

Infographic-assisted four-square writing strategy in narrative text writing instruction for senior high school students

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ABSTRACT

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This study aims to examine the effectiveness of the infographic-assisted four-square writing strategy in teaching narrative text writing. Research method was a quasi-experimental design using a non-equivalent control group design. From 160 students of X-class at SMA Dirgantara, 64 students were selected as research sample using a purposive sampling technique. Data were collected through writing ability test and observation, then analyzed using normality, homogeneity, N-Gain, and t-tests. From data analysis results, the experimental group demonstrated a significantly greater improvement than the control group, as indicated by an independent-samples t-test on the gain scores ($p < 0.05$) with a large effect size (0.790). Furthermore, the experimental group achieved a higher normalized gain (N-Gain = 59,96), compared with the control group (N-Gain = 38,01). These results show an improvement in writing ability in both the control and experimental classes, but the latter experienced a greater improvement. Hypothesis test shows a significant difference between the two groups. The integration of infographic media with the four-square writing strategy, which offers a structured and visually supported approach to enhance students' narrative writing skills, shows the novelty of this study. The findings contribute to the development of more innovative and visual media-based writing instruction strategies in language classrooms. Consequently, as the practical implication, teachers can integrate this strategy to enhance the quality of the process and students' learning outcomes in writing narrative texts.

1. Introduction

Language learning is a crucial process in developing learners' communication skills. This process covers the integrated mastery of listening, speaking, reading, and writing skills. According to Cummins (2000), language learning aims to develop language competence so that students are able to communicate effectively. In line with that, Jaekel et al. (2022) found that language learning focuses on the development of communicative competence through the use of language in meaningful contexts. Thus, language learning is a process that plays a crucial role in comprehensively developing learners' communication skills. Language learning plays a strategic role in achieving educational goals (Stander, 2022; Zhang & Zou, 2022). Through language learning, students develop the thinking, communication, and collaboration skills needed in life. Research conducted by Su and Zou (2022) also demonstrated that language learning designed to be active and contextual contributes positively to enhancing students' literacy competence and learning outcomes. Therefore, language learning serves as a crucial means of achieving comprehensive educational goals.

Technological developments have brought about significant changes in the delivery of education (Granić, 2022; Singh, 2021). These advancements necessitate the use of technology in

language learning as a means to support the learning process. The use of technology enables the presentation of material that is more engaging, interactive, and suited to the characteristics of the learners (Park & Kwon, 2023; Seery et al., 2023). Thus, the integration of technology into language learning has become a necessity to support the achievement of educational goals in the digital era. Various studies show that the implementation of technology contributes positively to the advancement of education. The results of the study conducted by Yu et al. (2022) indicated that technology can enhance learning effectiveness, learner engagement, and learning outcomes. Another research by Akintayo et al. (2024) revealed that the use of technology-based media can create a more interactive and meaningful learning experience. Therefore, the utilization of technology has become a key factor in supporting the improvement of educational quality. Learning strategies that utilize digital technology have a positive impact on language learning. A research conducted by Liu et al. (2024) found that implementing such strategies enhances learner engagement in the learning process while facilitating the understanding of linguistic material. The results of the research conducted by Lee et al. (2024) also showed that the use of digital technology supports language skill development through learning activities that are more interactive, collaborative, and contextual. Thus, the utilization of digital technology in instructional strategies serves as an effective approach to enhancing the quality of language learning.

Language instruction aims to develop learners' language skills in an integrated manner (Kalsum et al., 2023; Kitila et al., 2023). These skills—comprising listening, speaking, reading, and writing—are interconnected within the communication process. Among the four skills, writing is a productive skill that requires mastery of linguistic aspects, the organization of ideas, and the ability to think systematically (Bora, 2023; Kottacheruvu, 2023). One form of writing skill that learners need to master is writing narrative texts. Narrative writing is a crucial skill for students to acquire. Through writing narratives, students learn to develop ideas, construct logical plotlines, and use language that is coherent and communicative (Chai & Hamid, 2023; Luo et al., 2023). These abilities also foster creative thinking, imagination, and the capacity to express experiences and ideas in writing (Gardner-Neblett, 2023; Li, 2023). Consequently, mastering narrative writing serves as a vital foundation for students in developing their literacy and communication competencies. Narrative text is a type of text that aims to recount a sequence of events in a coherent manner, both to entertain and to convey a message to the reader (Coble, 2013; Toolan, 2016). According to Qatrinada and Apoko (2024), narrative texts are structured using orientation, complication, and resolution, ensuring the story has a clear plot that is easy to understand. In line with that, a research by Neri et al. (2024) indicated that the ability to write narrative texts is positively correlated with the development of students' creative thinking skills, idea organization, and literacy competence. These findings suggest that instruction in narrative writing focuses not only on the written product but also on the development of students' thinking and language skills. Therefore, the views of Anderson and Anderson, along with the findings of previous research, consistently affirm that instruction on narrative texts needs to be systematically designed to foster a balanced development of students' linguistic, cognitive, and literacy skills.

Writing instruction is a complex language skill, as it requires students to integrate critical thinking, linguistic proficiency, and the ability to organize and develop ideas logically (Handayani, 2024). Advances in educational technology have introduced various digital media capable of supporting knowledge construction through the presentation of information that is more visual, interactive, and contextual, thereby facilitating more effective writing skill development (Chen et al., 2024; Granić, 2022). Integrating technology into writing instruction serves not merely as a means of delivering content but also as a pedagogical tool that fosters increased learning motivation, active participation, and higher-quality written work. One strategy that can be applied in teaching narrative writing is the four-square writing strategy, as it helps students organize their ideas before writing. This strategy guides students in systematically arranging story elements, resulting in a more logical and coherent narrative flow. A research by Wei (2024) indicated that the implementation of the four-square writing strategy has a positive effect on improving students' narrative writing skills, particularly regarding the organization of ideas and content development. Therefore, the four-square writing strategy has the potential to serve as an effective instructional alternative for enhancing the quality of students' narrative writing. The four-square writing strategy is a pre-writing technique that employs a graphic layout consisting of four outer squares and a central square to help students systematically develop and organize their writing ideas (Gould & Gould, 1999). When teaching narrative writing, each section of the diagram is used to structure story components—such as

orientation, a sequence of events, the climax, and the resolution—thereby making the narrative flow more structured and coherent (Hasanah et al., 2023). Through this process, students receive clear guidance on developing their ideas into a complete, logical, and easily understandable narrative text.

The use of media in instruction is also crucial, as it assists teachers in conveying knowledge to students. A variety of instructional media can be tailored to meet students' needs and characteristics (Malik & Qureshi, 2024). Visual media, such as infographics, offer another way to capture students' attention and facilitate their understanding of the material being taught. Infographics possess strong visual appeal and present information in a more engaging manner, thereby boosting students' interest in learning (Kara, 2024). Instructional media that are engaging can enhance student motivation and learning outcomes. One of considered effective instructional tools for teaching writing is infographics. They support the development of students' writing skills by presenting information in a visual, concise, and structured manner (Abbazio & Yang, 2022). Presenting information through infographics enables students to grasp concepts, organize ideas, and develop their written content more systematically (Alwadei & Mohsen, 2023). Given these characteristics, infographics contribute to enhancing the quality of the writing instruction process while encouraging students to produce writing that is clearer, more coherent, and more communicative. Infographics serve as a visual learning medium that integrates text, images, icons, colours, and symbols to present information in a concise, engaging, and easily understandable manner (Bhat & Alyahya, 2023). In the context of learning to write narrative texts, infographics help students grasp text structure, story elements, and the relationships between ideas through a systematic, visual presentation of information (Alwadei & Mohsen, 2023; Elaldı & Çifçi, 2021). Furthermore, the use of infographics supports the process of idea development, boosts learning motivation, and enables students to produce more organized narrative texts.

Although various studies have examined the use of digital technology in language learning, most have focused on the use of specific media or teaching methods in isolation. Research on the four-square writing strategy generally emphasizes improving the ability to organize ideas, whereas studies on infographics tend to highlight the visualization of learning materials. To date, research integrating the four-square writing strategy with infographics for teaching narrative text writing remains relatively limited, particularly within the context of language instruction in Indonesia. Therefore, this study aims to address this gap by examining the implementation of the infographic-assisted four-square writing strategy in teaching narrative text writing. The novelty of this study lies in the integration of the four-square writing strategy with infographic media as a unified instructional approach to enhance students' narrative writing skills. Unlike previous studies that generally examined the four-square writing strategy or infographic media in isolation, this research investigates the effectiveness of combining the two in narrative writing instruction. Consequently, this study is expected to make both conceptual and empirical contributions to the development of writing instruction strategies that are more innovative, systematic, and aligned with the characteristics of 21st-century learning. A preliminary study conducted at SMA Dirgantara revealed that many students struggle with writing narrative texts. Factors contributing to this low level of proficiency include teaching methods that do not align with the material and the use of unengaging instructional media. Student interviews indicated feelings of boredom stemming from monotonous lecture-style teaching and a perceived lack of teacher attention to their learning needs. Consequently, there is a need for more engaging and innovative teaching strategies to enhance students' writing capabilities, particularly in the context of narrative writing.

Based on the preceding explanation, this study aims to examine the effectiveness of the infographic-assisted four-square writing strategy in teaching narrative text writing. The research focuses on analysing the impact of implementing this strategy on students' narrative writing skills. Consequently, the research question to be addressed is: how effective is the infographic-assisted Four four-square writing strategy in improving students' narrative writing skills? This study offers an innovative approach by integrating infographic media into the four-square writing strategy to support narrative writing instruction for 10th-grade high school students. Unlike previous studies that generally focused on the use of writing strategies or visual media separately, this study combines both; with infographics will serve as a visual stimulus to help students generate ideas, and organize the storyline, while the narrative elements will be developed more systematically through the four-square strategy. This integration makes a novel contribution by offering a learning model that is more engaging, structured, and effective in enhancing students' narrative writing skill.

2. Method

This study employs a quasi-experimental approach with a non-equivalent control group design to examine the effectiveness of the infographic-assisted four-square writing strategy in teaching narrative text writing. This design was selected because it allows the researcher to compare an experimental group and a control group that were not randomly assigned but were instead naturally formed within the classroom. According to Seo and Lim (2024), this design is appropriate for educational research because classroom conditions in schools generally do not allow for the individual randomization of subjects without disrupting the ongoing learning process. Thus, the non-equivalent control group design provides adequate control over extraneous variables while enabling the researcher to obtain valid data regarding the effect of the administered treatment. This study was conducted with 160 students of X-class at SMA Dirgantara. From that research population, a purposive sampling technique was employed to select 64 students, based on considerations regarding comparable initial proficiency, class availability, and alignment with the objectives of the quasi-experimental study. This technique is used because it allows researchers to selectively assign research subjects to classes deemed most representative of the research conditions, without disrupting the existing class structure (Perines, 2021). A sample size of 64 students is considered adequate for educational experimental research, as it ensures sufficient data to compare the experimental and control groups in a more stable and statistically justifiable manner.

The data collection instruments in this study consisted of a narrative text writing test—comprising both a pretest and a posttest—and classroom observation. The pretest and posttest were used to measure students' initial and final narrative writing abilities, thereby revealing changes that occurred following the intervention (Zhang et al., 2021). Meanwhile, observation was employed to gather data on the learning process, student engagement, and the actual classroom implementation (Roque et al., 2024). This combination of instruments was selected for its ability to yield comprehensive data regarding both the learning process and outcomes, thereby enhancing the validity and accuracy of the research findings. Data collection in this study followed a systematic process aligned with the instruments employed: observation and a narrative text writing test. Initially, students took a pre-test to assess their baseline narrative writing skills prior to the instructional intervention. Subsequently, instruction was conducted using the infographic-assisted four-square writing strategy in the experimental class, while the control class received conventional instruction; observations were carried out throughout this period to document learning activities. Following the intervention, students took a post-test to measure improvements in writing ability, thereby yielding data that allowed for an objective comparison between pre- and post-intervention performance.

The research instruments consisted of a narrative writing test (pre-test and post-test) and an observation sheet, were reviewed by two experts to ensure their content validity in terms of relevance, clarity, and alignment with the research objectives. The reliability of the writing scores was established through inter-rater reliability, with two independent raters assessing students' compositions using the same scoring rubric. The analysis indicated a high level of agreement between the raters, confirming that the instruments were both valid and reliable for data collection. Students' narrative writing was assessed using an analytic scoring rubric covering five criteria: content, organization, vocabulary, language use, and mechanics. Each criterion was rated on a predetermined scale to ensure consistent and objective assessment across the pre-test and post-test. The treatment procedures were implemented systematically, with the experimental group receiving infographic-assisted four-square writing strategy instruction and the control group following conventional narrative writing instruction over the same instructional period. The research data were analysed using both descriptive and inferential statistics to obtain a comprehensive overview of the findings. Descriptive statistics were employed to characterize the students' pretest and post test results—such as mean scores, standard deviations, and maximum and minimum values—while inferential statistics were used to test the research hypothesis and determine the effectiveness of the infographic-assisted four-square writing strategy in teaching narrative text writing. These analytical techniques were utilized to ensure that the data not only described the general situation but also yielded scientifically generalizable conclusions based on appropriate statistical tests.

3. Results and Discussion

Results, The study was conducted over four sessions. In the first session, students in both the experimental and control groups were administered a pretest to assess their initial narrative writing abilities. The narrative writing performance of the experimental and control groups on the pretest is presented in table 1.

Table 1. Narrative Text Writing Ability in the Pretest for the Experimental and Control Classes

	Experiment	Control
Minimum	50	44
Maximum	78	78
Mean	65,25	64,09

Based on table 1, the students' narrative writing ability in the experimental class pretest showed a minimum score of 50, a maximum of 78, and an average of 65.25. Meanwhile, the control class pretest showed a minimum score of 44, a maximum of 78, and an average of 64.09. There was a difference in narrative writing ability between the experimental and control classes at the pretest stage. The pretest results indicate that the students' narrative writing ability in both the experimental and control classes was at a relatively similar level; there was no significant difference between the two groups prior to the intervention. These findings suggest that both classes possessed comparable initial proficiency. In the second session, students were presented with instructional material on writing narrative texts using different approaches. In the control class, a conventional lecture-based method without the aid of infographics was employed, whereas in the experimental class, the four-square writing strategy supported by infographics was used. During the third session, students wrote narrative texts in accordance with the assigned method. Students in the experimental class learned the stages of writing a narrative text using the four-square writing strategy; during this process, they were given the freedom to gather information about characters from various sources. Meanwhile, students in the control class learned the steps for writing narrative texts. A post-test was administered to both classes in the fourth session. Students in each class wrote a narrative text based on the writing stages learned in the previous session. The narrative writing performance of the experimental and control classes in the post-test is presented in table 2.

Table 2. Narrative Text Writing Ability in the Post-test for the Experimental and Control Classes

	Experiment	Control
Minimum	69	61
Maximum	100	97
Mean	78,28	86,09

Following four instructional sessions, a post-test was administered to assess the development of students' abilities. Table 2 shows that for the narrative text writing post-test, the experimental class achieved a minimum score of 69, a maximum score of 100, and an average score of 78.28. Meanwhile, the control class recorded a minimum score of 61, a maximum score of 97, and an average of 86.09. These results indicate an improvement in narrative text writing skills in both the experimental and control classes. This improvement is evident from the higher scores compared to the earlier pre-test results. These findings suggest that the instruction provided had a positive impact on the students' writing abilities. Subsequently, hypothesis test was conducted, comprising tests for normality and homogeneity, the N-gain score test, and the hypothesis test (independent sample t-test). The results are presented in table 3.

Table 3. Pretest Normality Test Results for Control and Experimental Classes

		Saphiro-Wilk		
		Statistics	df	Sig.
Pre-test	Experiment	966	32	398
	Control	964	32	362
Post-test	Experiment	962	32	310
	Control	973	32	582

The normality test in this study utilized the Shapiro-Wilk test. Based on table 3, the significance values for the pretest were 0.398 for the experimental class and 0.362 for the control class. Furthermore, the significance values for the post-test were 0.310 for the experimental class and 0.582 for the control class. These results indicate that all significance values—for both pretest and post-test—were greater than 0.05, demonstrating that the data are normally distributed. Normality

test results indicate that all data from both the pre-test and post-test for the experimental and control groups meet the criteria for a normal distribution. At both the initial measurement and post-treatment stages, data from both groups showed no deviation from a normal distribution pattern. This indicates that the data distribution is suitable for further analysis. Consequently, the research data satisfy the fundamental assumptions required for the use of parametric statistical tests. The next step is the homogeneity test, the result of which is shown in table 4.

Table 4. Homogeneity Test Result

		Levene Statistics	df	df2	Sig.
Pre-test	Based on Mean	436	1	62	512
	Based on Median	428	1	62	516
	Based on Median and with adjusted df	428	1	59,590	516
	Based on trimmed mean	427	1	62	201
	Based on Mean	027	1	62	790
Post-test	Based on Median	055	1	62	815
	Based on Median and with adjusted df	055	1	61,275	815
	Based on trimmed mean	073	1	62	788

The homogeneity test results indicate that the data variances for the experimental and control classes are equal. Table 4 presents the results of the homogeneity test performed on the students' posttest scores. The significance value for the pretest was 0.512 (> 0.05), while the significance value for the posttest was 0.790 (> 0.05); this indicates that the data variances for both the pretest and posttest in the two classes are homogeneous. Testing was conducted on the post-test data to examine the uniformity of distribution across groups. The results indicate no significant difference in variance between the two classes; thus, the data are considered homogeneous. This means that both research groups satisfy the assumption of equal variances for further analysis. In the subsequent stage, an N-Gain test was conducted. The results of the N-Gain test are presented in table 5 below.

Table 5. N-Gain Test Result

N-Gain Score		
	Experimental group	Control group
Mean	59,96	38,01

Based on table 5, the N-Gain test results for the experimental class—treated using the Four-Square Writing method supported by infographic imagery—showed a score of 59.96%, which falls into the "moderately effective" category. Meanwhile, the control class, which received no such treatment, obtained a score of 38.01%, placing it in the "ineffective" category. The N-Gain test results indicate a difference in the improvement of abilities between the experimental and control classes. The experimental class, which received the infographic-assisted Four-Square Writing strategy intervention, demonstrated greater improvement and fell into the "moderately effective" category. In contrast, the control class, which received no special intervention, showed less improvement and fell into the "ineffective" category. These findings suggest a difference in instructional effectiveness, which was subsequently further examined through hypothesis testing using an independent sample t-test. The final stage is hypothesis testing, specifically the independent sample t-test. Table 6 below presents the results of the hypothesis test.

Tabel 6. Independent Sample t-Test Result

Table 8: Independent Sample t-Test Result								95% Confidence Interval of the Difference	
	F	Sig	t	df	Sig (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances assumed	.072	.790	3.442	62	.001	7.813	2.270	3.275	12.350
Equal variances not assumed			3.442	61.627	.001	7.813	2.270	3.275	12.350

Hypothesis test was conducted using an independent sample t-test. The t-test result showed a Sig. (2-tailed) value of 0.001 (< 0.05), meaning the null hypothesis (H_0) was accepted and the alternative hypothesis (H_a) was rejected. The data indicate a significant difference between the experimental and control classes following the intervention. Thus, the implemented learning strategy influenced the improvement of students' narrative text writing skills. These data indicate that the implementation of the Four-Square Writing strategy, supported by infographic media, has a significant impact on students' narrative writing skills. This is supported by hypothesis test results showing a meaningful difference between the experimental and control classes following the intervention. This difference suggests that the strategy employed is more effective than conventional instruction. Thus, the Four-Square Writing strategy, supported by infographic media, is effective for teaching narrative writing.

Discussion, Based on the research results, an improvement in narrative text writing skills was observed in both groups following the instructional process. However, a greater improvement occurred in the class that received instruction using the four-square writing strategy supported by infographic media. These findings indicate that the use of appropriate instructional strategies and media can yield differing impacts on student learning outcomes. Consequently, these results serve as a basis for discussing the effectiveness of implementing this strategy in teaching narrative text writing. The pre-test results indicate that the students' initial narrative writing abilities in both the experimental and control classes were at a relatively comparable level prior to the intervention. This suggests that the two groups possessed homogeneous ability characteristics, making them suitable for comparison in an experimental study. This aligns with the research findings by Stander (2022) which states that the equivalence of initial ability across groups is important to ensure that differences in learning outcomes following the treatment are truly attributable to the variable under study.

The post-test results indicate an improvement in students' narrative writing abilities following the instructional process in both groups. This improvement suggests that the implemented instruction had a positive impact on the development of students' writing skills. These findings align with previous research by Su and Zou (2022) indicating that structured, strategy-based instruction can enhance the quality of students' writing. The findings of this study indicate that the four-square writing strategy, supported by infographic media, leads to a more effective improvement in students' narrative writing skills compared to conventional instruction. This addresses a research gap (Seery et al., 2023; Yu et al., 2022) indicating that the use of structured learning strategies combined with visual media to significantly improve narrative writing skills has previously been limited. Empirical evidence from the N-Gain and hypothesis tests confirms that this approach improves learning outcomes, and yields a significant difference between the experimental and control classes. Thus, this study makes a novel contribution to the development of a more effective writing instruction model based on targeted visual media. This study confirms that structure-based learning strategies, such as four-square writing, combined with infographic media, play a significant role in developing narrative writing skills. This finding enriches research in the field of language learning (Alwadei & Mohsen, 2023; Handayani, 2024; Jaekel et al., 2022), particularly regarding the approach that integrates writing strategies with targeted visual media. Thus, this study positions itself as a contribution to the development of learning innovations that are more effective and applicable in the classroom.

The findings of this study successfully build upon previous research (Liu et al., 2024; Stander, 2022; Zhang & Zou, 2022) indicating that a structure-based writing instruction strategy can improve students' writing skills. This development is evident in the integration of infographic media—an approach not widely utilized in previous studies within the context of four-square writing. The findings reinforce empirical evidence that combining strategies with visual media yields more optimal results than employing strategies alone. Thus, this study does not only replicate but also extends prior research in the field of narrative text writing instruction. The findings suggest that infographic-assisted four-square writing strategy improves students' narrative writing by reducing cognitive load through visual organization and guiding them to structure ideas into coherent narratives. From a theoretical perspective, the integration of visual representations and structured planning supports knowledge construction and facilitates the writing process, enabling students to generate, organize, and elaborate their ideas more effectively. Pedagogically, this approach promotes active engagement, scaffolds students' writing development, and provides a systematic framework that enhances both the quality and coherence of their narrative texts.

Compared with previous research findings, the findings are consistent with previous research demonstrating that structured writing strategies and visually supported instructional media can significantly improve students' writing performance. Similar to earlier studies, the present findings indicate that providing systematic guidance for idea generation and text organization enables students to produce more coherent and well-developed narrative texts. This consistency reinforces the view that combining cognitive scaffolding with instructional support is an effective pedagogical approach to facilitating writing development across diverse educational contexts. Despite similarities with previous studies, this research differs by demonstrating the added value of integrating infographic media with the four-square writing strategy, rather than examining writing strategies or visual aids separately. While earlier studies primarily emphasized the role of structured writing frameworks in improving text organization, the present study highlights how visual scaffolding through infographics further supports idea development, creativity, and narrative coherence. This difference suggests that the effectiveness of writing instruction may be enhanced when cognitive structuring strategies are combined with multimodal representations that address students' needs in generating and organizing ideas during the writing process.

The novelty of this study lies in the application of the four-square writing strategy combined with infographic media for teaching narrative text writing. This combination offers a more structured yet visual approach, thereby helping students organize their ideas more effectively. Consequently, the study introduces an innovation in writing instruction that has rarely been specifically examined in previous research. This research makes a significant contribution to the field of language education by offering more effective learning strategies to enhance students' narrative writing skills. The implementation of the four-square writing strategy, supported by infographics, assists teachers in delivering instruction that is more structured and easier for students to comprehend. Furthermore, the findings encourage innovation in the use of visual media to reinforce students' ideas and the organization of their writing. Consequently, this study has implications for improving the quality of both the process and the outcomes of writing instruction in the classroom. Based on the findings and discussion, it can be said that the present research has practical implications for English language teaching. It suggests that infographic-assisted four-square writing strategy can serve as an effective instructional approach to enhance students' narrative writing performance. The observed significant improvement with a meaningful effect size indicates that the intervention not only produces statistical differences but also contributes to educationally relevant gains in students' ability to organize and develop written ideas. Therefore, English teachers may consider integrating visual scaffolding with structured writing strategies to create more engaging, systematic, and supportive writing instruction.

4. Conclusion

Overall, the research findings indicate an improvement in students' narrative writing abilities following the implementation of the instructional approach used. A comparison between the group that received the intervention and the one that did not reveal a clear difference in achievement. Data analysis also suggests that an approach integrating writing structure with visual media support yields more optimal results. It means this approach can be considered an effective instructional alternative for enhancing students' writing skills. Furthermore, this study theoretically contributes to the development of writing instruction research by demonstrating how the integration of visual media and structured writing strategies can support students' cognitive processes in composing narrative texts. In addition, the findings practically provide an innovative instructional approach that combines infographic media and the four-square writing strategy for English teachers, to facilitate more effective, engaging, and systematic writing practices. This study is limited by its focus on a specific educational context involving tenth-grade students in one senior high school, which may restrict the generalizability of the findings to other educational levels, subjects, and learning environments. Therefore, it is recommended that narrative writing instruction adopt a more structured approach supported by visual media to help students more easily develop their writing ideas. Teachers can employ similar strategies in the classroom as an alternative method to progressively improve students' writing skills. Future research is encouraged to examine the application of this approach across different subject matter or educational levels to gain a broader perspective. Additionally, developing a wider variety of supporting media could further enhance the effectiveness of language learning in the classroom.

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