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**THE EFFECTIVENESS OF CANVA IN IMPROVING SEVENTH  
GRADE STUDENTS' DESCRIPTIVE WRITING:  
A QUASI-EXPERIMENTAL STUDY**

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**ABSTRACT**

*This study addresses a research gap in comparative investigations of visual media for teaching descriptive writing at the junior high school level. While previous studies have largely examined Canva in isolation and focused on higher education, limited attention has been given to its effectiveness compared to other visual platforms and across specific writing components. This quasi-experimental study examines the effects of Canva and Pinterest on seventh-grade students' descriptive writing performance. Forty-four students were selected through purposive sampling and assigned to experimental and control groups. Data were collected through pre- and post-tests assessed by three independent raters using an analytical writing rubric. The findings reveal that students taught using Canva achieved significantly greater improvement than those taught using Pinterest, with a very strong effect size. Canva was particularly effective in supporting idea development and text organization, resulting in higher-quality written products. These results suggest that Canva is a pedagogically effective visual medium for teaching descriptive writing, and its integration through structured writing activities is recommended to enhance students' writing skills.*

Keyword: *Canva, descriptive writing, digital learning tool, writing achievement*

**INTRODUCTION**

Writing is a fundamental skill in English language learning, as it requires learners to organize ideas, select appropriate vocabulary, and apply grammatical structures accurately. In addition to linguistic competence, writing also contributes to the development of critical thinking, creativity, and digital literacy, which are essential skills in 21st-century education (Handayani & Handayani, 2020; Permata, 2022). At the junior high school level, students are expected to master descriptive text writing; however, previous studies indicate that EFL learners frequently experience difficulties in constructing coherent paragraphs, selecting

suitable adjectives, and consistently applying the simple present tense (Toba & Komariah, 2022).

In the junior high school context, classroom observations and teacher interviews revealed that students often struggle to understand generic text structures and linguistic elements. In addition, students demonstrate low learning motivation, which is partly attributed to the use of monotonous instructional media. English teachers commonly rely on textbooks and static visual resources such as Pinterest images. Although Pinterest provides visual support, it offers limited multimodal features that facilitate structured idea organization and systematic thinking. This condition highlights the need for more interactive and multimodal digital learning media to support students' writing development.

Canva, a web-based graphic design platform, offers various features such as customizable templates, icons, color schemes, and visual layouts that enable students to organize and develop written texts more creatively and systematically. The use of Canva can be theoretically explained through several learning perspectives. Mayer's Cognitive Theory of Multimedia Learning (2009) suggests that the integration of text and visuals can reduce cognitive load and enhance information processing. From a sociocultural perspective, Vygotsky's theory emphasizes the role of scaffolding, where tools such as templates and visual models assist learners in planning, organizing, and revising their writing. In addition, Digital Multimodality Theory (Kress, 2010; Jewitt, 2016) posits that meaning-making in digital environments occurs through the combination of multiple semiotic modes, including text, images, color, space, and layout. Compared to static visual media such as Pinterest, Canva provides a more comprehensive multimodal learning environment.

Although previous studies have reported that Canva positively influences students' motivation, creativity, and writing performance (Andryanto et al., 2023; Amanda et al., 2024; Royani, 2024), several research gaps remain. First, comparative studies examining the effectiveness of Canva in relation to other visual platforms, such as Pinterest, are still limited. Second, most existing research has focused on university or senior high school students, while studies involving junior high school learners are relatively scarce. Third, prior studies tend to evaluate writing achievement using overall scores, without analyzing specific writing components such as content, organization, grammar, vocabulary, and mechanics.

To address these gaps, the present study investigates the effectiveness of Canva compared to Pinterest in improving the descriptive writing skills of seventh-grade junior high school students. This study is expected to contribute theoretically by enhancing the

understanding of multimodal learning in EFL writing contexts and practically by providing teachers with empirical evidence to support the selection of effective digital learning media for writing instruction.

## METHOD

### Research Design

This research employed a quasi-experimental design with a non-equivalent control group. According to Creswell (2014) and Sugiyono (2017), quasi-experimental designs are appropriate when random assignment is not possible, yet the researcher intends to examine causal relationships between the treatment and learning outcomes. This design allows comparison of students' writing performance before and after the intervention in both the experimental and control groups. The structure of the design is as follows:

**Table 1: Research Design of the Study**

Groups	Pre-test	Treatment	Post-test
Experiment	Y1	X1 = Canva	Y2
Control	Y1	X2 = Pinterest	Y2

### Population and Sample

The population of this study was all 66 seventh grade students of SMP N 6 Sijunjung in the 2024/2025 academic year. A population is defined as a group of subjects with specific characteristics that form the basis for generalizing research results (Fraenkel, Wallen, and Hyun, 2019). The research sample consisted of 44 students, consisting of class VII.1 as the experimental class and VII.2 as the control class. The sampling technique used purposive sampling, which is the selection of samples based on certain considerations relevant to the research objectives (Etikan, Musa, and Alkassim, 2016). This technique was used because the classes could not be randomly assigned and the class divisions had already been determined by the school.

The two classes were selected based on the English teacher's recommendation that the initial academic abilities of the two classes were relatively equivalent. Equivalence in initial abilities is essential for maintaining internal validity in quasi-experimental designs, allowing differences in outcomes to be attributed to the treatment (Cohen, Manion, and Morrison, 2018). The experimental class was taught using Canva, while the control class was taught using Pinterest. This division allowed researchers to compare the effectiveness of the two

visual media based on multimodal learning theory, which states that integrating text and images can improve students' cognitive process in writing (Mayer, 2009).

### **Instrumentation**

The instrument used in this study was an essay writing test, administered in the form of a pre test and post test to measure students' descriptive text writing skills. The essay test was chosen because it is able to assess students' ability to produce authentic writing according to the competencies being measured (Brown, 2015). According to Weigle (2012), a writing test is the most appropriate instrument for measuring writing performance because it provides a direct picture of students' abilities in developing ideas, organizing text, and applying linguistic elements. During the test, students were asked to write a descriptive text based on a predetermined topic. The text must meet the structure, communicative purpose, and linguistic elements of descriptive text. The test was administered to two classes: an experimental class and a control class, before and after the treatment. In the experimental class, students wrote using Canva, while in the control class, students used Pinterest. Students assessment is conducted using an analytical rubric referring to Brown (2007), which covers five aspects: content (C), organization (O), grammar (G), vocabulary (V), and mechanics (M). Scores are calculated using the formula:

$$Score = \frac{3C + 2O + 2G + 1,5V + 1,5M}{40} \times 100$$

The formula retains Brown's weighting but is adjusted to the school's grading scale (0 – 100). The score classification refers to Brown (2007):

- a. 90 – 100 : Excellent
- b. 70 – 89 : Good
- c. 50 -69 : Fair
- d. 0 – 49 : Poor

### *Validity*

The validity of the instrument was tested through content validity, namely the suitability of the instrument items with the competencies, learning indicators, and linguistics elements of the descriptive text. According to Fulcher (2015), content validity is important to ensure that the instrument measures what it is supposed to measure. The researcher checked the

suitability of the instrument through expert judgment by two supervising lecturers and one seventh grade English teacher. Next, the instrument was tested in a class not involved in the study, and the results were analyzed using Pearson correlation through SPSS 20. The results of the analysis showed that all indicators had a higher r-count value than the r-table, so the instrument was declared valid. A summary of the validity test results is shown in Table 2:

**Table 2: The Validity of Test**

Indicators	r-hitung	r-tabel	Decision
Content	0,870	0,432	Valid
Organization	0,584	0,432	Valid
Grammar	0,808	0,432	Valid
Vocabulary	0,761	0,432	Valid
Mechanics	0,678	0,432	Valid

Based on Table 2, all indicators have r-calculation values that exceed the r-table, so the instrument can be declared valid and suitable for use in research.

### *Reliability*

Reliability in this study was tested in two stages: instrument reliability and assessor reliability, to ensure that the test and assessment process produced consistent and reliable data. Instrument reliability was tested through a pilot test in class VII.3 prior to the main study. This test aimed to ensure that the writing test had adequate internal consistency. According to Ary et al. (2019), a reliable instrument will produce stable data when used under similar conditions. In this study, reliability was analyzed using Cronbach's Alpha as recommended by Larson-Hall (2016) for measurement in language research. The test results showed that all assessment aspects had Alpha values above 0.804, thus the instrument can be declared reliable and suitable for use in research.

Second, this study also tested inter-rater reliability to ensure consistency of scores across raters on student writing. Raters' consistency is crucial in performance based assessments such as writing tests (Hallgren, 2012). Three raters were involved in this process: the researcher, a seventh grade English teacher, and an English lecturer. Reliability analysis was conducted using Cohen's Kappa, which is designed to measure the level of agreement between raters beyond the possibility of chance (McHugh, 2012).

**Table 3: Inter- Rater Reliability Results Using Cohen's Kappa**

Rater Pair	Kappa Value	Interpretation
Rater 1 – Rater 2	1.000	Perfect Agreement
Rater 1- Rater 3	0.072	Slight Agreement
Rater 2 – Rater 3	0.072	Slight Agreement

Based on the results in Table 3, the rater pairs demonstrated varying levels of agreement, ranging from perfect to slight agreement. Nevertheless, all raters used the same rubric and followed a uniform scoring procedure, so the scoring process was considered consistent and adequate to support the accuracy of the research results.

### Techniques of Data Collection

Research data was collected through three main stages, pre test, treatment, and post test. According to McMillan and Schumacher (2014), data collection techniques must follow standardized procedures to ensure the information obtained is valid and can be interpreted accurately. A pre test was administered two days before treatment to measure students' initial abilities and ensure both classes were at comparable levels. Students wrote descriptive texts based on the same topic, and their results were assessed using Brown's (2007) rubric. The treatment was conducted over two weeks, spanning four sessions. Each week consisted of three lesson plans divided into two sessions, depending on the school's timetable. Both classes followed the same learning stages: material review, practice identifying structures and linguistic features, text composition, and presentations with a difference in media. The experimental class used Canva, while the control class used Pinterest, a media commonly used by teachers. The post test was administered one day after the entire treatment was completed. The instructions, timeframe, and format of the assignments were the same as the pre test to maintain measurement consistency. The writing was scored by three independent raters (a researcher, a teacher, and an English lecturer) using the same rubric to maintain objectivity.

The treatment was conducted over two weeks, with a total of four meetings. Each week consisted of three 45 minute credit hours, divided into two meetings based on the school's fixed scheduling system. Both the experimental and control classes followed the same learning sequence. The procedures for each meeting are summarized below:

**Table 4: Experiment Class (Canva)**

Meeting	Focus	Activities	Output
1	Introduction	Introduction to Canva, basic features, and review of descriptive text.	Students understand Canva and text concepts
2	Guided Practice	Identifying structure & language features using exercises.	Completed practice tasks
3	Group Production	Group writing of descriptive text & designing it in Canva, presentation.	Group project (Text + Design)
4	Individual Tasks	Individual descriptive writing & Canva design, submission via	Individual project submitted

**Table 5: Control Class (Pinterest)**

Meeting	Focus	Activities	Output
1	Introduction	Review descriptive text, analysis of images from Pinterest.	Understanding text concept using visuals
2	Guided Practice	Identifying structure & language features using exercises.	Completed practice tasks
3	Group Production	Group writing of descriptive text & simple design using image form Pinterest, presentation.	Group descriptive text
4	Individual Tasks	Individual descriptive writing & Pinterest, submission via WhatsApp (JPG/PNG).	Individual assingment.

### Techniques of Data Analysis

The data analysis techniques in this study were conducted through several stages, namely assumption testing, descriptive analysis, and advanced statistical analysis. First, a normality test was conducted using Shapiro-Wilk because the sample size in each group was less than 50 students. This test was used to determine whether the distribution of pre test and post test scores in both groups was normal. Next, a homogeneity of variance test was conducted using Levene's Test to determine whether the two groups had the same variance. The results of these two tests served as the basis for determining subsequent analysis techniques. Because the data were not normally distributed and the variance of the two groups were not homogeneous, further statistical analysis was conducted using the nonparametric Mann-Whitney U Test, which is suitable for comparing two independent groups with non-normal data distributions. This test was used to analyze the equality of initial abilities through pre test scores and differences in learning outcomes through post test scores after treatment was given.

Descriptive analysis including mean scores and standard deviations, was calculated to provide a general overview of students' writing abilities before and after treatment. Furthermore, student improvement was analyzed using gain scores, the difference between post test and pre test scores for each participant. Because the writing assessment involved more than one rater, this study also conducted an interpreter reliability test using Cohen's Kappa to ensure consistency of assessments. The Kappa values obtained indicated a substantial level of agreement, thus the assessment process can be considered consistent and reliable. Overall, this sequence of analyses ensured that the data were processed and

interpreted appropriately according to the characteristics of the dataset and the research design used.

## FINDINGS AND DISCUSSION

### Findings

#### *Descriptive Statistics of Pre Test and Post Test Scores*

Before conducting inferential analysis, the data were examined descriptively to obtain an initial picture of students' writing abilities in the experimental and control classes. This analysis aimed to show the average, minimum, maximum, and standard deviation values of the pre test and post test results.

**Table 6: Pre Test and Post Test Scores**

Class	Mean	Min	Max	SD
Pre Test Experimental	84.75	63	100	11.15
Post Test Experimental	90.44	80	100	6.27
Pre Test Control	81.03	75	91	5.85
Post Test Control	85.84	49	100	13.05

The table shows that both classes improved from pre test to post test. However, the experimental class had a higher average increase (84.75 to 90.44) than the control class (81.03 to 85.84), indicating a positive effect of Canva use.

#### *Data Analysis*

##### 1. Normality testing

Normality tests were performed using the Kolmogorov-Smirnov and Shapiro-Wilk tests. Because the sample size was less than 50, the primary interpretation was based on the Shapiro-Wilk values. The results showed that most variables had p-values  $< 0.05$ , indicating that the data were not normally distributed. The results of the normality test are presented in the table below:

**Table 7: The Result of Normality Testing**

Class	Shapiro-Wilk Sig	Interpretation
Pre Test Experimental	.085	Not normal
Post Test Eksperimental	.002	Not normal
Pre Test Control	.072	Nearly normal
Post Test Control	.017	Not normal

Based on the Shapiro-Wilk test, three of the four variables had p-values  $< 0.05$ , indicating that the data were not normal. Therefore, the comparative analysis used non-parametric tests.

## 2. Homogeneity Testing

The homogeneity test used to determine the equality of variance between the experimental and control classes.

**Table 8: Homogeneity Test Results**

Test	Sig. (Pre-Test)	Sig. (Post-Test)	Interpretation
Levene's Test	0.001	0.003	Not Homogeneous

A significance value  $< .05$  indicates that the variance of the two groups are not homogeneous. Because the assumptions of normality and homogeneity were not met, the analysis used the Mann-Whitney U

## 3. Hypothesis Testing

Since the data were not normally distributed and not homogeneous, the Mann-Whitney U Test was used to analyze the hypothesis. The result of the test is presented in Table 9:

**Table 9: The Result Mann-Whitney U Test**

Test	U	Z	Sig. (2-tailed)	Interpretation
Mann-Whitney U	9.000	-5.491	0.000	Significant

The Mann-Whitney U Test result showed that the significance value was 0.000, which was lower than 0.05 ( $0.000 < 0.05$ ). Therefore, the null hypothesis ( $H_0$ ) was rejected and the alternative hypothesis ( $H_1$ ) was accepted. It can be concluded that there was a significant difference between the students who were taught using Canva and those taught using Pinterest.

The results of the study showed that using Canva had a positive impact on students' descriptive writing skills. This was evident in the higher average post test scores of the experimental class compared to the control class. Students learning through Canva showed more consistent progress in content, organization, grammar, vocabulary, and mechanics. Statistical analysis using the Mann-Whitney U test also demonstrated that the difference between the two groups was statistically significant ( $p < 0.05$ ). Therefore, Canva can be considered an effective learning tool for improve junior high school students' writing skills, particularly in descriptive texts. These results also demonstrate that digital application based learning designs can provide a more engaging learning experience and advantage students better express their ideas.

## **Discussion**

The results of the study showed that using Canva resulted in greater improvements in descriptive writing skills compared to Pinterest. Theoretically, Canva's effectiveness can be explained through Mayer's Multimedia Learning Theory (2009), which states that the integration of text and visuals can reduce cognitive load because information is presented through two processing channels (verbal and visual) simultaneously. In the context of this study, students who wrote using Canva received visual support such as images, colors, and layouts that helped them organize their ideas in a more structured manner. Furthermore, from the perspective of Vygotsky's sociocultural theory (1978), Canva's templates and features function as scaffolding that facilitates students to plan, organize, and develop their writing gradually to produce more complete descriptive text.

The experimental class's performance improvement can also be seen across five assessment aspects. In terms of content and organization, Canva helped students identify main ideas and systematically organize descriptions through the use of visual elements. In terms of grammar and vocabulary, the more engaging multimodal environment engaged students, enabling them to revise more thoroughly. Meanwhile, in terms of mechanics, Canva's clean interface helped students understand capitalization, punctuation, and paragraph structure. Students in the control class who used Pinterest received visual references but lacked integrated text structuring tools, so their improvement was not as significant as in the experimental class.

The findings of this study align with several previous studies that have confirmed the benefits of digital media in improving student engagement and writing quality (Suryani, 2021; Kusuma, 2022). However, this study makes a novel contribution by comparing two digital platforms with distinct characteristics Canva and Pinterest. Furthermore, this study was conducted on seventh grade junior high school students, an age group rarely studied in the context of using digital design tools for writing. Focusing on the five components of writing also provides a more in depth understanding of which aspects are most facilitated by the use of Canva. The difference between the results of this study and previous studies that used static image is likely due to Canva's interactive features, which allow for direct visual manipulation.

The results of this study provide several pedagogical implications that teachers can apply in writing lessons. Teachers can utilize Canva not only as a design tool, but also as a media for planning and composing writing. For example, in the initial meeting, teachers can

provide descriptive text templates with blank sections for students to fill in (identification, description). In the next stage, teachers can integrate grammar exercises, such as the use of the simple present, directly into the project design. Teachers can also encourage collaborative activities where students work in small groups to create descriptive posters and then present them. For optimal learning, schools need to ensure the availability of devices such as mobile phone or laptops and stable internet access.

Despite the positive results, this study has several limitations. The relatively small sample size and the fact that it was conducted from only one school make the findings difficult to generalize widely. The short duration of the treatment (four sessions) also limits observations of long term development. Furthermore, this study did not use class randomization, and there is the possibility of differences in characteristics between classes or teacher influences that could not be fully controlled for. External factors such as busy school activities also have the potential to affect student focus during learning.

## **CONCLUSION AND SUGGESTION**

Based on the findings of this study, it can be concluded that the use of Canva as a digital learning medium has a significant and positive effect on seventh-grade students' descriptive writing skills, as reflected in the higher post-test scores of the experimental group compared to the control group. This improvement can be explained through Mayer's Multimedia Learning Theory, which emphasizes that the integration of visual and textual elements reduces cognitive load and supports more effective idea organization. From a sociocultural perspective, Canva's built-in templates function as instructional scaffolding that assists students in planning, structuring paragraphs, and developing ideas, particularly for learners who require additional support in the writing process. This study contributes to existing research by directly comparing Canva and Pinterest, demonstrating that interactive platforms requiring active content creation provide greater learning benefits than platforms focused primarily on visual collection. Pedagogically, teachers are encouraged to integrate Canva into writing instruction through structured activities such as idea mapping, paragraph organization, draft development, and guided feedback combined with explicit grammar instruction. Nevertheless, this study is limited by its small sample size, single-school context, short treatment duration, and lack of randomization. Future research should involve larger and more diverse samples, longer interventions, different writing genres, and experimental designs that examine specific Canva features to better understand their impact on students' writing

development. Overall, the findings suggest that Canva can be an effective tool for teaching writing when used in a targeted manner and supported by appropriate pedagogical strategies.

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