

CHAPTER III
RESEARCH METHOD

This chapter discusses about the steps of researcher in conducting research method. The method consists of research design, research variable, population and sample, research instrument, data collection, and data analysis.

A. Research Design

This study uses quasi-experimental as a research design. There are some research designs that can be used in experimental research such as true experimental, pre-experimental, and quasi-experimental (Prasetyo, 2008). Quasi-experimental design is a type of research where subjects are not randomly assigned to an experimental group and a control group (Nunan, 1992). A quasi-experiment is an experimental situation in which researchers assign participants to groups, but it is not random because researcher cannot create the groups for the experiment (Creswell, 2008). From those definitions can be concluded that quasi-experimental is one type of research designs where the subject cannot be randomly assigned.

This study uses quasi-experimental because the subject cannot be assigned randomly into the groups. This study examines two groups which one group is treated by using Graphic Organizer strategy as experimental group, and one another group is treated using skimming strategy as control group. It can be seen in the table 3.1.

Tabel 3.1
Research Design

Group	Pre-Test	Treatment	Post-Test
Experimental Class	X1	Graphic Organizer Strategy	X2
Control Class	Y1	Skimming Strategy	Y2

Note:

X1 : Pre-test of experimental group

X2 : Post-test of experimental group

Y1 : Pre-test of control group

Y2 : Post-test of control group

B. Research Variables

For experimental research designs, research variables are needed. Variables are entities that can produce multiple values. Variables can be broken down in various ways (Ary, 1985). The focus of the research is the variables of this research. In this research, there are two variables:

a. Independent Variable (X)

Variables that can function independently without depending on other variables are called independent variables. The independent variable of this research is graphic organizer strategy.

b. Dependent Variable (Y)

Variables that cannot stand alone without media or research approaches are called dependent variables. The dependent variable in this research is students' reading comprehension in recount text.

C. Population and Sample

Salkind (1994) stated that a population is a group of people who can participate where the author wants to apply the results of his research to the general population. This study will be conducted in MAN 2 Kediri that located on Jl. Pahlawan No.66,

Mliler, Purwoasri, Kediri. The population of this study is the first year or tenth grade's students of MAN 2 Kediri which has 369 students in total that consisted of 11 classes.

Lunsford (1995) stated that sample is only a small part of the population that selected for research. The sample of this study is X-F and X-H students of first year classes which X-F consists of 32 students and X-H consists of 30 students. The sample uses by this study is cluster sampling because the sample chosen here is taught by the same teacher. The researcher divides the sample into two classes, one class as experimental class and one another as control class. X-F class is chosen as experimental class, and X-H class is chosen as control class.

D. Research Instrument

The research instrument of this study is a test. A test is a type of question or exercise designed to measure the abilities, intelligence and abilities of each person in a group (Arikunto, 1997). A test that will be conduct consist of two tests, there are pre-test and post-test. This test is used as research tools to collect data; both are used to assess students' reading comprehension on recount text. Pretest, as stated by Creswell (2002), provides a test of some characteristics of researchers towards students who take part in the experiment before they get the treatment. Meanwhile, a post test is a test to measure on some characteristics that is assessed for participants in an experiment after given the treatment.

- a. Pre-test is done by experimental and control group of X-F and X-H at MAN 2 Kediri. It is conducted for knowing the previous ability in their reading comprehension ability. The items of pre-test are focused on recount text. The text that is delivered in the pre-test is aimed to measure their reading

comprehension. Pre-test consisted of 25 multiple choice questions. The text that is used is recount text. The blueprint of the pre-test is present in table 3.2.

Tabel 3.2
Blueprint of pre-test

Learning Outcomes	Learning Objectives	Indicators of Achievement of Learning Objectives	Item Number of Pre-test
<p>Element : <u>Reading-Viewing</u></p> <p>By the end of Phase E, students read and respond to a variety of texts, such as narratives, descriptions, procedures, expositions, recount and report. They read to learn or to find information. They locate and evaluate specific details and main ideas of a variety of texts. These texts may be in the form print or digital texts, including visual, multimodal or interactive texts. They are developing understanding of main ideas, issues or plot development in a variety of texts. They identify the author's purposes and are developing simple inferential skills to help them understand implied information from the texts.</p>	Students have the ability to read and learn to get new information of the text	Students are able to identify what kind of information they get from the text	8,18,21
	Students have the ability to find and evaluate specific information and the meaning of the text	Students are able to identify the specific and detail information of the text	1,2,6,13,19,20,23
		Students are able to identify the generic structure of the text	3, 4,9,11,24
		Students are able to evaluate the language features of the text	12, 25
	Students have the ability to understand the main idea of the text	Students are able to analyze the main idea	15, 17,22
	Students have the ability to identify the writer's purpose of the text	Students are able to analyze the social function of the text	7,16,25
	Students have the ability to make simple inference and understand the implied meaning of the text	Students are able to make simple inference from difficult words in the text	5,10,14

b. Post-test is also carried out for experimental and control groups. The post-test is carried out after giving all the treatments to carry out the treatment. The post-test topic is the same as those given to the experimental and control groups with the items and topic given to the experimental and control group in pre-test. Post-test is given to see how well the students have understood the subject. The purpose of this test is to compare the outcomes of the two assessments of student knowledge with the material that was previously presented to the students. Post-test consisted of 25 multiple choice questions

that should be answered by students. The blueprint of the post-test is present in table 3.3.

Tabel 3.3
Blueprint of post-test

Learning Outcomes	Learning Objectives	Indicators of Achievement of Learning Objectives	Item Number of Post-test
<p>Element : <u>Reading-Viewing</u></p> <p>By the end of Phase E, students read and respond to a variety of texts, such as narratives, descriptions, procedures, expositions, recount and report. They read to learn or to find information. They locate and evaluate specific details and main ideas of a variety of texts. These texts may be in the form print or digital texts, including visual, multimodal or interactive texts. They are developing understanding of main ideas, issues or plot development in a variety of texts. They identify the author's purposes and are developing simple inferential skills to help them understand implied information from the texts.</p>	Students have the ability to read and learn to get new information of the text	Students are able to identify what kind of information they get from the text	8,18,21
	Students have the ability to find and evaluate specific information and the meaning of the text	Students are able to identify the specific and detail information of the text	1,2,6,13,19,20,23
		Students are able to identify the generic structure of the text	3, 4,9,11,24
		Students are able to evaluate the language features of the text	12, 25
	Students have the ability to understand the main idea of the text	Students are able to analyze the main idea	15, 17,22
	Students have the ability to identify the writer purpose of the text	Students are able to analyze the social function of the text	7,16,25
	Students have the ability to make simple inference and understand the implied meaning of the text	Students are able to make simple inference from difficult words in the text	5,10,14

E. Treatment Procedure

In this study, there is a treatment procedure used to assist students' reading comprehension in recount text. The graphic organizer strategy is applied to the experimental group and skimming strategy is applied to the control group. The flow of learning activities between the experimental group and the control group will be different. It can be seen in the table below:

Tabel 3.4
The Activities during Treatment

Treatment		
Genre Based Approach	Experimental Group	Control Group
	Graphic Organizer Strategy	Skimming Strategy
BkoF (Building Knowledge of Field)	<ul style="list-style-type: none"> - Students will be given reading materials provided by school. - Students will be shown the picture about topic that will be discussed in the class. - Students will be asked to guess what topic they will discuss from the picture given. - Teacher will explain about the topic, and the learning objectives. It is aimed to build students' prior knowledge before they will get the detail explanation about the topic. - Teacher will ask the students and give insight about graphic organizer strategy in general. 	<ul style="list-style-type: none"> - Students will be given reading materials provided by school. - Students will be shown the picture about topic that will be discussed in the class. - Students will be asked to guess what topic they will discuss from the picture given. - Teacher will explain about the topic, and the learning objectives. It is aimed to build students' prior knowledge before they will get the detail explanation about the topic. - Teacher will ask the students and give insight about skimming strategy.
MoT (Modeling of Text)	<ul style="list-style-type: none"> - Teacher will give one example of the text and explain to students about the generic structures, and language features of the text. - Teacher will give students one example of graphic organizer about the summary of the text they learn. - Teacher will give one blank graphic organizer that will be used as the trial. - Teacher will show one another text and ask students to guess which the generic structure and the language features of text. - Teacher will continue to give the explanation how to find main idea of text and how to analyze social function of the text, then ask students to guess what is main idea and social function of the text given by using graphic organizer. - Students will be asked to fill the blank graphic organizer by following teacher's instruction. 	<ul style="list-style-type: none"> - Teacher will give one example of text and explain to students about the generic structures, and language features of the text. - Teacher will explain to students how to skim the text to identify the generic structure, and language features of the text. - Teacher will show one another text and ask students to guess which the generic structure and the language features of text. - Teacher will continue to give the explanation how to find main idea of text and how to analyze social function of the text, then ask students to guess what is main idea and social function of the text given by skimming the text. - Students will be asked to write the summary of what they have just skimmed in their own book.

<p>JcoT (Join Construction of Text)</p>	<ul style="list-style-type: none"> - Students will be divided into some groups. - All groups will be given one text and blank paper to make graphic organizer. - Students will be asked to answer the questions by doing discussion with friends in the groups, then write the result in their own graphic organizers. - Teacher will randomly choose one student in each group to stand and present their work by using their own graphic organizers. - Teacher will give the opportunity to other groups to give respond if they disagree with other groups' explanation. - If the groups have presented their work, teacher will give the feedback to strengthen students' understanding. 	<ul style="list-style-type: none"> - Students will be divided into some groups. - All groups will be given one text. - Students will be asked to skim the text and try to find generic structure, language features, and the main idea of the text to get the point what the text talk about (read the text during 7 minutes). - Students in the group will be asked to make a short summary what text talk about, and analyze the generic structure, also the main idea of the text. - Teacher will randomly choose one student in each group to present their work of skimming. - Teacher will give the opportunity to other groups to give respond if they disagree with other groups' explanation. - If the groups have presented their work, teacher will give the feedback to strengthen students' understanding.
<p>IoT (Independent Construction of Text)</p>	<ul style="list-style-type: none"> - Students will be given one text and blank graphic organizer. - Each student should finish the task in the graphic organizer individually. 	<ul style="list-style-type: none"> - Students will be given the questions that should be finished individually by doing skimming.

**Table 3.5
The Schedule of Treatment**

Activity	Experimental Class	Control Class
Pre-test	18 January 2024	18 January 2024
Treatment	25 January 2024	25 January 2024
Treatment	1 February 2024	1 February 2024
Treatment	15 February 2024	15 February 2024
Treatment	22 February 2024	22 February 2024
Post-test	29 February 2024	29 February 2024

F. Data Collection

The process of data collection involves establishing study boundaries, collecting information through unstructured or semi-structured methods such as observations, interviews, written or visual materials, and creating a protocol for recording the information (Creswell, 2014). The data collection process is used to collect the data needed in this research process. In the process of collecting data, the researcher will use reading comprehension test. This following, there are some steps doing by the researcher.

Firstly, researcher collects the data by conducting the pre-test for the experimental group and the control group. This test aims to assess students' reading comprehension on recount text before they are given the treatment. The pre-test contains 25 multiple choice questions. The pre-test of the experimental and control groups can be seen in Appendix 4.

Secondly, the researcher gives the treatment to the control group and the experimental group after the pre-test done. The experimental group gets treatment using graphic organizer strategy. Meanwhile, the control group gets treatment using skimming strategy. This treatment has aim to see the effect of teaching strategy on reading comprehension between the experimental group which given the treatment by using the graphic organizer strategy and the control group which given skimming strategy.

Thirdly, after getting treatment, the researcher gives a post-test to the experimental and the control group in the end of teaching and learning process. This post-test aims to find out the enhancement of students' reading comprehension on recount text after being given the treatment. The post-test contains 25 multiple

choice questions. The post-test in the experimental and control groups can be seen in Appendix 4.

Then the last process, the result of the pre-test scores is compared with the result of the post-test scores. It aims to find out the progress of students after and before being given treatment. The result of experiment can be seen and concluded after the result of post-test and pre-test compared.

G. Validity and Reliability

Carrying out research tests must be valid and reliable to ensure that the results obtained are accurate and consistent. Validity and reliability serve as measuring tools in research. Validity is a measure that indicates the level of accuracy and legitimacy of an instrument in research. Meanwhile, reliability pertains to the consistency and accuracy of measurement results when the same instrument is repeatedly used on the same subjects under similar conditions. Research results can be considered valid when there are similarities between the data collected and the data that actually occur in the object under study. Meanwhile, research can be considered reliable if there is consistent data at different times (Sugiyono, 2018).

The researcher assesses the validity and reliability of the tests using the software tool known as SPSS and was checked as a valid test by English teacher there before the test is tested. Prior to utilizing the questions in the actual testing process, a set of 50 questions was examined. This set was divided into 25 pre-test questions and 25 post-test questions. It can be seen in table 3.6 below.

Table 3.6
Result of Validity

Pre-test				Post-test			
No.	r table	r count	Description	No.	r table	r count	Description
1	0,361	0,608	Valid	1	0,361	0,492	Valid
2	0,361	0,405	Valid	2	0,361	0,424	Valid
3	0,361	0,614	Valid	3	0,361	0,477	Valid
4	0,361	0,622	Valid	4	0,361	0,277	Invalid
5	0,361	0,462	Valid	5	0,361	0,225	Invalid
6	0,361	0,431	Valid	6	0,361	0,519	Valid
7	0,361	0,363	Valid	7	0,361	0,427	Valid
8	0,361	-0,038	Invalid	8	0,361	0,573	Valid
9	0,361	0,342	Invalid	9	0,361	0,584	Valid
10	0,361	0,562	Valid	10	0,361	0,547	Valid
11	0,361	0,449	Valid	11	0,361	0,459	Valid
12	0,361	0,543	Valid	12	0,361	0,503	Valid
13	0,361	0,431	Valid	13	0,361	-0,037	Invalid
14	0,361	0,582	Valid	14	0,361	0,560	Valid
15	0,361	0,419	Valid	15	0,361	0,242	Valid
16	0,361	0,415	Valid	16	0,361	0,714	Valid
17	0,361	0,366	Valid	17	0,361	0,585	Valid
18	0,361	0,271	Invalid	18	0,361	0,382	Valid
19	0,361	0,494	Valid	19	0,361	0,370	Valid
20	0,361	0,592	Valid	20	0,361	0,420	Invalid
21	0,361	0,585	Valid	21	0,361	0,451	Valid
22	0,361	0,369	Valid	22	0,361	0,497	Valid
23	0,361	0,637	Valid	23	0,361	0,063	Invalid
24	0,361	0,481	Valid	24	0,361	0,450	Valid
25	0,361	0,560	Valid	25	0,361	0,403	Valid

From the table above, it can be seen that there are 22 valid items and 3 invalid items for pre-test, then 20 valid items and 5 invalid items for post-test. Those invalid items are not included in the pre-test and post-test. However, researcher only uses 20 valid items for pre-test and 20 valid items for post-test that used to collect the data.

Test is considered to have a high level of reliability when it can consistently produce stable results or has a high degree of confidence. The reliability testing is utilized to determine the level of test consistency. The research instrument is

considered reliable when the Cronbach's Alpha value > 0.60 (Sugiyono, 2010). The items can be assumed reliable if the Cronbach's Alpha value is higher than 0.60. However, the items cannot be assumed reliable if Cronbach's Alpha value is lower than 0.60. The result of reliability test can be seen in table 3.7 and table 3.8 below.

Table 3.7
Reliability of Pre-test

Reliability Statistics	
Cronbach's Alpha	N of Items
.733	26

Based on the reliability test above, it can be assumed that the pre-test items were reliable because the result of Cronbach's Alpha is 0.733. It means that the Cronbach's Alpha value was higher than 0.60, and it is reliable.

Table 3.8
Reliability of Post-test

Reliability Statistics	
Cronbach's Alpha	N of Items
.723	26

Based on the reliability test above, it can be assumed that the pre-test items were reliable because the result of Cronbach's Alpha is 0.723. It means that the Cronbach's Alpha value was higher than 0.60, and it is reliable.

H. Data Analysis

The researcher uses ANCOVA analysis to test the hypotheses Then, ANCOVA is conducted by using SPSS 21 version. This data analysis aims to find out the differences on students' reading comprehension using graphic organizer strategy and students who are taught by using skimming strategy. Furthermore, the

effectiveness is determined based on the value or significance criteria accepted or rejected are:

1) The value of p (sig) $> \alpha$ (5% or 0.05), H_0 cannot be rejected.

That means, there is no significance difference between students who are taught by using graphic organizer strategy and those who are taught by using skimming strategy in enhancing students' reading comprehension on recount text at tenth grade's students of MAN 2 Kediri.

2) The value of p (sig) $\leq \alpha$ (5% or 0.05), H_0 is rejected.

That means, there is significance difference between students who are taught by using graphic organizer strategy and those who are taught by using skimming strategy in enhancing students' reading comprehension on recount text at tenth grade's students of MAN 2 Kediri.