

CHAPTER III

RESEARCH METHODOLOGY

3.1 Place and Time of Research

This research has been carried out in MAN 1 Deli Serdang, located at Jl. Limau Manis No.Pasar 15, Medan Sinembah, Kec. Tj. Morawa, Kabupaten Deli Serdang. This research was conducted from May 14 to May 28, 2024. The reason the researcher chose this location was that the researcher found a problem that matches the topic of this research about the problem in writing narrative text.

3.2 Population and Sample of Research

The population of this research is all of the 11th-grade students of MAN 1 Deli Serdang In academic 2023/2024. There are six classes of grade 11th in MAN 1 Deli Serdang, they are divided into three majors, XI A MIPA, XI B MIPA, XI C MIPA, XI D IPS, XI E IPS, and XI F Agama. The sample of this research uses random sampling. The sample used in this research consisted of two 11th-grade classes at MAN 1 Deli Serdang: XI A MIPA for the experiment class and XI B MIPA for the control class. There are 26 students in the experiment class and 24 in the control class. A total of 50 students have participated as a sample in this research. A total of 50 students have participated as a sample in this research. For ethics in this research first ask permission to the participants with a consent form. Second, collecting the data without no harm. Third, reporting the real dating and asking for confirmation. A test was used as the instrument in this research.

Table 3 1 Population and Sample

Population	Sample	Percent
250 Students of MAN 1 Deli Serdang In academic 2023/2024	26 Students for Experimental Class	20% Total Students of MAN 1 Deli Serdang In academic 2023/2024
	24 Students for Control Class	

3.3 Method and Design of Research

This research investigation took a quantitative approach using a quasi-experimental approach. According to Maciejewski (2020), quasi-experimental research involves two

groups: treatment and non-treatment. Both groups will get different treatments. The quasi-experimental design used in this study is a one-group pretest-posttest. A one-group pretest-posttest design is an experimental approach in which the same dependent variable is examined in one group of study participants before (pretest) and after (posttest) treatment. The researcher will divide the participants into two classes: experimental and controlled. In the experimental class, the researcher will teach narrative text with a cube story while in the controlled class, the researcher will not use the cube story.

Table 3 2 Research Design

Group	Measurement 1	Treatment	Measurement 1
Control Class	pre-test	Using Conventional technique	Post-test
Experimental Class	pre-test	Using Cube Story Treatment	Post-test

3.4 Instrument of Research

1. Test

A test was employed as the research instrument. The written test in this study consisted of a pre-test and a post-test. The pre-test was designed to assess the student's writing abilities before therapy. Simultaneously, a post-test was administered to determine whether or not the cube story had significant effects on the student's narrative writing abilities.

The researcher also offered the stated scoring for evaluating the student's writing performance. The writing assessing technique used in this study was developed by Sara Cushing Weigle. Which especially evaluated student's writing abilities. Five criteria were utilized to assess the student's narrative writing ability: content, organization, vocabulary, language use, and mechanics. The detailed rubric is shown in Table 3.2.

Table 3.3 Scoring Rubric of Writing

Adopted from Assessing Writing by Sara Cushing Weigle. (2002).

No	Component	Score	Level	Criteria
1	Content	30 – 27	Excellent to very good	Knowledgeable, relevant to the assigned topic, and able to identify the characteristics of narrative.
		26 – 22	Good to average	some knowledge of the subject adequate range. limited development of thesis mostly relevant to the topic, but lacks detail
		21 – 17	Fair to poor	limited knowledge of the subject little substance inadequate development of the topic
		16 – 13	Very poor	does not show knowledge of the subject non-substantive. not pertinent. or not enough to evaluate
2	Organization	20 – 18	Excellent to very good	Fluent expression, ideas clear, well organized, logical sequencing, cohesive, the text is complete with (orientation, complication, and resolution).
		17 – 14	Good to average	Loosely organized but ideas stand out, limited support, logical but incomplete sequencing, the text are complete with

				(orientation, complication, and resolution)
		13 – 10	Fair to poor	Non-fluent ideas confused or disconnected, lack logical sequencing and development.
		9 – 7	Very poor	Does not communicate, no organization, not enough to evaluate.
3	Vocabulary	30 – 24	Excellent to very good	Sophisticated range, effective word, word form mastery, appropriate register, using past tense, there are time conjunction and speech function.
		23 – 18	Good to average	Adequate range, occasional errors of word/idiom form, choice usage but meaning not obscured, using past tense, there are time conjunction and speech function
		17 – 12	Fair to poor	Limited range, frequent errors of word/idiom, choice, usage, meaning confused or obscured.
		11 – 7	Very poor	Essentially translation, little knowledge of English vocabulary, idioms, word form, or not enough to evaluate.

1	Mechanics	5	Excellent to very good	demonstrates mastery of conventions with few errors in spelling, punctuation, capitalization, paragraphing,
		4	Good to average	occasional errors of spelling, punctuation, capitalization, and paragraphing but meaning not obscured
		3	Fair to poor	frequent errors of spelling, punctuation, capitalization, paragraphing poor handwriting meaning confused or obscured
		2	Very poor	no mastery of conventions dominated by errors of spelling, punctuation, capitalization, paragraphing handwriting illegible or not enough to evaluate
4	Language Use	25-22	Excellent to very good	Effective, complex constructions few errors of agreement, tense, number, word order/function, articles, pro-nouns, prepositions
		21-18	Good to average	effective but simple constructions minor problems in complex constructions several errors

				of agreement, tense, number, word order/function, articles, pronouns, prepositions but meaning seldom obscured
		17- 11	Fair to poor	major problems in simple/complex constructions. frequent errors of negation, agreement, tense, number, word order/ function, articles, pronouns, prepositions and/or fragments, run-ons, deletions meaning confused or obscured
		10-5	Very poor	virtually no mastery of sentence construction rules dominated by errors does not communicate OR not enough to evaluate

3.5 Technique of Collecting Data

For collecting data, researchers use written tests as the main method. According to (Auliya et al., 2020), the formula obtained can be shown in Table 3.1 It represents that the experimental class's data will be gathered in the following order: pretest, treatments, and posttest. The control class will then gather data both before and after the treatments. Several techniques for gathering data in research are:

1. Pre-test

The first stage is to deliver a pre-test to both the control and experimental classes before the class activity to determine the students' correctness and complexity

when composing narrative prose. The students compose an English narrative text using one kind of narrative text, a fable.

2. Treatment

The researchers used various approaches to teaching the two classes. The experimental class was presented the Cube story to determine the effect of using that variable. Control is only exposed to the school's standard teaching techniques.

3. post-test

The post-test is the final task. The students are given the post-test following the administration of the treatment. The post-test will be given to both classes. The test given was the same as the test instruction in the pretest, only with the same type of narrative text which is a fable. After the posttest was done, the researcher was given an assessment score on the pretest and posttest. Then, the score of the post-test would be compared with the pre-test before.

a) Procedures of Experimental Class

The researcher mentioned some steps for using cube story in teaching English narrative text in experimental class, such as:

1. first, the researcher explains the narrative text's meaning, purpose, kinds, language features, and generic structure.
2. second, the researcher explains about kinds of narrative text, in this research will use fable. so, the researcher will explain the meaning of the fable.
3. Third, at this step the researcher will focus on the language features used in writing narrative text, one of which is past tense. So here the researcher will explain the meaning and pattern of past tense sentences.
4. Fourth, this step is an important part of this research. This step will explain the generic structure of narrative text using story cubes.
5. fifth, the researcher will start with part of the generic structure which is an orientation. so, in this step will learn about nouns, nouns explain the characters and places that will be used in this story. next, we learn

about the adverb of time's meaning and example. After learning all this, we will then use the story cube as a tool to present images on each side to create an orientation paragraph. For example, on each side of the cube, there will be a place time, and character setting.

6. sixth, the next part explains the next generic structure in the narrative, namely complication. In this step, we will focus on the problem of the story. So here the researcher will explain the meaning and examples of action verbs. After all, has been understood, the researcher will use story cubes—which have six sides—to represent the various problems that might come up in the narrative and help build a complication paragraph. The first side represents the first problem, which is stealing, and then the second side of the cube represents the second problem, namely killing.
7. The final step is to explain the final part of the generic structure in a narrative, namely the resolution of a story, usually called the ending of the story. In this section, we will also use cube stories as a tool to present solutions to problems that have occurred.

b) Procedures of control class

In this section, several steps will be explained in teaching English narrative text in the control class, namely:

1. first, the researcher will also explain narrative text such as meaning, purpose, kinds, language features, and generic structure.
2. second, the researcher describes several narrative text kinds, just like the experimental control class, the class will also use fables and will explain what fables are.
3. Third, the researcher will also concentrate on the language features such as the past tense—that are employed while composing narrative texts.
4. Fourth, the same as the experimental class, the control class will also focus on the generic structure of narrative text
5. Fifth, the researcher will also begin with an orientation, which is a component of the general structure. so, you are going to explore nouns and adverbs of time. and there is a difference, namely that the control

class will not use story cubes to represent a place, time, and characters used in the story

6. Sixth, the section that follows describes the narrative's next general structure, which is a complication. In this section, we will concentrate on the story's problem. and also learn about action verbs same as the experimental class and don't use cubes story.
7. The last, explain the last component of the generic structure, which is the story's resolution, also known as the story's finale.

3.6 Technique of Data Analysis

1. Preliminary Analysis

After obtaining data from the study, the initial step is for preliminary analysis. It was useful to determine if the data was qualified. In that stage, the normality and homogeneity tests were run to see whether the data was normally distributed and homogeneous.

a. The Normality Test

The normality test occurred when calculating the test. According to Eko(2009), The normality distribution test is used to determine if our data follows a normal distribution or not. The analytical normality test in this study is performed by Kolmogorov Smimov using SPSS software. If the normality score reaches 0.05, the data distribution may be considered normal. A normality test score below 0.05 shows that the data distribution is not normal.

b. The homogeneity Test

The homogeneity test examines whether the experimental and control groups are homogeneous. This test is intended to measure the similarity between the experimental and control classes. If the significance level of the test exceeds 0.05, the data is considered homogeneous. This study use SPSS software.

2. Data Analysis

a. Hypothesis Test

The hypothesis is assessed after the normality and homogeneity tests are finished and it is established that the data is homogeneous and distributed normally. For comparing the experimental and control class scores, a t-test was used to test the hypothesis.

- 1) Mean score of the experimental group

$$M_x = \frac{\sum x}{N}$$

Description:

M_x : Mean score of the experimental group

$\sum x$: Total score of the students in the experimental group

N: Total students in the experimental group.

- 2) Mean score for the control group

$$M_y = \frac{\sum y}{N}$$

Description:

M_y : Mean score of the experimental group

$\sum y$: Total score of the students in the experimental group

N: Total students in the experimental group.

- 3) Determining the standard deviation of the experimental group

$$SD_x = \frac{\sqrt{\sum x^2}}{N}$$

- 4) Determining the standard deviation of the control class

$$SD_y = \frac{\sqrt{\sum y^2}}{N}$$

b. Effect Size

The effect size will be used to assess how strong the writing narrative task's effect size was on the cube story. As a result, the researcher used the following formulation of Cohen.

$$d = \frac{(\text{mean for group A} - \text{mean for group B})}{\text{pooled standard deviation}}$$

Pooled standard deviation

$$= \frac{\text{Standar deviation 1} + \text{Standar deviation 2}}{2}$$

Cohen states that the following criteria can be used to assess if the effect size is strong or weak:

Table 3 4 Cohen's Criteria of Effect Size

Range	Category
0 – 0.20	Weak effect
0.21 - 0.50	Modest effect
0.51 – 1.00	Moderate effect
> 1.00	Strong effect

3.7 Statistical Hypothesis

Hypotheses are used to learn and discover the research's response, as well as to conclude the research. The following is an analysis of the research hypothesis:

$$H_a = t \text{ value} > t \text{ table}$$

$$H_o = t \text{ value} < t \text{ table}$$

H_a (Alternative Hypothesis): There is a significant effect of using cubes story on students' writing skills in narrative text.

H_o (Null Hypothesis): There is no significant effect of using cubes story on students' writing skills in narrative text.

The criteria were used as follows:

1. If $t \text{ value} > t \text{ table}$, means that the alternative hypothesis (H_a) is accepted and the null hypothesis (H_o) is rejected. It may be inferred that students who are using cubes story as teaching media have a significant effect on their ability to write narrative text
2. If the $t \text{ value} < t \text{ table}$, means that the alternative hypothesis (H_a) is rejected and the null hypothesis (H_o) is accepted. It may be inferred that students who are using cubes story as teaching media have no significant effect on their ability to write narrative text.