

## CHAPTER III

### RESEARCH METHODOLOGY

#### 3.1 Place and Time Research

This research was conducted at the MAS Muallimin UNIVA Medan School in class 10<sup>th</sup>, which is located on Jl. SM. Raja KM 5.5 Medan Amplas, Medan City, Sumatera Utara, and which was implemented in April-May 2023.

The researcher chose conducted research at the MAS Muallimin school, because at that school the students' English writing ability had an average score below the KKM. Problems in writing, namely the use of vocabulary, which is still relatively small, language structures that are not in accordance with English, students having difficulty developing ideas, students not understanding and the use of grammar when writing a paragraph, and there are still wrong spelling and punctuation in sentences that they use. The researcher also found that the method used by the English teacher still used the conventional method, and students rarely participated during the lesson.

Therefore, the researcher is interested in conducting research at this school by applying a method that has never been used before at this school, namely the *estafet* writing method. This is a method in which students play an active role by dividing into 4-5 people/group. All students in the group give ideas to each other, and how do they connect their ideas and sentences in an *estafet* manner or sequentially, so that their ideas or sentences are formed into paragraphs.

#### 3.2 Population and Sample

##### 3.2.1 Population

According to Sugiyono (2016), the population is a generalization area consisting of: subjects/objects/that have certain qualities and characteristics set by the researcher to be studied and then conclusions drawn. This means that the population can also be called objects and other natural objects (Sugiyono, 2016). If the school is to be used as a research site, then this is the population. This school has many students/subjects and other objects.

The population in this study is all students of class X MIA MAS Muallimin Medan, which totaled 197 students.

**Table 3.1**

**Population of the research**

<b>Class</b>	<b>Total</b>
X MIA I	18
X MIA II	36
X MIA III	36
X MIA IV	18
X IIS I	18
X IIS II	36
X IIS III	35
<b>Total</b>	<b>197</b>

### 3.2.2 Sample

The sample is part of the characteristics or amount owned by the population. If the population is too large, the researcher can use a portion of the population which is called a sample. Therefore, the sample taken must truly represent the population (Sugiyono, 2016).

The sample used in this study is students of class X MIA IV and X IIS I. So, class X IIS I is a control class that does not receive treatment, whereas class X MIA IV is an experimental class that does receive treatment.

**Table 3.2**  
**Sample of the research**

<b>Class</b>	<b>Number of Students</b>	<b>Male</b>	<b>Female</b>	<b>Group</b>
X MIA IV	18	7	11	Experimental Class
X IIS I	18	13	5	Control Class
Total	36	20	16	

### 3.3 Research Method and Procedure

#### 3.3.1 Research Method

This study uses a quasi-experimental research method. Quasi-experimental is an experiment carried out on the placement of the smallest groups. So, class X MIA I is a control class that does not receive treatment, whereas class X IIS IV is an experimental class that does receive treatment as the experimental and control groups (Hastjarjo, 2019). The experimental group is referred to as the group that is given treatment and which is used as a research unit or research object in order to prove whether the research is successful or not, while the control class is the opposite, not given treatment. So, the results can be seen whether there is a significant difference or not between the experimental class and the control class.

The quasi-experimental method is divided into two, namely time series design and nonequivalent control group design (Sugiyono, 2016). However, this study used a nonequivalent control group design. In which the experimental group is referred to as A while the control group is referred to as B. Both of which were not randomly selected. Then the two groups were both given a pretest and posttest. However, only the experimental group was given treatment, namely group A (Creswell, 2012).

O <sub>1</sub>	X	O <sub>2</sub>
O <sub>3</sub>		O <sub>4</sub>

O<sub>1</sub> = pretest results of the experimental group before being given treatment

O<sub>2</sub> = posttest results of the experimental group after being given treatment

O<sub>3</sub> = pretest results of the control group before being given treatment

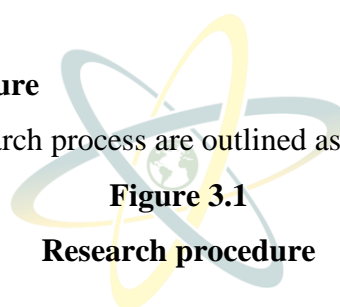
O<sub>4</sub> = the posttest results of the control group were not given treatment (Sugiyono, 2016).

This research uses quasi-experimental research because this research adjusts to existing field events. According to the quasi-experimental definition, it is not permissible to randomize classes with the aim of forming two new classes. So, in this study, the researcher can only choose two classes from the number of existing classes without changing the initial class arrangement.

So, this research method was chosen because the researcher wanted to see a comparison between classes that were given treatment and those that were not, without randomizing the class. This study was divided into namely the experimental class and the control class. How to choose the experimental class and the control class is determined by the lowest average student test scores. Then, got two low classes, so the class is chosen for the experimental class and the control class.

### 3.3.2 Research Procedure

The steps of the research process are outlined as follows:



The following are the research steps, below:

#### 3.3.2.1 Experiment Implementation

1. Pretest, at this stage the researcher gives a test before being given treatment. This test is carried out in order to obtain student learning outcomes or test student abilities. The results of this test will show that writing descriptive text students have low, medium, or high skills. Therefore, the pretest will be conducted to compare before and after the treatment will be carried out in the control class with the conventional method and the experimental class with the *estafet* writing method.
2. Treatment, the researcher gave treatment to the experimental class at this stage. The researcher taught the *estafet* writing method to descriptive text material. At this stage the two classes were used as research samples, both classes were given descriptive text material and the same time allocation, but the difference is the method. The steps will be conducted:

- 1) The researcher explains the descriptive text to students from definition, example, generic structure, language features
  - 2) The researcher explains what and how the learning process uses the *estafet* writing method
  - 3) The researcher gives an example of a descriptive paragraph using the *estafet* writing method
  - 4) The researcher will be divided the students into several groups and gave students worksheets in each group with a topic
  - 5) The researcher will be instructed to do *estafet* writing on descriptive text
  - 6) The researcher instructed the whole group to collect worksheets
  - 7) The researcher and students together correct the results of their work, after which the teacher gives an assessment of the results of their work.
3. Posttest, after being given treatment, the next stage is to test students' abilities again by giving tests after being given treatment, in order to prove whether there are differences in learning outcomes on students' ability to write descriptive texts between the control class and the experimental class.

### 3.4 Research Instrument

#### 3.4.1 Conceptual Definition

The conceptual definition in this study is the *estafet* writing method, writing ability, and descriptive text.

##### 3.4.1.1 *Estafet* Writing Method

The *estafet* writing method is a writing method, students are divided into several groups. Students in the group poured out the sentence in succession (Lahir, 2017). The purpose of using *estafet* writing is to make students enjoy themselves, have fun, and be free to express their imaginative thoughts according to the topic. This makes students play a more active role in the learning process, and the teacher only monitors students, because students stand out more than the subject teacher (Ansoriyah & Rahmat, 2018; Saragih & Rabbani, 2017; Sukiyanto, 2019).

### 3.4.1.2 Writing Ability

Writing ability is regarded as a crucial skill that students must possess for academic objectives as well as a practical life skill (Hidayati & Widiati, 2019; Margana, M., & Maristy, 2020; Swandi & Netto-Shek, 2017). The capacity to express thoughts and ideas through a variety of acceptable and appropriate written languages is known as writing ability. The following traits are also necessary for good writing: (a) the capacity to identify problems that need to be written about; (b) sensitivity to the needs of the reader; (c) the capacity to plan research strategies; (d) the capacity to use Indonesian; (e) the capacity to begin writing; and (f) the capacity to independently evaluate the essays. If supported by reading activities and their extensive vocabulary, this ability will grow (Mariana et al., 2018).

### 3.4.1.3 Descriptive Text

Noprianto (in the book Gerot & Wignel, 1994; Knapp & Watkins, 2005: 67) descriptive text is a writer or speaker can inform readers or listeners about a certain thing, person, animal, place, or event (Noprianto, 2017; Yuliana et al., 2016). In the contents of the text, there is identification, namely introducing a person, animal, or object. If he describes someone, it can be started by explaining what his name is, his favorite food and drink, and who they really are, such as their identity. Then go to the next paragraph, namely, describing. At this stage, the author can immediately explain how something looks physically, how beautiful a person is, and so on.

### 3.4.2 Operational Definition

To measure students' writing ability, there are several aspects that can be seen, namely, content, organization, mechanics, grammar, and vocabulary.

**Table 3.3**  
**Writing Skill Assessment**

Aspect of Writing	Score	Category	Description
	30-27	Excellent	Have extensive knowledge of subjects,
		to very	

<b>Content</b>		good	topic development, and have content that is appropriate to the topic.
	26-22	Good to average	Has some knowledge in the subject, limited idea development, and content that is appropriate to the topic but less specific.
	21-17	Fair to poor	Limited knowledge, not enough idea developers.
	16-13	Very poor	Does not use knowledge from the subject in the contents of the paragraph, has content that is not in accordance with the topic.
<b>Organization</b>	20-18	Excellent to very good	fluent in expressing ideas in a structured manner and in accordance with the topic.
	17-14	Good to average	It is less structured, but the main idea can be expressed well.
	13-10	Fair to poor	Not fluent in expressing ideas, confused, and main ideas are not developed.
	9-7	Very poor	Not organized, not fluent at all in writing, and not enough to be assessed.
	20-18	Excellent to very	Use of appropriate words/idioms and

<b>Vocabulary</b>		good	mastery of word forms.
	17-14	Good to average	There are some wrong words/idioms, the meaning is not covered.
	13-10	Fair to poor	There are frequent word/idiom errors, the meaning of which is confusing and unclear.
	9-7	Very poor	General translation, little knowledge of vocabulary or idioms; not enough to be assessed.
<b>Grammar</b>	25-22	Excellent to very good	There are only a few mistakes in tenses, word functions, articles, pronouns, prepositions.
	21-18	Good to average	Occasionally there are some errors of agreement, negation, word function, tense, pronouns, prepositions.
	17-11	Fair to poor	Frequently there are errors of agreement, negation, word function, tense, pronouns, and prepositions.
	10-5	Very poor	There is no mastery in writing a sentence, errors are more dominant, and not enough to be assessed.



<b>Mechanics</b>	5	Excellent to very good	Several errors of punctuation, spelling, and capitalization.
	4	Good to average	Occasionally there are errors of punctuation, spelling, and capitalization.
	3	Fair to poor	Errors of punctuation, spelling, and capitalization often occur.
	2	Very poor	Not having mastery of language rules, dominant errors of punctuation, spelling, capitalization, not enough to be graded.

Writing Skills Assessment Rubric by (Jacobs et al, 1981)

Then there are five classifications of student assessment, as follows:

No	Score	Classification
1	90-100	Excellent
2	80-89	Very good
3	70-79	Good
4	60-69	Fairly good
5	50-0	Poor

(Hasri et al., 2021)

### 3.4.3 Instrument of Grid

As for the instrument grid in this study, the researcher gave a text to the students, in which the text will be instructed to make descriptive text using the *estafet* writing method. In the instrument there is a topic and students using simple present tense and generic structure in descriptive text. Then the aspects that are

assessed from the test are vocabulary, mechanics, organization, content, and grammar.

### 3.5 Data Analysis Technique

Use to analyze data that must be tested for normality and homogeneity tests

#### 3.5.1 Normality Test

In this test, steps are taken to find out whether the data that is owned is normally or not normally distributed. Normal distribution that is symmetrical with the mean and median in the center. The requirement to use the parametric method, if the data obtained produces normally distributed data. If the data is not normally distributed, use non-parametric statistical methods.

Then the basis for decision making with a significance level of 5% (0.05), as follows:

- a. If the value of  $t_{\text{count}} > t_{\text{table}} (0.05)$ , then the data is normally distributed
  - b. If the value of  $t_{\text{count}} < t_{\text{table}} (0.05)$ , then the data is not normally distributed.
- (Sugiyono, 2016).

To test normality data, several methods can be used, namely Kolmogorov-Smirnov or Shapiro-Wilk. This depends on the data requirements you have. In the test with the Kolmogorov-Smirnov method according to (Chakravart, Laha, and Roy, 1967) said this test is commonly used to decide if the sample comes from a population with a specific/certain distribution. This method is used to test the "goodness of fit" which is to compare a series of data in a sample against the normal distribution of a series of values with the same mean and standard deviation and also to see the normal distribution of some data. It is recommended to use this test with samples above 50 ( $20 \leq N \leq 1000$ ). It is said to be normal if the significance value is  $> 0.05$  (Sintia et al., 2022)

Because the Shapiro-Wilk method was disclosed by Samuel Stafford Shapiro and Martin Wilk in 1965. According to (Shapiro & Wilk, 1965) said that this method was born because this method is an alternative statistical procedure to test a complete sample to see its normality (Sintia et al., 2022). The normality test with this method is a test carried out in order to find out the distribution of random data in a small sample. Razali and Wah (2011) said that the Shapiro-Wilk test is

recommended for data samples of less than 50 samples ( $N < 50$ ). Therefore, the data is said to be normal if the significance value is  $> 0.05$  (Razali & Wah, 2011).

Therefore, in this study using the Shapiro-Wilk test because it has a sample of  $< 50$ . so, researchers used SPSS 22.0 to test the normality of the data.

### 3.5.2 Homogeneity Test

Homogeneity test is a step to show that two or more groups of sample data come from populations that have the same variance. t two or more groups of sample data come from populations that have the same variance. Homogeneity test is carried out as a prerequisite in the independent sample t test. Because before carrying out the test, the data must be homogeneous. Meanwhile, to test homogeneous, the data must be normally distributed. So, this test is shown to see the differences that occur in parametric statistical tests such as the t test (Usmadi, 2020). There are several methods that can be used in homogeneous tests, but the researcher chose Levene's test in his research.

The choice of Levene's test is based on a research design that generates data with more than two groups. Then the basis for decision making with a significant level of 5% (0.05), as follows:

- a. If the value  $t_{\text{count}}$  (significant value in Levene Statistics)  $> t_{\text{table}}$  (0.05), then it can be said that the data variation is homogeneous.
- b. If the value  $t_{\text{count}}$  (significant value in Levene Statistics)  $< t_{\text{table}}$  (0.05), then it can be said that the variation in the data is not homogeneous (Nuryadi et al., 2017).

### 3.6 Statistical Hypothesis

To prove the results of the hypothesis, use the t-test with the independent sample t-test. In this test to find out the difference between the averages of two groups that are independent (free) or you can also say the variables are independent or not the same. So, the decision is:

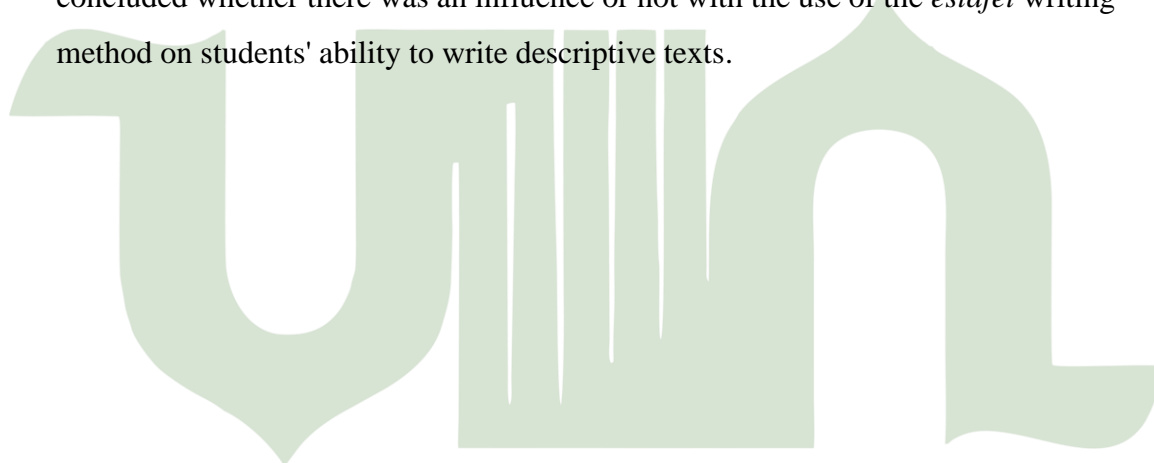
- a.  $H_a$  is accepted if  $t_{\text{hitung}} > t_{\text{table}}$  or if the sig. (2-tailed)  $< 0,05$
- b.  $H_0$  is accepted if  $t_{\text{hitung}} < t_{\text{table}}$  or if the sig. (2-tailed)  $> 0,05$  (Nuryadi et al., 2017).

If reformulated the hypothesis in this study is:

- a.  $H_a$ : there is an effect on students' ability writing descriptive text when taught using *estafet* writing method.
- b.  $H_0$ : there is no effect on students' ability writing descriptive text when taught using *estafet* writing method.

If  $H_a$  is accepted, it means that the students' ability to write descriptive text has increased when using the *estafet* writing method instead of using the conventional method ( $\mu_1 \neq \mu_2$ ). If  $H_0$  is accepted, it means that the students' ability to write descriptive text has no influence or no improvement when using *estafet* writing and it can be said that using *estafet* writing method is the same as using conventional methods ( $\mu_1 = \mu_2$ ).

To find out significant differences, researchers can look at the results of the pretest and posttest when learning descriptive texts by looking at the average posttest in the experimental class and the control class. Afterwards it was concluded whether there was an influence or not with the use of the *estafet* writing method on students' ability to write descriptive texts.



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