

CHAPTER III

RESEARCH METHOD

This chapter elaborates on the methodological framework used to conduct the research. It presents the research design, population and sample, research instruments, data collection procedures, and data analysis techniques applied to evaluate the effect of using Canva on students' writing organization.

A. Research Design

This study will employ a pre-experimental design, specifically a one-group pre-test and post-test design. According to Creswell (2014), this design involves administering a pre-test before the treatment and a post-test after the intervention to measure changes within a single sample group without a control group. In line with this, the present study aims to examine the effect of using Canva as a learning media on the writing organization of eighth-grade students. The sample group will undergo a pre-test to measure their initial writing organization skills, followed by writing instruction using Canva as the treatment, and subsequently a post-test to evaluate the improvement in their writing organization and to determine the effectiveness of the intervention.

B. Population and sample

The population of this study will consist of all eighth-grade students of Islamic Junior High School Padang Panjang, totaling 330 students in the academic year 2026/2027. The students are distributed across six classes: Class VIII A (30 students), VIII B (33 students), VIII C (32 students), VIII D (30 students), VIII E (30 students), and VIII F (33 students).

The sample will be selected using a purposive sampling technique. One class will be chosen as the research sample to receive the writing instruction using Canva as the digital visual medium. This single sample group will undergo both the pre-test prior to the treatment and the post-test following the intervention.

C. Research Instrument

The instrument used in this study will be a writing test designed to measure students' writing organization in composing greeting cards. The test will require students to write a greeting card based on a given situation related to real-life contexts, such as expressing congratulations, wishes, or sympathy. The writing test will be administered in the form of a pre-test and a post-test to the sample group. The pre-test will be conducted to identify students' initial writing organization ability, while the post-test will be conducted to measure students' writing organization after the implementation of the treatment using Canva.

The validity of the instrument in this study will be established through content validity. The writing test and scoring rubric are designed based on the theory of writing organization proposed by experts such as Harmer (2004) and Hyland (2003). The instrument will focus on three aspects of writing organization, namely unity, coherence, and logical sequencing. In addition, the test and scoring rubric will be reviewed by experts in English education to ensure that the instrument appropriately measures students' writing organization in greeting card writing.

The reliability of the instrument will be determined through inter-rater reliability. In this study, the students' writing will be scored by two raters using the same scoring rubric to ensure consistency in the assessment. The first rater will be the researcher, and the second rater will be the English teacher. The scores from both raters will then be analyzed to ensure that the scoring process is reliable. Students' writing will be assessed using an analytic scoring rubric focusing specifically on writing organization, which includes unity, coherence, and logical sequencing, adapted from Harmer (2004) and Hyland (2003). Each aspect will be scored separately to ensure objective and consistent assessment. The same test format and scoring rubric will be applied in both the pre-test and post-test to ensure consistency of measurement

1. BLUE PRINT

Title : Instrument Blueprint writing Test

Variable : Writing Organization

Type of Instrument: Writing Test

Table 3.1 Instrument Blueprint Writing Test

Variables of Organization	Sub-Indicator	Test Task	Aspect Measured	Scoring Technique
Unity	Relevance of ideas to the main topic	Students write a Greeting card based on the give situations.	Focus and relevance of ideas	Analytic Rubric

Coherence	Logical connection between sentences	Students develop the content of greeting card with connected	Flow and connection of ideas	Analytic Rubric
Logical Sequencing	Appropriate text structure	Students arrange greeting card in correctly	Organization of text structures	Analytic Rubric

2. Analitical Rubric for Assessing Students' Writing Organization in Greeting Card Writing adapted by Hyland (2003)

Table 3.2 Analitic Rubric of Writing Organization

Aspect	Score 3 (Excellent)	Score 2 (Fair)	Score 1 (Poor)
Unity	All sentences clearly support one main idea; no irrelevant information.	Some sentences support the main idea, but a few are irrelevant.	Ideas are not focused; many sentence do not support the ides
Cohere nce	Ideas are logically connected; flow is smooth and easy to follow.	Ideas are somewhat connected; flow is sometimes unclear.	Ideas are not connected writing is confusing and difficult understand.

Logical Sequencing	The structure (opening – content – closing) is arranged clearly and appropriately	The structure is mostly correct but has some problems in order.	No clear structure; opening, content, and closing are not properly arranged.
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The calculation of the total score is obtained from:

Unity (1-3)

Coherence (1-3)

Logical sequencing (1-3)

Thus, the maximum score is 9.

The final score is calculated using the formula:

Final score = (total score / 9) x 100

3. ASSESMENT

Table 3.3 Scoring of Writing Test

No	Aspect	Score (1-3)
1.	Unity	
2.	Coherence	
3.	Logical Sequencing	

Procedure of Scoring

- a. Each students writing is assessed based on three aspects: Unity, coherence, and logical sequencing.
- b. Each aspect is scored on a scale of 1 to 3, with the following criteria: 1= poor,

2= fair,

3= excellent

- c. The scores from all three aspects are then summed to obtain the total

score: Minimum score = 3

Maximum score = 9

- d. The final score is calculated using the following formula

Final score = (total score / 9) x 100

- e. The final score represents the students overall performance in writing organization.

4. Technique of Data Collection

The data are collected through the following procedures:

- a. The researcher administers a pre-test to both the experimental and control groups to identify students' initial writing organization ability in greeting card writing.
- b. The researcher conducts the treatment. The experimental group receives instruction through Canva integrated with Project-Based Learning. Students are guided to plan, draft, design, revise, and present greeting card texts using Canva. During the activities, students organize their ideas into the opening, content, and closing sections of the greeting card while focusing on unity, coherence, and logical sequencing. In contrast, the control group receives conventional writing instruction through teacher explanation, textbook-based activities, and paper-based writing tasks without using Canva.

- c. The researcher administers a post-test to both groups to measure students' writing organization after the treatment.
- d. The researcher collects, scores, and tabulates the data for statistical analysis.

5. Types of Treatment

The detailed pedagogical procedures of the treatment using Canva across the teaching stages are presented in Table below:

Table 3.4 Procedure of the Treatment

Stages	Activities and Supported Learning Materials	Time
Pre-Teaching	- Orienting and motivating students to learn by engaging them with modern digital learning tools such as Canva. - Explaining the learning objectives and introducing the individual writing project using Canva.	10'
While-Teaching	1. Building Knowledge and Text Concepts: - Presenting materials (Greeting Card) to achieve the learning goals as stated in the Module. - Discussing the indicators of good and sufficient Greeting Card writing (Generic structure: Opening, Content, and Closing.	65'

	Writing Quality: Unity, Coherence and Logical Sequencing). 2. Individual Product Creation in Canva: - Individually selecting and editing templates in Canva to create an Greeting Card - Designing and writing original content independently by utilizing Canva features (text formatting, layouts, and visual elements). 3. Submission and Individual: Students submit their completed digital greeting cards and briefly share or showcase their products to the class for peer review.	
Post-Teaching	- Providing constructive comments, teacher feedback, and evaluations on students' individual Canva products to ensure better writing results. - Summarizing the lesson and reflecting on the individual learning process.	15'
Total	2 x 45 Minutes (1 Meeting)	90'

D. Technique of Data Analysis

The data obtained from this study will be analyzed using quantitative analysis techniques to determine the effect of using Canva on students' writing organization. The data analysis procedure is carried out through several sequential stages:

1. Standard Deviation Formula:

$$s = \sqrt{\frac{\sum(x - \bar{x})^2}{N-1}}$$

Where:

$\bar{x}$ = mean score

x = individual score

N = number of students

S = standard deviation

2. Prerequisite Tests

Before testing the research hypothesis, prerequisite statistical tests must be performed to determine the appropriate statistical method (parametric or non-parametric). The normality test is conducted to determine whether the distribution of the pre-test and post-test scores in both groups follows a normal distribution. The Shapiro-Wilk test will be used via SPSS because the sample size is 30 students per group.

The formula for the Shapiro – Wilk test is:

$$w = \frac{(\sum a_i x_i)^2}{\sum (x_i - \bar{x})^2}$$

If the significance value (Sig.) is greater than 0.05 (Sig. > 0.05), the data are normally distributed. Conversely, if Sig. < 0.05, the data are not normally distributed.

3. Hypothesis Testing

Hypothesis testing is conducted to examine whether there is a statistically significant effect of using Canva on students' writing organization.

a. Parametric Assumption:

If the pre-test and post-test data satisfy the normality assumption (Sig. > 0.05), an Independent Samples t-Test will be utilized.

b. Non- Parametric Assumption:

Because the pre-test and post-test data violated the assumption of normality ($p < 0.05$), a non-parametric statistical test was employed to test the hypothesis. Specifically, the Wilcoxon Signed-Rank Test was applied via SPSS to determine whether there was a statistically significant difference between the pre-test and post-test scores within the single sample group ($N = 30$).

The decision-making criteria for this test depend on the resulting Asymp. Sig. (2-tailed) value; if the value is lower than 0.05 ($p < 0.05$), the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted, indicating a significant difference in

students' writing organization after being taught using Canva. Conversely, if the Asymp. Sig. (2-tailed) value is higher than 0.05 ($p > 0.05$), the null hypothesis (H_0) is accepted and the alternative hypothesis (H_a) is rejected, which means there is no significant difference in students' writing organization scores before and after the treatment.

c. The hypothesis

H_0 (Null Hypothesis):

There is no significant difference in students' writing organization before and after being taught using Canva.

H_a (Alternative hypothesis):

There is a significant difference in students' writing organization before and after being taught using Canva.

d. Decision Criteria

If Asymp. Sig. (2-tailed) < 0.05 , H_0 is rejected and H_a is accepted. Meanwhile, If Asymp. Sig. (2-tailed) > 0.05 H_0 is accepted and H_a is rejected.

e. Normalized Gain (N-Gain) Score Analysis

To measure the magnitude of improvement in students' writing organization and evaluate the effectiveness of the treatment without being biased by students' initial ability differences, a Normalized Gain (N-Gain) Score Analysis is conducted using Hake's (1998) formula:

$$\text{N-Gain} = \frac{\text{Post-test Score} - \text{Pre-test Score}}{\text{Ideal Score (100)} - \text{Pre-test Score}}$$

The N-Gain results are interpreted based on Hake's classification criteria:

N-Gain Score Range	N-Gain Percentage (%)	Category / Effectiveness
$g > 0.70$	>76%	High / Effective
$0.30 < g < 0.70$	56% - 75%	Medium / Quite Effective
$g < 0.30$	<40%	Low / Ineffective

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PADANG