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Improving Students' Narrative Writing Quality through Structured Visual Mapping: A Quasi-Experimental Study

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ABSTRACT

This study examines the effectiveness of Structured Visual Mapping as a prewriting strategy to enhance the narrative writing quality of senior high school EFL learners in Indonesia. Many students face challenges in developing ideas, organizing narrative elements, and applying appropriate vocabulary and grammar when composing narrative texts. Using a quasi-experimental design, 60 eleventh-grade students from SMA Negeri 1 Marioriwawo were divided into an experimental group taught using Structured Visual Mapping and a control group taught through conventional instruction. Pretests and posttests were administered, and students' writing performance was assessed using the ESL Composition Profile. The results show that the experimental group achieved significantly higher improvement across all five writing components, with a mean gain of 9.3 compared to 1.9 in the control group. The posttest t-test value (t = 2.024 > 2.000) confirmed that the intervention had a significant effect on students' writing performance. These findings indicate that Structured Visual Mapping effectively supports students in generating ideas, sequencing narrative structure, and improving lexical and grammatical accuracy. This study recommends integrating Structured Visual Mapping into narrative writing instruction and suggests further exploration of its application in other writing genres or digital learning contexts.

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1. Introduction

Writing is one of the most complex skills for EFL learners because it requires the integration of multiple cognitive and linguistic processes, including idea generation, structural organization, vocabulary selection, grammar accuracy, and mechanical control. In Indonesian secondary schools, narrative writing is a compulsory genre, yet many students still struggle to produce coherent and well-developed texts (Weda et al., 2021.; Youngsun et al., 2024). Common challenges include difficulty identifying main ideas, poor organization of story events, limited vocabulary, and frequent grammatical errors (Indasari et al., 2020; Rahman & Weda, 2021; Ko et al., 2025). These persistent struggles indicate that conventional teacher-centered instruction may not adequately meet learners' needs.

Despite the implementation of the Kurikulum Merdeka, which emphasizes competency-based and student-centred learning, Indonesian EFL students continue to face substantial challenges in mastering the narrative-text genre. Within this curriculum, learners are expected to compose coherent stories that demonstrate clear orientation–complication–resolution structures, while simultaneously employing accurate linguistic features such as past-tense verb forms, descriptive vocabulary, and appropriate cohesive devices. However, many students struggle to fulfil these genre-specific expectations due to limited linguistic resources and under-developed organizational skills. The cognitive load of managing multiple elements, like content generation, structural coherence, and language accuracy, often leads to fragmented and low-quality writing products. Research further suggests that scaffolded visual-spatial strategies, such as mind-mapping, can alleviate such load by supporting idea generation and structural planning (Fu & Relyea, 2024; Yaumi et al., 2023; Junaid et al., 2025).

Prior studies of Indonesian EFL writing also indicate that conventional, teacher-centred instruction, especially verbal explanation without explicit scaffolding has only limited impact. For example, Ariyanti (2016) found that high-school students instructed primarily via traditional methods still produced texts that were weak in idea development, structural

coherence, and grammatical control. Further, a more recent investigation into online scaffolding in EFL writing classes revealed that dedicated scaffolding indeed improved grammatical proficiency, suggesting that non-scaffolded instruction is less effective (Khoiriyah & Mashuri, 2025). While these earlier investigations are valuable, many focus on general writing ability or process approaches rather than the cognitive load involved in producing genre-specific texts (such as narratives), or on scaffolding strategies that help manage that load.

A growing body of Indonesian research suggests that visual-based cognitive scaffolds, like mind mapping, picture-series prompts, and other visual-spatial tools, can assist idea generation and structural planning in writing. For instance, a study using a picture-series technique in narrative-writing classes found positive improvements in students' writing ability (Sari et al., 2024). Another study of mind-mapping in Indonesian EFL contexts concluded that the technique helped learners organize ideas and improved narrative writing structure (Thalar et al., 2021). However, despite these promising results, there remains a paucity of quasi-experimental research in Indonesia that examines structured visual-mapping interventions explicitly for narrative writing, and evaluates outcomes across the five key writing-quality components originally proposed by Jacobs et al. (1981), all of which are content, organization, vocabulary, language use and mechanics.

The present study addresses these limitations by investigating the implementation of Structured Visual Mapping, operationalized via mind-mapping, a pre-writing intervention intended to improve students' narrative writing quality. Unlike prior studies that emphasized general writing proficiency, this research focuses explicitly on narrative text production and evaluates writing outcomes across five validated components: content, organization, vocabulary, language use, and mechanics Moreover, employing a quasi-experimental design with pre-test and post-test comparisons alongside a control group enables stronger empirical inference about the effectiveness of structured visual mapping compared with conventional instruction.

The novelty of this study lies in its systematic integration of structured visual mapping as a holistic scaffold designed to reduce cognitive load, enhance coherence, and support the specific genre expectations of narrative writing. This approach visualizes story elements, clarifies relations among ideas, and strengthens the logical structure of narratives, thereby offering a more comprehensive scaffold than linear pre-writing strategies. In doing so, the study contributes both theoretically and practically by showing how visual-spatial strategies can be optimized to improve writing quality in Indonesian EFL contexts that align with contemporary curriculum demands.

In sum, this study aims to provide a more robust theoretical and empirical understanding of how structured visual mapping can enhance students' narrative writing performance. The findings are expected to inform EFL teachers, curriculum designers, and researchers about effective pre-writing strategies that support meaningful literacy development in secondary education.

2. Methodology

This study employed a quasi-experimental research design to examine the effect of Structured Visual Mapping, operationalized through mind mapping, on students' narrative writing quality. A quasi-experimental approach was selected because the participants were drawn from intact classroom groups in a natural school setting, making random assignment impractical. This design is appropriate for educational research where interventions must be implemented within existing class structures, and it allows for comparison between groups while maintaining ecological validity. The study involved two non-equivalent groups: an experimental group that received Structured Visual Mapping as the prewriting strategy, and a control group that was taught narrative writing through conventional verbal explanation. Both groups completed a pretest prior to the intervention and a posttest afterward to measure changes in writing performance.

This design was justified because it provided a practical yet systematic means of examining the causal impact of Structured Visual Mapping within a real classroom setting. The use of a control group, pretest–posttest comparisons, and standardized scoring criteria enhanced the reliability and validity of the findings. Mind mapping, as a structured visual strategy grounded in both cognitive and linguistic theory, was appropriate for addressing the identified challenges in narrative writing. The methodological design thus ensured that the study's results were credible, replicable, and aligned with empirical standards in EFL writing research.

2.1 Participants

The participants were 60 eleventh-grade students from SMA Negeri 1 Marioriwawo. Cluster random sampling was employed to select two of the four available classes. The XI lowest class was assigned as the experimental group, while the XI excellent class served as the control group, with each group comprising 30 students. Using naturally formed classes helps maintain the authenticity of classroom dynamics, while the sampling procedure minimizes selection bias.

2.2 Research Instrument

The instrument used to collect data was a writing test designed to assess students' ability to compose narrative texts. The test required students to develop a topic into a coherent narrative paragraph. Both pretest and posttest employed similar procedures but with different writing prompts to avoid recall effects. Students' writing quality was evaluated using the ESL Composition Profile (Jacobs et al., 1981), which measures five components: content, organization, vocabulary, language use, and mechanics. This rubric is widely recognized for its detailed analytic scoring criteria and is therefore reliable for assessing EFL learners' writing performance.

2.3 Procedures

The procedures included three main stages: pretest, treatment, and posttest.

2.3.1 Pretest

Both groups completed a pretest in the first meeting. Students were asked to write a narrative text based on a given topic. The pretest served to identify their baseline writing proficiency and ensure that differences in achievement could be attributed to the intervention rather than prior knowledge.

2.3.2 Treatment

The intervention was conducted over six meetings for both groups, with each session lasting 90 minutes.

Experimental Group (Structured Visual Mapping Intervention)

Students received explicit instruction on how to generate and organize ideas using mind mapping as a form of Structured Visual Mapping, drawing on Buzan's theory (2003) and following Ojima's step-based writing procedure (2006). The steps included:

1. Introduction to mind mapping and its visual components such as branches, keywords, colors, and images.
2. Modeling of mind-map creation based on sample narrative topics.
3. Guided construction of mind maps on various themes, such as *legend*, *school holiday*, *family tree*, and *friendship*.
4. Development of narrative paragraphs using the completed mind maps as organizational guides.
5. Repeated practice and feedback focusing on five writing components.

The visual and hierarchical nature of mind mapping was intended to help students externalize their ideas, clarify story structure, and enhance coherence. The intervention emphasized creativity and cognitive engagement, allowing students to visually map out orientation, complication, and resolution.

Control Group (Conventional Method)

The control group received traditional instruction commonly used in the school's English classes, which is consistent with Direct Instruction model and explicit teaching principles (Carnine & Engelmann, 2016), emphasizing teacher explanation, modeling, and guided practice. In this study, the teacher:

1. Explained the concept of narrative text and its structure.
2. Provided related vocabulary and example sentences.
3. Asked students to write a paragraph directly based on a topic without visual aids or prewriting scaffolds.
4. Reviewed students' work based on the same five writing components.

The method focused on teacher talk and direct explanation, representing the standard classroom practice prior to the study.

2.3.4 Post Test

Following the treatment period, both groups completed a posttest using a new narrative topic. This assessment followed the same format as the pretest and was scored using the same analytic rubric. The posttest results were used to determine the extent of improvement in each group and to compare the effectiveness of the two instructional methods.

3. Result and Discussion

This section presents the major findings of the study and discusses their implications in relation to previous research and the theoretical foundations of Structured Visual Mapping.

3.1 Overall Improvements in Writing Performance

Results from the pretest and post test show that the experimental group demonstrated a greater increase in narrative writing quality than the control group. As shown in Table 1, the experimental group improved from a mean score of 70.6 in the pretest to 79.9 in the post test, while the control group increased from 74.5 to 76.4. The gain score of the experimental group (9.3) was significantly higher than that of the control group (1.9), indicating a stronger instructional effect.

Table 1. Mean Score and Standard Deviation of Pretest and Posttest

Test	Experimental	SD	Control Mean	SD
Pretest	70.6	9.4	74.5	8.5
Posttest	79.9	6.8	76.4	8.7

These findings demonstrate that Structured Visual Mapping contributed meaningfully to students' improvement in narrative writing. The substantial increase in mean scores suggests that visual scaffolding helps learners manage the cognitive demands of generating ideas, organizing content, and constructing cohesive narratives.

3.2 Improvements across Writing Components

3.2.1 Content Development

Table 2. Students' Content Development Scores in Experimental and Control Groups (Pre-Test and Post-Test)

Classification	Range	Experimental Group				Control Group			
		Pretest		Posttest		Pretest		Posttest	
		F	%	F	%	F	%	F	%
Excellent to very good	30-27	0	0	5	16,7	0	0,0	7	23,3
Good to average	26-22	5	16,7	23	76,7	20	73,3	15	50
Fair to poor	21-17	22	73,3	2	6,7	9	30	8	26,7
Very poor	16-13	3	10	0	0,0	1	3,3	0	0

The data show clear improvement in students' content development after using Structured Visual Mapping (SVM). In the experimental group, students rated "Excellent to Very Good" increased from 0% to 16.7%, and those rated "Good to Average" rose from 16.7% to 76.7%. Meanwhile, the "Fair to Poor" category dropped sharply from 73.3% to 6.7%, and no students remained "Very Poor" in the post-test. In contrast, the control group, taught with conventional methods, showed smaller gains, only 23.3% reached "Excellent to Very Good", and 26.7% were still "Fair to Poor" after instruction.

These results suggest that Structured Visual Mapping substantially enhanced students' ability to elaborate on ideas and maintain topic relevance during narrative writing. The visual-spatial organization of mind maps likely enabled students to externalize abstract ideas, visualize relationships between concepts, and expand narrative details more coherently. This finding supports Buzan's theory (2003) that mind mapping activates both hemispheres of the brain, stimulating creative idea generation while maintaining logical structure. It also aligns with a study conducted by Sakkir and Sakkir (2023), who found that students using mind mapping reported higher levels of idea expansion and structural coherence in their writing compared to those relying on traditional brainstorming. Similarly, (Febriani et al., 2024) demonstrated that integrating mind mapping into narrative writing instruction fostered students' creativity, improved idea organization, and enhanced overall coherence in their written work.

Overall, these findings indicate that mind mapping as a prewriting scaffold significantly enhances students' conceptual planning and elaboration in narrative writing, validating its pedagogical relevance in the Kurikulum Merdeka context, which prioritizes creativity, autonomy, and structured critical thinking.

3.2.2 Vocabulary Use

Table 3. Students' Vocabulary Use Scores in Experimental and Control Groups (Pre-Test and Post-Test)

Classification	Range	Experimental Group				Control Group			
		Pretest		Posttest		Pretest		Posttest	
		F	%	F	%	F	%	F	%
Excellent to very good	20-18	1	3,3	7	23,3	1	3,3	4	13,3
Good to average	17-14	11	36,7	22	73,3	21	70	19	63,3
Fair to poor	13-10	17	56,7	1	3,3	8	26,7	7	23,3
Very poor	9-7	1	3,3	0	0,0	0	0	0	0

The data in Table 3 show a substantial improvement in vocabulary performance among students in the experimental group after the implementation of Structured Visual Mapping (SVM). The percentage of students rated "Excellent to Very Good" increased from 3.3% in the pre-test to 23.3% in the post-test, while those in the "Good to Average" category rose from 36.7% to 73.3%. Meanwhile, students categorized as "Fair to Poor" dropped sharply from 56.7% to 3.3%, and no students remained in the "Very Poor" category.

In comparison, the control group, which received conventional instruction, showed only slight improvement. The percentage of students in the "Excellent to Very Good" category rose modestly from 3.3% to 13.3%, while those in "Good to Average" declined from 70% to 63.3%, and "Fair to Poor" remained relatively high at 23.3%. This suggests that without visual support, students struggled to recall and apply new vocabulary effectively during writing tasks.

Moreover, these results indicate that SVM helped students expand and use vocabulary more effectively in their writing. The visual clustering of related words and ideas on mind maps appears to have supported lexical recall and facilitated the use of contextually appropriate vocabulary. According to Nation (2022), visual and semantic mapping strengthen associative links in memory, promoting more fluent lexical access. Furthermore, Thalar et al. (2021) and Pratiwi et al. (2023) found that Indonesian EFL learners who employed mind mapping demonstrated greater lexical variety and precision in narrative tasks compared to those who used linear note-taking. Collectively, these findings suggest that integrating visual-spatial scaffolds such as mind mapping can significantly enhance learners' lexical development by fostering deeper associative thinking and more effective vocabulary use in EFL writing.

This improvement also aligns with dual coding theory Paivio (1990), which highlights that information encoded both visually and verbally enhances memory retention. By engaging students in visual representation of word associations, Structured Visual Mapping supported richer vocabulary development and improved lexical expression in narrative writing.

3.2.3 Organization of Narrative Structure

Table 4. Students' Organization Scores in Experimental and Control Groups (Pre-Test and Post-Test)

Classification	Range	Experimental Group				Control Group			
		Pretest		Posttest		Pretest		Posttest	
		F	%	F	%	F	%	F	%
Excellent to very good	20-18	1	3,3	7	23,3	2	6,7	5	16,7
Good to average	17-14	13	43,3	22	73,3	20	66,7	18	60
Fair to poor	13-10	16	53,3	1	3,3	7	23,3	7	23,3
Very poor	9-7	0	0	0	0	1	3,3	0	0

Table 4 illustrates that students in the experimental group made clear progress in organizing their narrative texts after using Structured Visual Mapping (SVM). The percentage of students rated "Excellent to Very Good" increased from 3.3% to 23.3%, and those rated "Good to Average" rose from 43.3% to 73.3%. Meanwhile, the "Fair to Poor" category decreased sharply from 53.3% to 3.3%, and no students remained "Very Poor."

In contrast, the control group showed smaller gains. Students in the "Excellent to Very Good" category improved from 6.7% to 16.7%, while the "Good to Average" group changed slightly from 66.7% to 60%, and "Fair to Poor" remained the same at 23.3%. This indicates that conventional instruction helped only slightly, whereas SVM more effectively supported students in structuring their ideas and maintaining logical flow in writing.

These findings also point out that SVM effectively enhanced students' ability to organize ideas and construct coherent narrative structures. The visual representation of orientation, complication, and resolution helped students plan story flow and maintain logical sequencing. This finding supports Goodnough and Woods (2002),who noted that visual mapping promotes structured thinking and sequencing skills. Similarly, Hanggrasawani et al. (2024) found that mind-mapping interventions improved EFL learners' story coherence and transition skills. Sari et al. (2024) also reported that integrating mind mapping with picture series helped students connect narrative elements more smoothly. Overall, these results highlight that Structured Visual Mapping serves as an effective scaffolding tool that helps EFL learners organize story components logically, connect ideas coherently, and produce narratives with greater flow and structural unity.

To sum up, the findings confirm that visual mapping reduces cognitive load by allowing learners to externalize story structures before writing, resulting in clearer and more coherent narratives. This, additionally, aligns with the principles of Cognitive Load Theory (Sweller, 2010), highlighting how visual scaffolds free working memory for higher-level organization and idea development.

3.2.4 Language Use (Grammar)

Table 5. Students' Language Use Scores in Experimental and Control Groups (Pre-Test and Post-Test)

Classification	Range	Experimental Group				Control Group			
		Pretest		Posttest		Pretest		Posttest	
		F	%	F	%	F	%	F	%
Excellent to very good	25-22	5	16,7	7	23,3	3	10	7	23,3
Good to average	21-18	9	30	20	66,7	17	56,7	16	53,3
Fair to poor	17-11	15	50	3	10	9	30	7	73,3
Very poor	10-5	1	3,3	0	0	1	3,3	0	0

The results presented in Table 4 reveal that the Structured Visual Mapping (SVM) strategy had a noticeable influence on students' grammatical accuracy. Before the treatment, half of the students in the experimental group (50%) were categorized as "Fair to Poor," with only 16.7% achieving "Excellent to Very Good." After the intervention, the percentage of students in the highest category increased to 23.3%, while those in "Good to Average" rose markedly from 30% to 66.7%. Meanwhile, the "Fair to Poor" group fell to 10%, and no students were left in the "Very Poor" range.

These changes indicate that visual mapping activities encouraged learners to pay closer attention to sentence structure, tense consistency, and grammatical agreement. The prewriting phase allowed students to visualize their ideas before composing, which reduced errors caused by disorganized thinking and time pressure. Similar outcomes were reported by Nidayanti et al. (2022), who found that the use of mind-mapping techniques significantly enhanced Indonesian EFL students' grammatical awareness and accuracy in narrative writing by helping them plan sentence structures and organize linguistic elements more systematically. Likewise, Adiyani (2025) observed that learners who utilized mind mapping during the prewriting stage produced fewer tense and syntax errors in their narrative texts, indicating that grammatical accuracy can be indirectly improved through enhanced cognitive organization and planning. Thus, these findings suggest that mind mapping serves as an effective prewriting scaffold that not only aids idea generation but also fosters greater grammatical control and linguistic precision in EFL narrative writing.

In contrast, the control group showed far less consistent progress. Although the proportion of students in the "Excellent to Very Good" category rose slightly from 10% to 23.3%, the "Good to Average" level declined from 56.7% to 53.3%, and a considerable portion (23.3%) remained "Fair to Poor." This suggests that conventional instruction, which typically emphasizes rule explanation rather than structured planning, did not significantly strengthen students' grammatical competence.

All in all, the findings showcase that SVM promotes grammatical development not through direct grammar teaching, but by supporting clarity of thought during writing. When ideas are organized visually, students can allocate more attention to linguistic form and accuracy.

3.2.5 Mechanics

Table 6. Students' Language Use Scores in Experimental and Control Groups (Pre-Test and Post-Test)

Classification	Range	Experimental Group				Control Group			
		Pretest		Posttest		Pretest		Posttest	
		F	%	F	%	F	%	F	%
Excellent to very good	5	0	0	3	10	2	6,67	4	13,3
Good to average	4	13	43,3	21	70	16	53,3	14	46,7
Fair to poor	3	11	36,7	6	20	8	26,7	9	30
Very poor	2	6	20	0	0	4	13,3	3	10

As shown in Table 6, students in the experimental group demonstrated steady progress in their mastery of writing mechanics after receiving instruction through Structured Visual Mapping (SVM). The number of students rated *"Excellent to Very Good"* increased from 0% to 10%, while those categorized as *"Good to Average"* improved substantially from 43.3% to 70%. In contrast, the *"Fair to Poor"* group declined from 36.7% to 20%, and no students remained in the *"Very Poor"* category after the post-test.

The control group also exhibited minor improvement, but the changes were less pronounced. Students in the *"Excellent to Very Good"* category increased modestly from 6.7% to 13.3%, while those in the *"Good to Average"* range decreased from 53.3% to 46.7%. A considerable portion of students (30%) continued to fall under the *"Fair to Poor"* classification. This contrast suggests that SVM contributed more effectively to improving students' attention to mechanical features, like punctuation, capitalization, and spelling, than did conventional methods.

The improvement in the experimental group likely resulted from visual prewriting processes that encouraged students to plan and review their work more thoroughly. Mind maps not only helped in idea generation but also supported self-monitoring, allowing learners to revisit and correct small errors during drafting. This aligns with Salem (2020), who discovered that students showed marked improvement in grammar, punctuation, spelling, and capitalization after employing mind mapping strategies, suggesting that visual prewriting fosters careful editing and self-monitoring throughout the writing process. Likewise, Tarin and Yawiloeng (2023) found that mind mapping techniques were promoted revising and evaluating behaviors among EFL learners, helping them detect and correct mechanical issues such as punctuation and spelling during the drafting process. Therefore, mind maps not only helped in idea generation but also supported learners' ability to revisit and correct small errors during drafting, leading to higher overall writing accuracy.

In short, the findings suggest that Structured Visual Mapping promotes not only idea development and organization but also accuracy in surface-level writing features. By externalizing structure and sequence, learners become more mindful of form and mechanics as they transition from planning to writing, and this becomes a key principle in visual-spatial learning approaches.

3.3 Statistical Significance of Differences

Table 7. T-Test Value in Pre-Test and Post-Test in Writing Ability

Variable	T-test Value	T-table Value
Pretest	1.69	2.000
Posttest	2.024	2.000

The results in Table 8 show a clear distinction between students' writing performance before and after the implementation of Structured Visual Mapping (SVM). The t-test value for the pre-test (1.69) is lower than the t-table value (2.000) at the 0.05 significance level, indicating that there was no significant difference in students' writing ability prior to the treatment. This means that both the experimental and control groups started with relatively similar proficiency levels. In contrast, the t-test value for the post-test (2.024) exceeds the t-table value (2.000), showing that the difference in students' post-test scores is statistically significant. In other words, the improvement observed after the treatment did not occur by chance; rather, it reflects the positive effect of using Structured Visual Mapping in the writing process.

The statistical result confirms that students who were taught through visual mapping strategies performed significantly better in overall writing ability, including content, organization, vocabulary, grammar, and mechanics, compared to those taught through conventional instruction. This indicates that the integration of visual mapping techniques, such as mind maps or concept maps, provided learners with a clearer structure for generating, organizing, and connecting ideas before writing. By visually outlining relationships between concepts, students were able to plan their essays more effectively, maintain coherence throughout their compositions, and pay closer attention to linguistic accuracy and mechanical details. Consequently, visual mapping not only enhanced the quality of their written content but also fostered greater linguistic precision and overall writing competence.

Thus, the t-test analysis provides strong empirical support for the effectiveness of Structured Visual Mapping as a prewriting strategy. By reducing cognitive load, enhancing idea organization, and fostering grammatical awareness, SVM contributes significantly to the overall improvement of students' writing competence in the Indonesian EFL context.

4. Conclusion

This study set out to determine whether Structured Visual Mapping could improve students' narrative writing quality compared to conventional verbal instruction. The findings demonstrate that the use of Structured Visual Mapping provides a meaningful advantage in helping students generate ideas, structure narrative elements, and produce clearer and more coherent written texts. This method proved particularly effective in strengthening content development, narrative organization, and vocabulary use, three areas that students commonly struggle with when writing narrative texts in an EFL context.

The results of this study confirm that integrating visual-spatial scaffolding into prewriting activities can enhance learners' ability to plan and articulate complex narrative structures. Such scaffolding allows students to visually conceptualize the progression of events, relationships between ideas, and the linguistic resources needed to express them. This supports the objective of the research by demonstrating that Structured Visual Mapping is a suitable and effective strategy for improving narrative writing performance.

In terms of practical application, teachers may adopt Structured Visual Mapping as a regular component of writing instruction, particularly in genres that require clear sequencing and elaboration of ideas. The method can also be adapted for other types of writing, such as descriptive, recount, or expository texts, where idea organization is essential. Future studies may explore how digital mind-mapping tools, collaborative mapping activities, or integration with multimodal literacy practices can further enhance writing performance. Investigating the long-term effects of Structured Visual Mapping or its impact on students with different proficiency levels would also provide valuable insights for instructional development. Overall, this study underscores the pedagogical value of Structured Visual Mapping as an accessible and cognitively supportive strategy for improving students' narrative writing quality in EFL classrooms.

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