# CHAPTER III

# RESEARCH METODOLOGY

In this chapter, the researcher presents the research methods. It focuses on the research design, variables, population, and research samples, research instruments, research procedures, data collection, and data analysis.

## A. Research Design

This research employed a quantitative method with a quasi-experimental approach, which is commonly applied in educational research to examine causal relationships in naturally occurring groups without random assignment. Quantitative research emphasizes objectivity and the use of numerical data to draw conclusions through statistical procedures. As stated by Creswell (2018), *"Quantitative research is a means for testing objective theories by examining the relationship among variables, which can be measured on instruments and analyzed using statistical procedures."* (p.41).

In this study, the researcher implemented a pre-test and post-test design to measure the effectiveness of the Draw Label Caption (DLC) strategy on students' writing performance. Even though quasi-experimental research lacks random assignment of subjects into groups, it offers a practical solution for investigating interventions in actual classroom settings with pre-existing, fully formed groups.

This study examined two variables within the framework of quasi-experimental research design. The Draw Label Caption (DLC) Strategy serves as the independent variable, and students' writing ability serves as the dependent variable. This study used the pre-test and post-test control group pattern with quasi-

experimental research methodology. The research design applied in this study involved two existing classes that were assigned as the experimental and control group. The experimental group received instruction through the DLC strategy, while the control group taught using Teacher Modeling Strategy. This study was conducted to determine whether the DLC strategy could effectively enhance students writing skills in descriptive texts.

**B. Research Variable**

This study involves two variables, namely the independent and dependent variable. The independent variable refers to the factor that is manipulated to observe it is effect, while the dependent variable represents the result of that manipulation. In this context, the independent variable is considered the source of change that affects the dependent variable. In contrast, the dependent variable represents the outcome as a results of the treatment provided through the independent variable. According to Kothari (2004), *"if one variable depends upon or is a consequences of the other variable, it is termed as a dependent variable and the variable that precedes the dependent variable is called an independent variable"*. (p.34).

In this research the independent variable is of the Draw Label Caption (DLC) strategy, which is applied as the teaching technique. The dependent variable is the students' writing ability in descriptive text. The purpose of this study is to examine the effectiveness of the DLC strategy in enhancing students' performance in writing descriptive text.

## C. Population and Sample of the Research

1. Population

According to Creswell (2018), a population is defined as a group of individuals who process distinct characteristic that set them apart from other groups. In this study, the population consist of all grade VII students at MTsN 2 Kanigoro Kediri in the 2025/2026 academics year. This population was chosen because it is relevant to the research objectives to assess the effectiveness of the Draw Label Caption (DLC) strategy in teaching descriptive text writing skills. From all existing VII classes, two classes were selected as the focus of the study to represent the population as a whole.

2. Sample

According to Creswell (2018), a sample refers to a portion of a population selected to represent the whole in the data collection process. In this study the researcher selected two intact classes of seventh-grade students at MTsN 2 Kediri. These groups were chosen based on their comparable characteristics and existing academic placement, as the students were already organized by school policy. Therefore, one class serve as the experimental group taught using Draw Label Caption (DLC) strategy, while the other class is the control class taught with the Teacher Modelling strategy.

This study is divided into experimental and control groups. There are X students who are the object of research as listed in the table below.

**Table 3. 1 Sample of the Research**

| No | Group Class | Class | Total Students |
|---|---|---|---|
| 1. | Experimental Class | VII B | 32 |
| 2. | Control Class | VII C | 34 |
| TOTAL | | | 66 |

## D. Instrument of the Research

The research instrument used in this study is one of the most important aspects of it. In this case, the instrument serves as a means to gather, quantify, and evaluate data relevant to the objectives of the research in a systematic manner. As mentioned by Ary et al (2018), as the validity and reliability of research tools in quantitative studies are essential for producing accurate and relevant results, research tools must be carefully developed. The instrument in this research was in the form of a written test which comprised a pre-test and a post-test. The tests were administered to both the experimental and control groups with the aim of obtaining data on the students' descriptive text writing skills.

1. Pre-test

Pre-test is a test conducted before treatment. Pre-test was administered to experimental and control group to measure students' initial ability in descriptive text. The researcher began the session by greeting and explaining that the test is intended to measure their current writing skills. The students were asked to write a short descriptive paragraph on the topic "Describe your favorite animal". The test was conducted individually within 40 minutes. There are no instructions or explanations about language features. This is to ensure that the test results reflected

the students' original ability.

2. Post-test

The post-test is given after all treatment sessions are completed. This test further evaluated the level of progress that the students had made in their descriptive writing skills. The researcher began the session by explaining the test instructions. The students were asked to write a descriptive paragraph on the topic "Describe your school festival". The test is conducted individually within 40 minutes. In this session, students are expected to apply their understanding of the generic structure and language features such as, adjective, simple present tense, and linking verbs. After collecting the students' results, the researcher analyzed the post-test from both groups. The experimental was taught using Draw Label Caption (DLC) Strategy and the control group was taught using Teacher Modelling Strategy. This is to determine the effectiveness of the treatment given.

In addition, to evaluate students' writing the researcher utilized an analytical scoring rubric adapted from John Anderson, which focuses on five components of writing namely Grammar, Vocabulary, Mechanics, Fluency (style and ease of communication), and Form (organization) (Harris, 1968). The use of an analytical scoring rubric is highly recommended in language assessment to ensure objectivity and reliability in measuring students' writing performance —a principle extensively discussed and supported in the assessment framework by Brown (2004).

**Table 3. 2 Rubrics for Assessing Writing**

| No | Components | Score | Description |
|---|---|---|---|
| 1. | Grammar | 6 | Few (if any) noticeable errors of grammar or word order. |
| | | 5 | Some errors of grammar or word order which do not, however, interfere, with comprehension. |
| | | 4 | Errors of grammar or word order fairly frequent; occasional re-reading necessary for full comprehension. |
| | | 3 | Errors of grammar or word order frequent; efforts of interpretation sometimes required on reader's part. |
| | | 2 | Errors of grammar or word order very frequent; reader often has to rely on own interpretation. |
| | | 1 | Errors of grammar or word order so severe as to make comprehension virtually impossible. |
| 2. | Vocabulary | 6 | Use of vocabulary and idiom rarely (if at all) distinguishable from that of native educated writer |
| | | 5 | Occasionally uses inappropriate terms or relies on circumlocutions; expression of ideas hardly impaired. |
| | | 4 | Uses wrong or inappropriate words fairly frequently; expression of ideas may be limited because of inadequate vocabulary. |
| | | 3 | Limited vocabulary and frequent errors clearly hinder expression of ideas. |
| | | 2 | Vocabulary so limited and so frequently misused that reader must often rely on own interpretation. |
| | | 1 | Vocabulary limitations so extreme as to make comprehension virtually impossible. |
| 3. | Mechanics | 6 | Few (if any) noticeable lapses in punctuation or spelling. |
| | | 5 | Occasional lapses in punctuation or spelling which does not, however, interfere with comprehension. |
| | | 4 | Errors in punctuation or spelling fairly frequent; occasional re-reading necessary for full comprehension. |
| | | 3 | Frequent errors in spelling or punctuation; lead sometimes to obscurity. |

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| | | 2 | Errors in spelling or punctuation so frequent that reader must often rely on own interpretation. |
| | | 1 | Errors in spelling or punctuation so severe as to make comprehension virtually impossible, |
| 4. | Fluency (style and ease of communication) | 6 | Choice of structures and vocabulary consistently appropriate; like educated native writer. |
| | | 5 | Occasionally lack of consistency in choice of structures and vocabulary which does not, however, impair overall case of communication. |
| | | 4 | "patchy", with some structures or vocabulary items noticeably inappropriate to general style. |
| | | 3 | Structures or vocabulary items sometimes not only inappropriate but also misused; little sense of ease of communication. |
| | | 2 | Communication often impaired by completely inappropriate or misused structures of vocabulary items. |
| | | 1 | A "hotch-potch" of half-learned misused structures and vocabulary items rendering communication almost impossible. |
| | | 6 | Highly organized; clear progression of ideas well linked; like educated native writer. |
| | | 5 | Material well organized; link could occasionally be clearer but communication not impaired. |
| 5. | Organization of Ideas | 6 | Well-organized; clear and logical progression of ideas. |
| | | 5 | Mostly well-organized; minor issues with flow. |
| | | 4 | Some lack of organization; re-reading required for clarification of ideas. |
| | | 3 | Little or no attempt at connectivity, though reader can reduce some organization. |
| | | 2 | Individual ideas may be clear, but very difficult to deduce connection between them. |
| | | 1 | Lack of organization so severe that communication is seriously impaired. |

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| | TOTAL | Grammar + Vocabulary + Mechanics + Fluency + Form = _____x 10 = ____: 3 = _____ |

## E. Treatment Procedures

The treatment procedures for both the experimental and control groups were conducted in three stages, adapted from Harmer (2004). While the experimental class was taught using the Draw Label Caption (DLC) strategy, the control class was taught using the Teacher Modelling strategy. The entire treatment was carried out over four meetings, with the specific procedures detailed as follows:

**Table 3. 3 Treatment Activities**

| Experimental Class | Control Class |
|---|---|
| **Pre-teaching**<br>a. The teacher greets students (asks how they are, checks attendance, and checks students' readiness).<br>b. The teacher invites students to pray together.<br>c. The teacher explains the objective of the lesson.<br>d. The teacher presents a picture related to the descriptive topic | **Pre-teaching**<br>a. The teacher greets students (asks how they are, checks attendance, and checks students' readiness).<br>b. The teacher invites students to pray together.<br>c. The teacher explains the objective of the lesson.<br>d. The teacher presents topic of descriptive text. |

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| e. The students are asked to observe the picture and share their opinions.<br>f. The teacher gives a brief explanation of the lesson steps. | e. The students are asked to recall previous knowledge about the topic.<br>f. The teacher outlines the learning steps. |
| **Whilst-teaching**<br>***Observing***<br>a. The teacher introduces descriptive text through a sample image.<br>b. The teacher explains the purpose, function, and context of descriptive writing.<br>c. The students identify and mention vocabulary related to the picture.<br>***Questioning***<br>a. The teacher asks the students guiding questions about the picture.<br>b. The students ask questions about vocabulary or expressing | **Whilst-teaching**<br>***Observing***<br>a. The teacher explains the definition and the function of descriptive text.<br>b. The teacher provides descriptive text model on the board.<br>c. The teacher explains and discusses common vocabulary used in the descriptive text.<br>***Questioning***<br>a. The teacher lead discussion and invites the students to ask questions based on the model text. |

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| their curiosity related to the picture.<br>***Experimenting***<br>a. The teacher explains about descriptive text more detail starts from tenses, generic structure, and language features.<br>b. The teacher introduces and demonstrates the application of the Draw Label Caption Strategy in writing descriptive text through a simple example on the board.<br>c. The students analyzed the examples provided by the teacher, identifying how to drawing, labelling, and captioning help them organize ideas.<br>d. The teacher gives the topic "Describe your favorite place in the school". After that the | b. The students analyze the structured and language features of the text.<br>***Experimenting***<br>a. The teacher explains about descriptive text more detail starts from tenses, generic structure, and language features.<br>b. The teacher demonstrates example of descriptive paragraphs on the boards while thinking aloud to show how ideas generated, organized, and developed into sentences.<br>c. The teacher highlights important aspects of grammar, vocabulary, and sentence structure during the modelling process.<br>d. The students observe and take notes while teacher models the writing process step by step. |

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| students should draw a sketch about it.<br>e. The students give label for everything that they sketched with appropriate vocabulary related to the object.<br>f. The students write a caption/short sentence based on the label.<br>g. The students can start write descriptive text consist of identification and description.<br>***Communicating***<br>a. The teacher gives feedback to the students.<br>b. The students revise their text based on the feedback. | e. The students practice drafting a short paragraph together following the teachers' model to ensure they understand the writing process.<br>f. The teacher provides topic "Describe your favorite place in the school".<br>g. The students write their own paragraphs by applying the structure and writing logic previously analyzed from the teacher's model.<br>***Communicating***<br>a. The teacher gives feedback to the students.<br>b. The students revise their text based on the feedback. |
| **Post-teaching**<br>a. The teacher and students conclude generic structures, language features, and reflect | **Post-teaching**<br>a. The teacher and students conclude generic structures, language features, and reflect |

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|---|---|
| on the content of the material in today's lesson.<br>b. The students convey the obstacles they faced during today's learning process.<br>c. The teacher gives feedback and encouragement.<br>d. The teacher closes the learning process by inviting students to pray together and the teacher gives greetings. | on the content of the material in today's lesson.<br>b. The students convey the obstacles they faced during today's learning process.<br>c. The teacher gives feedback and encouragement.<br>d. The teacher closes the learning process by inviting students to pray together and the teacher gives greetings. |

**F. Data Collection**

In this study, data were collected through writing test consisting pre-test, treatment, and post-test. The test used to measure the effectiveness of the Draw Label Caption (DLC) Strategy in enhancing students' ability in writing descriptive text.

a. Pre-test

The pre-test is administered to both experimental and control group groups before the treatment begins. The purpose is to assess students' initial ability in writing descriptive text and to serve as baseline data for comparing the results after the intervention. In this session, the researcher explained the test clearly to all students. The students were asked to write descriptive paragraph on the topic

*"Describe your favorite animal"* within time 45 minutes. No specific guidance regarding structure or language features is provided at this stage. The researcher collected all students' work for assessment and documentation.

b. Treatment

The treatment was conducted in 4 weeks of meetings for both classes. The experimental class was taught using Draw Label Caption (DLC) Strategy, while the control class was taught using Teacher Modelling Strategy.

c. Post-test

After completing the treatment, a post-test was administered to both the experimental and control groups. In this session, the researcher explained the test and distributed the sheets. The topic is *"Describe your school festival"*, which differs from the pre-test topic and they were given 45 minutes to finish their writing. The researcher collected all students' work for scored using analytical scoring rubric adapted from Harris (1968), focusing on grammar, vocabulary, mechanics, fluency, and organization. The post-test findings were compared to the pre-test results to determine the improvement in students 'writing abilities in each group. The comparison provided quantitative data to demonstrate how effective of Draw Label Caption (DLC) Strategy compared to Teacher Modelling Strategy.

d. Documentation

Documentation is conducted throughout the research process, including the pre-test, treatment, and post-test sessions. It includes taking photographs of classroom activities, such as students in the experimental group participating in the Draw Label Caption (DLC) Strategy and students in the control group joining the

Teacher Modelling Strategy. This documentation supports the researcher in objectively assessing students' engagement and performance.

**G. Data Analysis**

Data analysis is the final phase of the research procedure, during which the collected data are systematically organized and analyzed to address the research questions and verify the proposed hypotheses. In this study, the researcher employed Analysis of Covariance (ANCOVA) to examine whether there was a statistically significant difference between the post-test scores of the experimental group and the control group while controlling for the influence of pre-test scores.

ANCOVA is an extension of the General Linear Model (GLM) that integrates ANOVA and regression to provide a more accurate comparison by adjusting for the covariate (pre-test scores). The ANCOVA formula can be represented as follows (Field,2018):

$$Y_{ij} = \mu + \tau_i + \beta(X_{ij} - \bar{X}) + \epsilon_{ij}$$

Where:

- $Y_{ij}$ = The dependent variable (post-test scores)
- $\mu$ = The grand mean of the dependent variable
- $\tau_i$ = The effect of the treatment
- $\beta$ = The regression coefficient of the covariate
- $(X_{ij} - \bar{X})$ = The covariate (pre-test scores) adjusted by its mean
- $\epsilon_{ij}$ = The error term

Prior to conducting ANCOVA, the researcher conducted inter-rater

reliability testing to ensure the consistency of scoring between two raters. The reliability test was analyzed using Pearson Product Moment correlation through SPSS version 25. In addition, several tests of prerequisite assumptions test were performed, including the normality test through Kolmogrov – Smirnov, the homogeneity of variance test (Levene's Test), the homogeneity of regression slopes. These tests were conducted to ensure that the data fulfilled the requirements for ANCOVA.

Furthermore, to determine the magnitude of the treatment, the researchers conducted an effect size analysis using Partial Eta Squared, which is derived from the Test of Between-Subject Effects. The interpretation of the effect size follows Cohen's (1988) criteria: 0.01 indicates a small effect, 0.06 indicates a medium effect, 0.14 indicates a large effect

The decision-making criteria for hypothesis testing are based on the significance level α of 0.05 (Field, 2018). The criteria are as follows:

1. If the P Value (sig) > α (0.05), it means H0 is accepted and Ha is rejected.
2. P Value (sig) < α (0.05), it means H0 is rejected and Ha is accepted.