

## **CHAPTER III**

### **METHODOLOGY**

This chapter contained research information relating to place and time of the study, method and design of the study, population and sample of the study, research instrument, technique of collecting data, technique of analyzing data, and statistical hypotheses.

#### **A. Research Design**

This research is a type of quantitative research with a quasi-experimental design. Data collected in the form of numbers or processed using statistical methods as a response to research questions (Muijs, 2004). In this context, it is used to explore the relationship between two variables, namely the independent variable “influence of reading material selection” and “improvement of students' English reading skills” as the dependent variable. This study also adopted a quasi-experimental research design, which is often used to find a cause-and-effect relationship between two variables. In this situation, a quasi-experimental research design was used to examine the effect of selecting reading materials as the first variable on improving students' English reading skills as the second variable. According to Creswell (2015), a quasi-experiment is an experimental design that is conducted without randomization, but involves assigning participants to groups. This research will use

a pre-test and post-test, as well as an experimental class and a control class. According to Costa (2014) Pre-Test/Post-Test is one of the three highly recommended assessment tools to use, as it is a simple and efficient direct evaluation method that can help improve student learning outcomes.

## **B. Place of Research**

The research will be conducted at SMKN 2 Kota Kediri which is located at Jln. Veteran No.5 Kota Kediri. The researcher chose SMKN 2 Kota Kediri as the research location because the purpose of this research is to improve students' English reading skills at the school. By conducting research at SMKN 2 Kota Kediri, this research can contribute directly to local needs in improving students' English language skills at the school.

## **C. Population and Sample**

The population of this study was the XI grade students of SMK Negeri 2 Kediri City in the academic year 2023/2024. The research sample consisted of two classes, namely XI AK 4 and XI PHT 2 classes at SMK Negeri 2 Kota Kediri. Class XI AK 4 was selected as the experimental group that received the reading material selection treatment, while class XI PHT 2 received the standard reading material from the school. The technique in deciding the sample was purposive sampling. Purposive sampling allows the researcher takes the sample by using their judgment to choose the appropriate sample for collecting the data that needed and usually based on the

prior information (Fraenkel, 2002). The reason for using Purposive Sampling technique is because not all samples have criteria that match the phenomenon under study. Therefore, the writer chose the Purposive Sampling technique which sets certain considerations or criteria that must be met by the samples used in this study.

#### **D. Technique of Collecting Data**

This research uses quantitative methods, the writer also collects quantitative data which is divided into several steps there are:

In the first step of this study, the researcher will conduct a pre-test to measure the students' English reading skills before they are given a specific treatment or intervention. The purpose of this pre-test is to evaluate the initial difference between the two groups that will be compared in this study, namely the experimental group (who will receive the treatment or intervention) and the control group (who will not receive the treatment or intervention).

After the pre-test is conducted and the initial differences between the two groups are evaluated, the next step is to divide the students into the two groups based on their pre-test results. The experimental group will consist of students who will receive the planned treatment or intervention, while the control group will consist of students who will not receive the treatment. This division is done with the aim that the research can compare the impact of the treatment on English reading skills between the two groups in an objective and measurable manner. Thus, the researcher can identify whether the treatment given has a significant effect on the students' reading skills compared to the control group who did not receive the treatment.

After completing the pre-test the next step is treatment, researchers gave treatment to the experimental group and the control group. The treatment given is as follows:

<b>Experimental Group</b>	<b>Control Group</b>
The experimental group will receive treatment which consists of selecting reading materials that are suitable for the students' English reading level.	The control group will receive treatment in the form of using reading materials that already exist in the curriculum at school.
The reading material chosen is adjusted to the criteria of good reading material, namely learning objectives, difficulty level, readability, relevance to context and diversity.	These reading materials will be chosen randomly and have a level of difficulty that matches the level of students' English reading skill.
The experimental group will receive treatment in the form of group discussion sessions that emphasize students' understanding of the reading material.	The control group will also be treated with a group discussion session that focuses on students' understanding of the reading material.
During the discussion session, students will be encouraged to share	During the discussion session, students will be invited to share their

their views and ask questions about the reading material they have studied.	opinions and ask questions related to the reading material they read.
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The material selected is based on the criteria of good reading material. First is learning objectives, which be based on TP (Tujuan Pembelajaran) in the Merdeka curriculum. The Learning Outcomes for 11<sup>th</sup> grade phase F are that students use English reading skills to explore a variety of texts in a variety of contextual topics, students are able to develop implied inference skills when understanding information, and the ability to evaluate various types of texts in English. Second is the level of difficulty, the level of difficulty for 11<sup>th</sup> grade based on Merdeka Curriculum SK Badan tend to have longer and more complex sentences, similar to CEFR B2 which is the number of words in the reading text consists of 700-1000 words. Third is readability, the CEFR B2 level in terms of vocabulary is related to the level of language proficiency. B2 shows a fairly good level of proficiency in vocabulary acquisition and understanding of common phrases, such as being able to recognize and use some idioms and expressions used in various contexts, more nouns, verbs, adjectives, and adverbs that are more varied and specific, and the ability to use synonyms and antonyms. Fourth is relevance to context, that is, the reading materials selected in this research are reading materials that contain cultural elements and are relevant to students' interests. Reading materials that are relevant

to students are popular reading materials inspired by movies and novels. Fifth is diversity. The diversity of genres in the selected reading materials includes myths, legends, fantasy and fairy tales.

After finishing giving treatment to the experimental group, the next step in this study was to conduct a post-test on the control group. The post-test was conducted to evaluate how much improvement in English reading skills occurred in the control group after not getting the same treatment as the experimental group. The post-test data from the control group will be collected, analyzed, and then compared with the post-test results from the experimental group using relevant statistical methods.

The comparison between the post-test results of the two groups aims to determine whether there is a significant difference in the improvement of English reading skills between the group that received the treatment and the group that did not. The results of the statistical analysis will provide objective information regarding the impact of the treatment given on improving students' English reading skills. The findings will support conclusions regarding the effectiveness of a particular treatment or intervention on English language learning, as well as provide guidance for further educational research and practice in the selection of appropriate and effective reading materials.

## **E. Research Instrument**

In this study, researchers will use tests as the main instrument, which includes pre-test and post-test.

### **1. Pre-test**

Pretest is a test conducted before giving treatment to research participants. Its function is to measure students' English reading skills before the treatment is given. This pretest provides an initial picture of the level of students' reading skills before treatment.

### **2. Post-test**

The post-test is a test conducted after the research participants have received the treatment. After receiving the treatment related to the selection of reading materials, students will be tested again to measure their English reading skills. The purpose of the post-test is to evaluate whether the selection of relevant and interesting reading materials can improve students' reading skills.

### The Blueprint of Pre-Test & Post-Test

Indicator		Number of Item	Total
1. Identify various meanings of the narrative text.	General Information	1,7	2
	Finding Detail Information	3,10,14,16,18,19,24,	8
		25	
2. Understand the meaning, structure, factual information and words in narrative text.	Understand Moral Value and Structure	2,8,21	3
	Factual Information	6,9,13,20,22	5
	Vocabulary	12,23	2
3. Identifying characters in narrative text.	Recognizing Character	4,5,17	3
4. Make inferences based on the information given in the narrative text.	Inference Based on Text	11,15	2
TOTAL			25

By using pre-test and posttest instruments, this study can see the changes that occur in students' reading ability after receiving treatment. Post-test is an evaluation conducted after the research participants have undergone the treatment. After receiving the treatment related to the selection of reading materials, students will be tested again to assess their English reading skills. The purpose is to evaluate whether the selection of relevant and interesting reading materials can improve students' reading skills.

#### **F. Technique of Analysis Data**

##### **ANCOVA**

In this study, data were analyzed using Analysis of Covariance (ANCOVA). Analysis of covariance is a statistical technique used to adjust groups that have been formed based on one or more variables. In essence, analysis of covariance adjusts the scores on the dependent variable to account for initial differences in some other variable, such as baseline measurement scores, IQ, or reading readiness level (Gay, 1987).

Statistically, Analysis of Covariance can be used to normalize groups by accounting for the influence of variables other than the treatment variable. The only analysis model that can equalize the conditions of experimental groups is the Analysis of Covariance technique. The choice of ANCOVA analysis technique is important in this experiment of the influence of reading material selection on improving students' English reading skills. The researcher argues that the covariate

variable pretest (initial measurement) is the students' initial competence that affects the posttest result (final measurement).