

The Effect of Canva-Based Learning Media on Students' Learning Outcomes in Writing Procedural Texts

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ABSTRACT

This study aims to evaluate the effect of using Canva-based learning media on students' learning outcomes in writing procedural texts at the eleventh-grade level. The research employed a quantitative approach with a quasi-experimental design using a nonequivalent control group. The participants consisted of two classes, XI A and XI B, totaling 58 students. Sampling was conducted through a purposive technique to ensure comparable characteristics between the two groups. Data were collected through observation, written tests, and documentation to measure students' mastery of procedural text writing. The findings showed that the average score of the experimental class reached 85.68, while the control class obtained an average of 79.31. The hypothesis test produced a calculated t-value of 4.584, which was higher than the t-table value of 2.003, indicating a significant difference in learning outcomes between the two classes. These results suggest that Canva-based learning media effectively improved students' ability to organize ideas, use appropriate vocabulary, and structure procedural texts coherently. The novelty of this study lies in the integration of Canva not merely as a visual design tool but as an instructional medium that supports writing skill development through creative, technology-enhanced learning experiences aligned with modern classroom needs.

Keywords: Canva Application; Learning Outcomes, Procedural Text

INTRODUCTION

Teaching writing, especially procedural texts, still presents concrete challenges for many high school classrooms. At SMAN 2 Pangkatan, a sizeable proportion of eleventh-grade students struggle to plan steps, select precise verbs, and organize ideas into coherent sequences. Initial diagnostics showed that 20 of 58 students (34.48%) had not yet reached the school's Minimum Mastery Criterion (KKM = 75), indicating gaps in both concept understanding and task performance for procedural text learning. This pattern aligns with classroom observations: delivery remains largely conventional, learning media are not yet well matched to learner characteristics, and student participation is low during drafting and revising

activities. These local problems motivate the present study to test whether a targeted, visually supported medium can make the writing process clearer and more engaging for students, therefore improving outcomes.

Across Indonesia, researchers have argued that technology enhanced resources can help teachers clarify abstract content, sustain attention, and scaffold practice, provided that media are intentionally selected and integrated with objectives, tasks, and assessment. Studies show that poorly chosen or minimally adapted media rarely shift outcomes, while well designed digital materials can support focus, feedback, and retention (Dadi, Redhana, & Juniartina, 2019; Ilmiani et al., 2020; Damayanti, 2020; Setiawan & Kumala, 2020). Within this discussion, Canva stands out as an accessible platform that lets teachers build step by step visuals, templates, and interactive handouts suited to the linguistic and structural demands of procedural texts (Melinda & Saputra, 2021; Rahmatullah & Andi, 2020). The promise is pragmatic: if students can see the structure and language features they must produce, they are more likely to plan better, draft more coherently, and revise with purpose.

Classroom studies report that technology supported materials can raise participation and achievement when aligned with task demands (Bustanil, Asrowi, & Ardianto, 2019; Dadi et al., 2019; Ilmiani et al., 2020). Teacher focused investigations also note ongoing barriers such as limited design skills and uncertainty in media selection, which depress impact unless addressed through simple, ready to use tools (E. Dewi, 2019; NLP Dewi & IW, 2021; Hudayati, Andayani, & Junaidi, 2021). More recent analyses emphasize 21st century skills and the need for media that encourage creativity, clarity, and collaboration in writing tasks (Hidayatullah et al., 2021; Miasari, Pratiwi, & Purwoto, 2022; Ritonga & Halimah, 2023; Pratama et al., 2023; Kurnia & Suparyati, 2023; Prihartini & Sriyanto, 2023). Collectively, these findings suggest that the effectiveness of digital media is not automatic; it hinges on fit: the right tool for the right text type with the right scaffolds at the right time.

Canva meets several of these criteria for procedural writing. First, it enables teachers to model genre structure through clean, repeatable layouts such as Goal, Materials, and Steps, numbered sequences, and icon supported actions which students can duplicate and adapt during drafting. Second, it supports concise visual cues (arrows, timelines, checklists) that mirror the logic of procedures and reduce cognitive load during composition. Third, it offers ready templates for exit tickets, peer review checklists, and rubrics that keep feedback cycles consistent without adding preparation burden. Prior classroom reports describe gains in motivation and clarity when Canva is used to present content and guide practice (Rahmatullah & Andi, 2020; Melinda & Saputra, 2021; Pratama et al., 2023; Rahmayanti & Jaya, 2020). Yet, despite these practical advantages, there remains limited evidence that isolates Canva's effect on writing outcomes, not just engagement or presentation quality, in senior high school Indonesian language classes, particularly for procedural texts. This gap matters for teachers who must decide whether adopting Canva will actually improve KKM results, not only make lessons more colorful.

Local need strengthens that rationale. At SMAN 2 Pangkatan, many students have difficulty transforming topic knowledge into clear, sequential instructions. Media used to date have not consistently highlighted critical genre features such as imperative verbs, temporal connectors, and safety or accuracy notes, nor have they provided stable visual organizers for planning. Evidence from school records shows uneven achievement with only 65.52% of students meeting KKM on procedural text indicators; teachers report time costs in preparing differentiated materials and guiding revision. If a single, low threshold platform can streamline modeling, provide reusable organizers, and support peer feedback cycles, the school could expect more consistent drafting and higher post instruction scores.

Building on prior findings, this study positions Canva as an instructional scaffold rather than a mere design tool. The intervention centers on three moves: (1) modeling the generic structure and language features of procedural texts with Canva templates, (2) guiding students to plan and draft within that template to maintain sequence and clarity, and (3) using Canva based checklists for peer and teacher feedback focused on organization, verb choice, and coherence. The theoretical expectation aligns with research showing that explicit structure, visual signaling, and iterative feedback can improve written performance when media are integrated with tasks (Bustanil et al., 2019; Ilmiani et al., 2020; Hidayatullah et al., 2021; Miasari et al., 2022; Ritonga & Halimah, 2023; Pratama et al., 2023).

This study aims to determine the effect of Canva based learning media on eleventh grade students' learning outcomes in writing procedural texts at SMAN 2 Pangkatan, measured through posttest performance after instruction. Specifically, it tests whether classes taught with Canva mediated modeling and drafting outperform classes taught with conventional media on organization, language use, and overall text quality. For teachers, the results offer a concrete, replicable approach to planning genre based writing lessons with reusable Canva templates, saving preparation time while sharpening focus on genre features. For students, the intervention is expected to make planning more visible, drafting more structured, and revision more targeted, thereby increasing the proportion who meet or exceed KKM. By directly linking a widely available tool to measurable writing gains, the study responds to calls for evidence based, classroom ready strategies in Indonesian language instruction.

LITERATURE REVIEW

Canva-Based Learning Media

Canva is an online design platform that provides a wide range of templates, icons, fonts, and visual tools to help teachers develop creative and technology-supported learning media. The platform allows educators to present material in an interactive and visually appealing format that combines text, images, video, and audio (Monoarfa & Haling, 2021). Previous studies found that Canva supports students' engagement and motivation because its features make learning more attractive and

accessible (Miftahul Jannah et al., 2023; Prihartini & Sriyanto, 2023; Kurnia & Suparyati, 2023). Its user-friendly interface also helps teachers design materials quickly without requiring advanced graphic design skills. Through this feature, Canva facilitates 21st-century learning that emphasizes creativity, collaboration, and digital literacy.

In general, research agrees that Canva improves student motivation, but few studies have analyzed its direct impact on learning outcomes, especially in writing skills. Most existing works focus on visual design and presentation abilities rather than cognitive and linguistic development. This creates a research gap on how Canva-based media can improve students' writing competence, particularly in producing procedural texts that require clarity, sequence, and structure. Thus, this study expands on earlier findings by exploring Canva as not only a design platform but also an instructional scaffold that supports writing organization and comprehension. From a theoretical perspective, the integration of Canva in learning aligns with constructivist and cognitive learning theories. Constructivism emphasizes that students construct knowledge through active participation and interaction with their environment. When students use Canva, they engage in constructing visual representations of knowledge, making abstract concepts more concrete and meaningful (Piaget, 1970; Vygotsky, 1978). From the cognitive theory viewpoint, multimedia elements such as visuals, colors, and symbols in Canva reduce cognitive load and enhance memory retention (Mayer, 2017). This is especially beneficial for language learning, where visuals help students organize and recall procedural steps effectively. Moreover, dual coding theory (Paivio, 1986) explains that combining verbal and visual elements strengthens comprehension, supporting the use of Canva as a medium for teaching procedural texts.

In the context of Indonesian language learning, Canva allows teachers to model the structure of procedural texts goal, materials, and steps through interactive templates and sequential designs. It also supports student practice by providing space to illustrate and label processes creatively, helping them internalize the organization of procedural text. This connection between visual scaffolding and textual production is consistent with findings that well-designed media can enhance students' writing clarity, vocabulary, and idea sequencing (Bustanil et al., 2019; Ilmiani et al., 2020; Rahmayanti & Jaya, 2020). Therefore, Canva can bridge the gap between theoretical understanding and practical application by making abstract writing elements visible, organized, and easier to comprehend. While prior studies have proven Canva's effectiveness in increasing motivation and engagement, limited research has investigated its influence on writing outcomes, especially in procedural text learning. This study addresses that gap by focusing on how Canva-based media can improve students' understanding of structure, sequence, and language use in writing procedural texts. Through this approach, Canva is not only used as a design tool but also as a pedagogical medium that integrates visual, linguistic, and cognitive elements to support more effective and meaningful learning.

METHOD

Design and Sample

This study employed a quantitative approach with a Quasi-Experimental Nonequivalent Control Group Design (Hardani et al., 2020). The purpose was to examine the effect of Canva-based learning media on students' learning outcomes in writing procedural texts. The independent variable was the use of Canva learning media, while the dependent variable was the students' learning outcomes. The study was conducted at SMAN 2 Pangkatan during the 2024/2025 academic year. The sample consisted of 58 students from grade XI, selected using purposive sampling to ensure the two classes had comparable academic abilities. Class XI A served as the experimental class (29 students) and received treatment using Canva-based learning media, while Class XI B served as the control class (29 students) and was taught using conventional PowerPoint materials. Data were collected through observation, written tests, and documentation. The comparison of post-test scores between the two groups was used to determine the effect of the treatment.

Instrument and Procedures

The main research instrument was a writing test designed to assess students' ability to compose procedural texts based on three criteria: content accuracy, structure, and language use. The instrument underwent expert validation by two Indonesian language education lecturers and one senior teacher. The content validity was analyzed using the Aiken's V formula, which produced values above 0.80, indicating that all items were valid. To ensure reliability, a pilot test was conducted on 20 students outside the research sample, and the results were analyzed using Cronbach's Alpha, yielding a reliability coefficient of 0.87, categorized as high.

The experimental treatment was conducted over four meetings. In the experimental class, the teacher integrated Canva throughout the lesson to present, model, and guide the writing process. The learning began with an introduction to procedural texts using Canva slides that displayed colorful layouts of "Goals," "Materials," and "Steps." The teacher demonstrated how to organize ideas visually, select appropriate images, and structure instructions in sequence. Students then worked in small groups to design their own procedural texts using Canva templates. Each group selected a layout, inserted images and texts, arranged the steps, and added short explanations under teacher supervision. The teacher provided continuous feedback on vocabulary choice, grammatical accuracy, and logical order.

In the control class, the same lesson materials were taught using conventional media such as whiteboards and printed texts. Students completed the same procedural text writing tasks but without the visual support of Canva. The purpose was to ensure that any observed improvement in performance was due to the use of Canva-based media rather than differences in content or instruction. At the end of the

intervention, both groups took a post-test to measure their learning outcomes. The test results served as the primary data for statistical analysis.

Data Analysis

The data analysis process consisted of descriptive and inferential statistical analyses. Descriptive analysis was used to calculate the mean, median, mode, and standard deviation of pre-test and post-test scores in both classes to describe students' performance levels. Before hypothesis testing, the data were checked using two prerequisite tests:

1. Normality Test conducted using the Shapiro–Wilk test to ensure that the data were normally distributed ($p > 0.05$).
2. Homogeneity Test conducted using Levene's Test to confirm that the variance between the two groups was equal ($p > 0.05$).

Once both conditions were met, the hypothesis was tested using an Independent Sample t-test with a significance level of $\alpha = 0.05$. This test compared the post-test scores of the experimental and control classes to determine whether the use of Canva-based learning media had a statistically significant effect on students' learning outcomes. The combination of expert validation, reliable testing instruments, and rigorous statistical analysis ensured that the results accurately reflected the impact of Canva on students' achievement in writing procedural texts.

RESULT AND DISCUSSION

This research involved two classes: an experimental class that used Canva-based learning media and a control class that used conventional PowerPoint materials. Both classes consisted of 29 students each. The research measured students' ability to write procedural texts before and after treatment using pre-tests and post-tests.

Table 1. Comparison of Pre-Test and Post-Test Mean Scores

Class	Pre-Test Mean	Post-Test Mean	Improvement
Experimental (Canva)	72.45.00	85.68	+13.23
Control (Conventional)	70.27.00	79.31.00	+9.04

Table 1 shows that both classes experienced an increase in learning outcomes after the learning process. However, the improvement in the experimental class (13.23 points) was greater than in the control class (9.04 points). This indicates that students who learned using Canva-based learning media demonstrated higher progress compared to those who used traditional PowerPoint materials. The increase suggests that Canva helped students understand the structure and content of procedural texts more effectively by allowing them to visualize steps, materials, and outcomes through design features. The data provide initial evidence that the use

of technology-based media promotes better comprehension and performance in writing tasks.

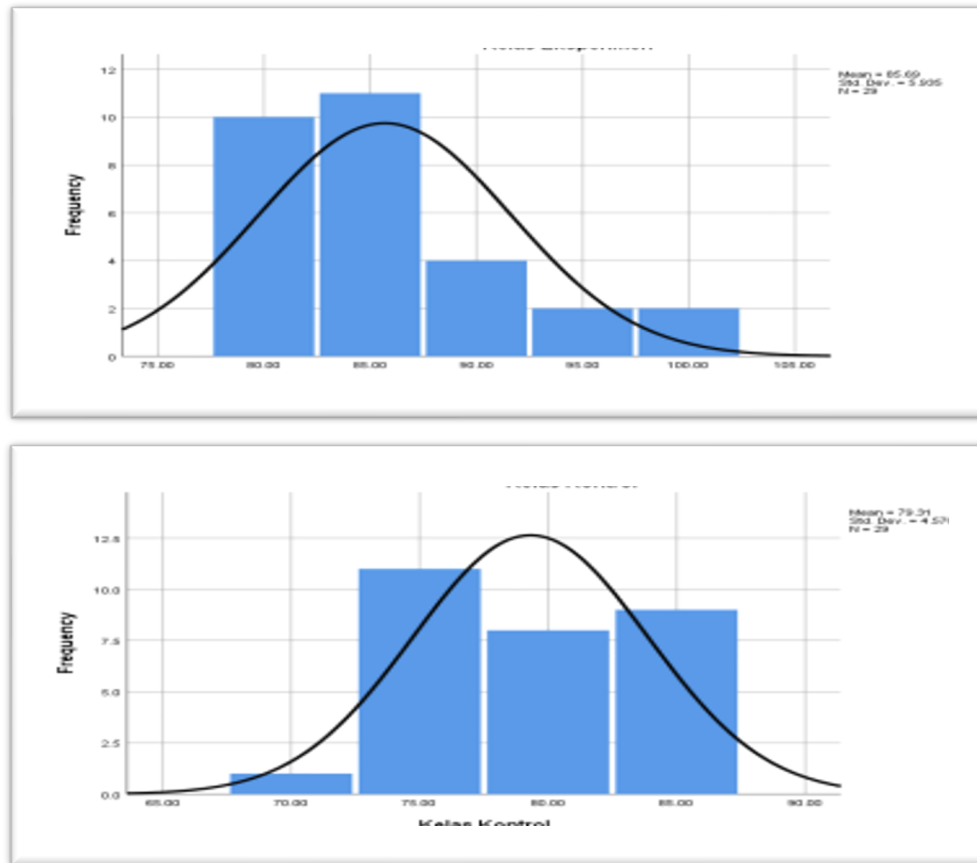


Figure 1. Comparison of Pre-Test and Post-Test Mean Scores

Figure 1 visually highlights the difference between the experimental and control groups. The height of the post-test bar for the Canva class rises sharply compared to the control group, visually demonstrating the larger learning gain. This visualization reinforces that students exposed to Canva-based learning benefited more significantly from the lessons.

Table 2. Descriptive Statistics of Post-Test Results

Class	Mean	Median	Mode	Std.Deviation
Experimental (Canva)	85.68	85	85	4.22
Control (Conventional)	79.31	78	75	4.75

Table 2 shows the descriptive distribution of post-test results. The experimental class had a higher mean score (85.68) than the control class (79.31), indicating better performance overall. The median and mode values are close to the mean, showing that most students achieved similar results, with a narrow spread of scores.

as reflected by the standard deviation (4.22). This consistency suggests that Canva-based instruction benefited nearly all students, not only a few. The lower variability in scores indicates that Canva provided equal learning opportunities, helping weaker students catch up by offering clear visual models and templates for structuring procedural texts.

Table 3. Normality and Homogeneity Tests

Test Type	Experimental Class	Control Class	Criteria	Decision
Normality (Lilliefors)	Sig. = 0.270	Sig. = 0.241	> 0.05	Normal
Homogeneity (Levene's Test)	Sig. = 0.520	—	> 0.05	Homogeneous

The results of the normality and homogeneity tests confirm that both sets of data met the statistical assumptions required for the t-test. The significance values for both classes in the normality test were greater than 0.05, meaning the data were normally distributed. The homogeneity test also returned a significance value above 0.05, indicating equal variance between the groups. This means that any difference in the post-test scores can be confidently attributed to the learning media treatment, not to variability in data distribution.

Table 4. Independent Sample T-Test Results

Variable	t-Value	t-Table ($\alpha=0.05$)	Sig. (2-tailed)	Interpretation
Learning Outcomes	4.584	2.003	0.000	Significant

Table 4 presents the results of the Independent Sample t-test, which compared the post-test scores of the experimental and control groups. The obtained t-value (4.584) is much higher than the t-table value (2.003), and the significance level (0.000) is lower than 0.05. These results confirm a significant difference between the two groups. This means that using Canva-based media significantly improved students' learning outcomes compared to conventional media. The large difference in scores supports the conclusion that Canva enhanced students' understanding of procedural text writing through visualization and structured design.

The findings of this study revealed that the use of Canva-based learning media significantly improved students' ability to write procedural texts. Students in the experimental class achieved higher post-test scores, showed better organization, and displayed clearer sequencing in their writing compared to those who learned through conventional methods. This improvement suggests that Canva provided effective visual scaffolding that helped students understand the structure and logical order of procedural texts. According to Mayer (2017), learning becomes more

meaningful when visual and verbal information are presented together because it allows learners to process and retain information more efficiently. In this study, Canva's combination of text, color, and imagery enabled students to visualize writing components such as goals, materials, and steps, making abstract concepts easier to comprehend and apply.

These results are consistent with the view that learning is most effective when students actively construct their own understanding. Vygotsky's constructivist perspective, as revisited by recent studies in digital pedagogy (Kurnia & Suparyati, 2023), emphasizes that learners build knowledge through interactive and creative activities. Canva provided students with opportunities to engage directly in the writing process by designing their own visual texts, arranging steps, inserting icons, and selecting relevant images. This approach encouraged deeper cognitive engagement and supported independent learning. The findings also echo recent research by Melinda and Saputra (2021), Rahmatullah and Andi (2020), and Pratama et al. (2023), which concluded that Canva improves student motivation, concentration, and participation in classroom activities. However, the present study adds new evidence by showing that Canva not only enhances motivation and engagement but also strengthens the structural and linguistic quality of students' writing.

The improvement in students' writing performance can also be understood through Paivio's dual coding principle, which has been reaffirmed in multimedia learning studies (Miasari, Pratiwi, & Purwoto, 2022). This principle explains that learning is more effective when visual and verbal channels work simultaneously to reinforce meaning. Canva's ready-made templates acted as visual cues that supported students in organizing ideas and remembering text sequences. By using visual representations to plan and edit their writing, students could more easily identify logical errors and improve coherence. Canva's interactive nature also promoted collaboration and immediate feedback. Students discussed, revised, and refined their work together, fostering teamwork and peer learning. This finding aligns with current studies by Ritonga and Halimah (2023) and Rahmayanti and Jaya (2020), which noted that digital media tools improve classroom collaboration and creativity by encouraging learners to interact directly with the content.

The study also revealed several new insights. First, the use of visual design through Canva helped students improve structural accuracy. The layout and step-by-step design supported students in maintaining the correct sequence of procedural instructions. Second, Canva fostered collaboration by allowing students to work together in creating and revising their projects, leading to a more interactive and communicative classroom atmosphere. Third, students reported higher levels of confidence and motivation when using Canva because the platform made learning feel more creative and enjoyable. These findings indicate that Canva functions not only as a design tool but also as an effective pedagogical medium that integrates creativity, literacy, and digital competence in line with current educational trends.

The implications of these findings are significant for both teachers and policymakers. For teachers, Canva offers an accessible and practical resource to design engaging lessons that integrate visual literacy and digital skills. It allows students to learn language in a contextual and creative way while reducing their anxiety toward writing. For schools, the study suggests the need for professional development programs that train teachers to use Canva effectively in classroom settings. At the curriculum level, the results support the goals of Indonesia's Merdeka Curriculum, which promotes innovative, student-centered, and technology-integrated learning. Theoretically, this research reinforces cognitive and constructivist learning perspectives, confirming that technology-enhanced media can help students build knowledge and improve writing competence through visual interaction.

Despite its promising results, the study has several limitations. The sample was limited to two classes from one school, which may not represent the wider student population. Future studies should include more diverse samples across regions to ensure broader applicability. The intervention period was relatively short, consisting of only four instructional meetings, so long-term effects were not measured. Future research could extend the duration to observe whether Canva has lasting impacts on writing fluency and higher-order thinking. Moreover, this study focused solely on procedural texts, while future investigations could explore other text genres such as narrative, exposition, and argumentative writing. Finally, differences in students' access to devices and internet connectivity may have affected participation and outcomes, suggesting the need for equitable digital infrastructure in schools. The study confirms that Canva-based learning media can effectively enhance students' writing performance by combining visual, verbal, and interactive learning experiences. The platform helps students conceptualize text structures, collaborate with peers, and express ideas more creatively. The findings highlight the importance of integrating digital media into classroom instruction to improve literacy and digital competence. Canva has proven to be a valuable tool for teachers seeking to design lessons that are not only educational but also engaging, inclusive, and aligned with the needs of modern learners.

CONCLUSION

The findings of this study confirm that the use of Canva-based learning media effectively enhances students' ability to write procedural texts. Students who learned through Canva showed clearer organization, better sequencing, and stronger creativity in expressing ideas. The success of Canva lies in its ability to combine visual and textual elements, helping students understand writing structures more easily while maintaining their interest and motivation in the learning process. This outcome highlights the importance of integrating technology as a medium that not only delivers content but also stimulates students' active participation and independent learning. The use of Canva in classroom instruction also supports the development of 21st-century learning skills such as collaboration, critical thinking, and digital literacy. Through Canva, students became more engaged in the writing

process, as they could design, revise, and present their procedural texts interactively. The results show that digital tools, when used purposefully, can transform traditional writing instruction into a more meaningful and student-centered experience.

For teachers, this study recommends using Canva as a creative platform to design visually engaging lessons and writing projects. Teachers can employ Canva to demonstrate text structures, guide students in drafting their writing, and provide visual aids that make learning more interactive and accessible. Training programs should also be provided to help teachers integrate Canva effectively into their teaching practices. For future researchers, further studies are encouraged to explore Canva's application in different genres such as narrative or expository writing and to examine its long-term impact on writing fluency and critical thinking. Expanding the research context to include diverse educational levels and regions will also help in understanding how Canva can be adapted across various learning environments. In essence, Canva offers a powerful and practical approach to writing instruction by merging creativity, technology, and pedagogy. Its use encourages students to become active, confident, and digitally literate learners while supporting teachers in creating more engaging and effective classroom experiences.

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