CHAPTER III

RESEARCH METHOD

This chapter describes the method that was employed in this study. The research design, demographic and sample, research instrument, data collection, and data analysis are all covered in this chapter.

A. Research Design

The researcher used a quasi-experimental design for this examination. Several stages carried out by researchers, such as pre-test, treatment, and post-test. A quasi-experimental design is distinguished by the fact that it does not permit control and manipulation of all important variables. In this study, there was two factors that were discussed. The independent variable is the first variable, while the dependent variable is the second. The value of students creating recount text is the dependent variable in this study, with teaching writing utilizing a telegram bot as the independent variable. An experiment or treatment might be described as the independent variable. The dependent variable is concerned with the outcomes of the investigation. First, the researcher conducted a pretest before implementing the experiment in the classroom. The researcher then administered treatment, and once the treatment was completed, the researcher administered a post-treatment test to determine the results. The research design as shown in table below:

Table 3.1 The Research Design

Group	Pre –test	Treatment	Post –test
Experimental	X1	BT	X2

Control	Y1	I	Y2

Note:

X_1 : Pre-test experimental group

Y_1 : Pre-test control Group

BT: Bot Telegram

I: Instagram

X_2 : Post-test of experimental group

Y_2: Post-test of control group

B. Population and Sample

Population according to (Scheaffer et al., 2006) is a group of components that we concluded. Meanwhile (Arikunto, 2006) defines the population as a group of research subjects. Based on the theoretical description above, the conclusion of the population is the subject of a study that was studied by researchers intended to make decisions.

This study's population came from the ten grade of SMAN 4 Kediri. Researchers used samples from two different classes but have the same standard in English subjects. This class selection discussed with the teacher. The two classes that selected. Participants from Class 10 A served as the experimental group, while Class 10 B served as the control group.

C. Research Instrument

Quantitative research employs a variety of research tools. To assess students in the classroom, a tool known as a research instrument is required (Arikunto, 2006). It's utilized to gather both primary and secondary information. The research instrument chosen must be appropriate for the research question.

The researcher used the test as an instrument to determine the value of the students' writing ability. According (Ary et al., 2010) a test is a series of signals given to a person with the goal of producing answers that can be used to calculate a numerical score. This study focuses on the writing ability of recount text. Researchers need data about students' writing skills, so a test is held. In this case, there are two kinds of tests that done by the researcher.

Researchers used two kinds of tests called pre-test and post-test. a) All students in classes 10A and 10B will take a pre-test who served as control and experimental groups at SMAN 4 Kediri. Before beginning treatment, a test administered to measure the students' writing abilities in a recount text. In this pretest, the researcher asked 10A and 10 B students to compose a two-paragraph recount text that comprises orientation, a series of events, and re-orientation. The discussion is about The Proclamation of Indonesia Independence. The teacher will gave students 60 minutes to finish.

b) All students in classes 10 A and 10 B were given a post-test by the researcher who served as control and experimental groups at SMAN 4 Kediri. The goal of this test is to look into the growth of student writing in recount text. In addition, the researchers were utilize this test as a result of the treatment to

establish whether or not it is effective. The researcher were gave instruction to the students, who were asked to write a recount text based on the topic is Bandung Sea of Fire. The time for completing the task is 60 minutes.

The researcher gave an assessment after the test takes place. Five things that are considered by researchers, namely content, organization, vocabulary, language use, mechanics. According to (Weigle, 2002), the complete scoring rubric and instrument test that were used in the study can be seen in appendix.

D. The Procedure of Treatment

Several procedures were carried out by the researcher while doing this investigation. The first step is to administer pre- and post-tests to the experimental and control groups. The experimental group taught how to write recount text using Telegram bot media, while the control group taught to use the Instagram. A brief explanation can be found in the table below:

Table 3.2 Treatment Procedure

Experimental Group	Control Group
Opening	Opening
Greeting	Greeting
- Checking the attendance list	- Checking the attendance list
-Reviewing the previous study	-Reviewing the previous study
-Explaining today's material	-Explaining today's material
The teacher explains the methods and rules of the Telegram bot.	The teacher explains the methods and rules of the Instagram.
The teacher asks the students to search bot @learningrecounttext_bot	The teacher asks the students to search account @recountext2022

Teacher ask the students to analyze social function, leangue features recount text based on bot Telegram	Teacher ask the students to analyze social function, leangue features recount text based on Instagram
- Teacher ask the students to make a *recount text* based on photo bot Telegram	Teacher ask the students to make a *recount text* based on photo Instagram
Teacher ask students to answer some questions based on bot telegram	Teacher ask students to answer some questions based on Instagram
- Closing	- Closing

Furthermore, the researcher provides an explanation of each way of using the two applications in the learning process.

1. Procedure Using Bot Telegram

The first step is to download the Telegram application, which can be done on the Play Store or App Store. After the application is successfully installed on the smartphone, open the Telegram app. Then click on the top that shows a magnifying glass image. Then write the address of the Telegram bot, namely @learningrecounttext_bot. After finding the account, click on it. Click "Start" to start a conversation with this bot. After that, find a box icon on the right side to bring up some of the bot's menus. The menu that appears consists of several learning objectives such as basic competence, knowledge of recount text, quizzes, etc. The teacher can direct students according to the lesson plan. Furthermore, the researcher makes the tutorial clearer in the video at the following link

(https://drive.google.com/drive/folders/1raKdW1I655VyGyZgo5wT6U0u0CS Dy84w?usp=sharing).

2. Procedure Using Instagram

The first step is to download the Instagram app from the Google Play Store or the App Store. After the application is successfully installed on the smartphone, open the Instagram app. Then click on the search section. Then write down the Instagram account address, namely @recounttext2022. After finding the account, click on it. The teacher can point to the bottom of the feed, where there are several feeds that appear consisting of several learning objectives such as basic competence, knowledge of recount text, quizzes, etc. The teacher can direct students based on the lesson plan. Furthermore, the researcher makes the tutorial clearer in the video at the following link *(https://drive.google.com/drive/folders/1raKdW1I655VyGyZgo5wT6U0u0CSDy 84w?usp=sharing).*

E. The Process of Collecting Data

Researchers used tests to collect data. The first researchers asked permission from the principal and teachers at SMAN 4 Kediri before carrying out this activity. The second researchers prepared several things, such as making lesson plans based on the ten grade syllabus of SMAN 4 Kediri. The next stage in performing this research for the researcher to administer a pre-test to both the experimental and control groups. After the data was obtained by the researcher, the next step was to provide treatment to the experimental group via a Telegram bot. The control group, on the other hand, were treated via Instagram. The

researcher done retest or post-test the two groups. The test results obtained

analyzed to determine the comparison of the two groups.

F. The Technique of Analyzing Data

Ardhana in (Moleong, 2002), defines data analysis as the process of

structuring data sequences and arranging them into patterns, classifications, and

basic units of description. Analyst data can be used to determine whether the

teaching process can be said to be successful or not. The data from the pre-test

and post-test will be analyzed using ANCOVA (Analysis of Covariance).

This ANCOVA technique was chosen based on the sample that examined, which

was not chosen at random. Furthermore, the researcher used SPSS (Statistical

Package for the Social Sciences) to analyze ANCOVA. The interpretation of the

data carried out by the researcher is based on the significant value provided that

H0 is acceptable if the p value (sig) > (5% or 0.05) then H1 is rejected.