comments that can damage their peers' emotions).
- l. Twelfth, students look for errors in the text of their friend's worksheets and give positive comments or correct corrections on the back sheet.
- m. Thirteenth, students back the task to the peer.

- n. Fourteenth, students consult with their peer corrector/editor for clarification of the feedback to make the editing clearer.
- o. Fifteenth, the teacher gives feedback on student writing.
- p. Sixteenth, students revise their writing based on corrections from their peers and feedback from the teacher.
- q. Seventeenth, students collect the results of revisions to the teacher.

C. Population, Sampling and Sample

1. Population

Population is entire subjects data is collected. Seltman (2015) as cited in Dewi et al (2017: 39) stated population as the entire set of actual or potential observational units. In other word, population is all subjects where the data will be gathered. The population of this research is the whole students of the first grade students of MA Terpadu Al – Anwar Durenan in the academic year 2019-2020 that consist of four classes. The total of the population of the first grade at MA Terpadu Al – Anwar Durenan in the academic year 2019-2020 consist of 127 students.

2. Sampling and Sample

The technique in taking sample is called sampling Sugiyono (2015: 810). In this research, the researcher used purposive sampling as the process of sampling. Ary et al (2010: 156) stated that purposive sampling also-referred to as judgment sampling-sample elements judged to be typical, or representative, are chosen from the population. Purposive sampling is type of non probability sampling where the

researcher consciously selects subjects for addition in as study to make sure that the elements would have certain characteristics pertinent to the study. Purposive sampling is sample which is taken because the researcher believes that X-A could give sufficient information. The researcher used purposive sampling. The class consisted of various background of schools and English proficiency. Some of them are joining English course, any others are graduated from excellent and ordinary schools.

Sample is the representative of population (Ary et al., 2010:148). Arikunto (2010) stated that sample as part of representative of population that is observed. By considering the number of population which many to determine the sample of population, the researcher focuses on one class and using purposive sampling to consider some qualifications. The sample of this research is X-A. The reasons are this class is taught by recount text, the class is cooperative enough, and the students has assumed as homogeneous in writing, means not too good and not too bad. In addition, English teacher who handles X-A suggests to take that class as the subject of sample to be researched.

Table 3.2 Sample of Research

Sample of X-Chemical		Total participants
Male	Female	
7	23	30 participants

D. Research Instrument

Research instrument refers to the instrument or tool to collect the data. The instrument which used by the researcher was achievement test (writing test or essay test). The researcher conducts some steps to get reliable instrument. Starting from reviewing literature, the researcher concerned on writing skill, especially in writing recount text at the first grade of MA Terpadu Al Anwar Durenan by using syllabus and books are used in MA Terpadu Al Anwar Durenan to get some information. Then the researcher started drafting the instrument. Next, the researcher asked the expert to check instrument draft and giving feedback to the researcher. After getting feedback, the researcher revised the draft and continued conducting the try out to know whether the instrument is reliable or not to collect the data. The try out was conducted on January 4th, 2020.

To know the result of the try out, the researcher used scoring rubric from Jacob et.al. The aspects of scoring are content, organization, vocabulary, language use and mechanics. Those aspects has been matched in assessing writing recount text. In these aspects, Jacob et al.'s also include certain criteria and assessments to fulfill them. In the aspect of students writing content, they must indicate knowledgeable, substantive, thorough development of thesis, and relevant to assigned topic to get 13-30 score. The next category is the organization in writing the recount text must be well-organized, has logical sequencing, cohesive, clear ideas, succinct, and fluent expression to get 7-20 score. The third category is vocabulary must be

sophisticated, effective word/idiom choice and usage, word form mastery, and appropriate register to get 7-20 score. The fourth category is language use in writing recount text must be effective complex constructions and has few errors of agreement, tense, number, word order/function, articles, pronouns, and prepositions to get 11-25 score. The fifth category is mechanics must demonstrate mastery of conventions and shows few errors of spelling, punctuation, capitalization, and paragraphing to get 2-5 score. After that, the last sum of scores are the total from all value of aspects. The maximum score is 100 points and the minimum score is 0 points. Furthermore, there would be no decimal score, so if there is decimal score must be sphered into numeral number.

E. Validity and Reliability Testing

Validity and reliability of instrument are integral parts in conducting a study since the instrument which would be used must be valid and reliable before using it to collect the data. The instrument which used by the researcher was achievement test (writing achievement test). The researcher ensured that the instrument (writing achievement test) to measure students' writing recount text by using peer correction technique was valid and reliable by doing validity and reliability testing. Then the researcher conducts the try out in another class to see the quality of instrument.

1. Validity

Ary et al (2010: 225) define validity as the extent to which an instrument measured what it claimed to measure. In other words, validity is measuring what it is designed to be measured. In language testing, Brown (2004) defines validity as the extent to which inferences made from assessment results are appropriate, meaningful, and useful in terms of the purpose of assessment. To measure whether the writing test has a good validity, the researcher analyzed all aspects (content, organization, vocabulary, language use, and mechanics) of writing test from content validity, construct validity, and face validity.

a. Content Validity

A test said to have content validity is its contents constitutes a representative sample of language skills, structures, etc being tested. In order to judge whether or not the test has content validity, we need a specification of the skills or structure being tested. The researcher informs some of instructions in conducting the test. They are preparing the tools, writing their identity, time allocation on test, and working the test individually.

The researcher uses peer correction technique to test students' writing skill in writing recount text. The researcher applies peer correction technique in several steps was adopted from previous studies. The steps are students read the recount text in each paragraph and students must pay attention to the writing components

of their peer such as generic structure, language use, and content. A comparison of test specification and test content is basis for judge the content validity. Then they find the mistakes of peer's text and make a circle it. The researcher made this test based on the course objective in the syllabus of tenth grade of MA Terpadu Al Anwar Durenan. Therefore, this is valid in term of content validity.

b. Face Validity

A test is said to have face validity if it measures what is intended to be measured. Face validity is hardly a scientific concept that is very important. A test which does not have face validity may not be accepted by test takers, teachers, educations, authorities or employees. The researcher used face validity by consulting with the advisor and English teacher who handles X-A class. In this test, there are some aspects that are consideration from this test to make a good test based on validity.

1. The instruction must be clear for the students.
2. In this test, the students do all the instruction given by the teacher. The instruction based on the syllabus and suitable with their level.
3. Time allocation must be clearly. The teacher gives 60 minutes for every student to make a paragraph of recount text about their first experience when they come to Anwarul Haromain Boarding School.

2. Reliability

Reliability shows whether the instrument is reliable and can be used as a device to collect the data with the stability of test scores. According to Howit and Cramer (2000: 28) reliability is the extent to which the measure will give the same response under similar circumstance. Ary et al (2010: 236) also defines reliability as the degree of consistency with which an instrument measures whether it is measuring. Thus, it can be said that a reliable test is consistent and dependable. It means reliability is the consistency of the instrument in producing one the similar score on different testing occasion or with different raters.

To measure the reliability of instrument, the researcher conducted the try out. The researcher used Alpha Cronbach Reliability Coefficient in SPSS 20.0 for Windows to analyze the score. According to Ridwan (2004: 118), the criteria of reliability instrument can be divided into 5 classes as follows:

- a. If the *alpha cronbach* score 0.00-0.20: less reliable
- b. If the *alpha cronbach* score 0.21-0.40: rather reliable
- c. If the *alpha cronbach* score 0.41-0.60: enough reliable
- d. If the *alpha cronbach* score 0.61-0.80: reliable
- e. If the *alpha cronbach* score 0.81-1 : very reliable

Table 3.3 Reliability Testing

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,828	,851	5

Relying on the result of reliability statistic of SPSS 20.0 for windows, the value obtained 0,828. This could be concluded that the instrument used by the researcher was reliable.

F. Data Collecting Method

The data collecting method serves the way how the researcher gets the data which is needed. To measure the effectiveness of using peer correction in wiring recount text, the researcher uses instruments. The instruments are pre-test and post-test. It can be seen clearly below:

1. Pre-Test

Pre-test is given to the students to know their achievements in writing descriptive text before being taught by using peer correction. In that day, the researcher came to X-B and asked the students to write an essay in type of recount text by topic “Your first experience when you came to the Anwarul Haromain Boarding School”. After finishing the

test or students' work, the researcher uses scoring rubric to calculate the score of pre-test.

2. Post-Test

Post-test is given after the students get treatment is taught by using peer correction technique in teaching recount text. From the score of this test, the researcher is intended to find out the effectiveness

of using peer correction technique in teaching recount text. The form of post test is essay. The researcher comes to X-A class and asks them to write an essay in type of recount text by topic "Your first experience when you came to the Anwarul Haromain Boarding School". After finishing the test or students' work, the researcher compares students' score pre-test and post-test. The researcher uses Jacobs *et al.*'s version scoring rubric to calculate the score. It can be seen in the appendix.

G. Technique of Data Analysis

Data analysis is used by researcher to analyze the collected data. The data is taken from students' score in pre-test and post-test to investigate the effectiveness of using peer correction technique in writing recount text. The collected data will be analyzed by using paired sample T-test in IBM SPSS Statistic 20.0 and testing the hypothesis.

When the sample size is large or at least 30, the Z test is used. However, z test is inappropriate when the sample z test is less than 30. In

such a case, t test is cancelled for. In relation with this, Bluman (1998:378) states that t test is statistical test for the population mean, and is used when the population is normally distributed or approximately normally distributed, σ is unknown, and $n < 30$.

There are some steps in analyzing data in SPSS 23.0 version. Firstly, the researcher input the data in SPSS statistics to know the frequency of pre-test and post-test score. After that, by using this application the researcher know the mean, median, mode, and standard deviation. After comparing the data, the researcher knows pair sample statistics. Then, the researcher find pair sample correlation from two kinds of test. The researcher analyzes the result of significant one-tailed. After the researcher knows the result of significant one-tailed from SPSS statistics, the researcher can give the number of the result but not the conclusion. To get the conclusion, the researcher does hypothesis testing. Ary et al (2010) states there are some procedures to test the hypothesis:

1. Stating null and alternative hypothesis.
2. Determining a significant level.
3. Selecting a critical value.
4. Selecting the appropriate statistic test.
5. Deciding to reject or not reject the null hypothesis.

From the last steps of hypothesis testing the conclusion can be established whether the use of peer correction technique is effective or not toward students' writing achievement in recount text.