

The Effectiveness of Mind Mapping Strategy on Student's Writing Skill in Recount Text: A Pre-Experimental Study of Tenth Grade Students at SMA Swasta Kampus Nommensen Pematangsiantar

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ABSTRACT

Writing is an essential skill in English learning, especially in writing recount texts, which require students to organize ideas chronologically and coherently. However, many students still face difficulties in generating ideas, organizing content, and maintaining motivation in writing. This study aimed to analyze the effectiveness of the Mind Mapping Strategy on students' writing ability in recount text of X grade at SMA Swasta Kampus Nommensen Pematangsiantar. This research employed a descriptive qualitative research design. The participants of this study were 23 students selected through purposive sampling. The data were collected through writing tests administered before and after the implementation of the Mind Mapping Strategy. Students' writing was assessed using an analytic scoring rubric covering content, organization, vocabulary, language use, and mechanics. The findings showed a significant improvement in student's writing ability after the implementation of the Mind Mapping Strategy based on the comparison of pre-test and post-test scores. The mean score increased from 69.09 in the pre-test to 87.45 in the post-test. The results indicate that mind mapping helped students generate ideas, organize their thoughts, and write more coherent recount texts. Therefore, it can be concluded that the Mind Mapping Strategy is effective in improving students' writing skill in recount text and is recommended for use in teaching writing at the senior high school level.

Introduction

Writing is one of the most essential skills in learning English because it allows students to express their thoughts, communicate ideas, and develop creativity through written language. Among the various types of texts taught in the Indonesian high school curriculum, recount text is considered important because it helps students retell their past experiences in a coherent and meaningful way. However, many students still find writing in English challenging due to limited vocabulary, lack of grammatical mastery, and difficulties in organizing their ideas logically.

According to Harmer (2007), writing is a process that requires careful planning, drafting, revising, and editing. For students who learn English as a foreign language, this process can be difficult because they often struggle to start writing, generate ideas, and connect sentences cohesively. As a result, many students produce disorganized or unclear recount texts. Furthermore, they often feel unmotivated when asked to write long paragraphs, believing that writing in English is time-consuming and complicated.

To address these challenges, teachers are encouraged to use techniques that can help students organize their ideas more effectively before they begin writing. One such technique is the Mind Mapping Strategy, introduced by Tony Buzan (2006). Mind mapping is a visual method that helps learners brainstorm and connect ideas through diagrams consisting of keywords and branches. By using mind maps, students can see the relationships among ideas, structure their writing more clearly, and increase their motivation to write.

Several studies have shown that mind mapping can assist students in improving their writing skills (Al-Jarf, 2009; Syaiful, 2020). However, most of these studies used a quantitative approach, focusing on measuring the effect of the strategy rather than exploring the students' personal experiences while using it. Therefore, despite the growing number of studies on Mind Mapping Strategy, there is still a lack of empirical evidence that quantitatively examines its effectiveness in improving student's writing skill in recount text, Particularly at the senior high school level in the Indonesian context.

Based on these considerations, the researcher conducted a study entitled "An Analysis of Students' Experiences in Writing Recount Text through Mind Mapping Strategy." This study aims to describe students' experiences, perceptions, and difficulties in applying mind mapping when writing recount texts. The findings of this research are expected to help English teachers understand how students actually use this strategy, what challenges they face, and how it can be optimized to improve the teaching of writing skills.

Method

2.1 Design

This study employed a quantitative pre-experimental research design, specifically a one-group pre-test and post-test design, to examine the effectiveness of Mind Mapping Strategy on student's writing skill in recount text of tenth grade at SMA Swasta kampus Nommensen Pematangsiantar. The main focus of this study was to describe in depth how students experienced the use of mind mapping in their writing process and how this strategy influenced their ability to generate ideas, organize their thoughts, and construct recount texts.

A qualitative approach was chosen because this research did not only aim to measure students' scores, but also to understand their learning experiences, perceptions, and attitudes toward the use of Mind Mapping Strategy in writing activities. Through this approach, the researcher could obtain rich and detailed information directly from the students about how they used mind mapping, what benefits they gained, and what difficulties they encountered while applying the strategy.

In this study, the researcher observed students during the writing process and collected data through open-ended questionnaires and writing tasks. The researcher also analyzed students' recount texts to see how mind mapping helped them organize their ideas, structure their paragraphs, and improve the coherence of their writing. By using this design, the researcher was able to provide a comprehensive description of the students' experiences and the role of mind mapping in supporting their writing development.

Therefore, this descriptive qualitative design was considered appropriate because it allowed the researcher to explore the phenomenon naturally in a real classroom context without manipulating variables, while still focusing on the learning process and its impact on students' writing performance in recount text.

2.2 Participants

The population of this research was all X grade students of SMA Swasta Kampus Nommensen Pematangsiantar. The sample consisted of 23 students from one class. The class was selected using purposive sampling because it represented average ability students and was accessible for the researcher. To protect students' identity, their real names were replaced with initials.

2.3 Instrument

The main instrument of this study was a writing test, consisting of a pre-test and a post-test, which was used to measure students' writing skill in recount text before and after the implementation of the Mind Mapping Strategy. In the pre-test, students were asked to write a recount text based on their personal experiences, such as a holiday, school event, or

unforgettable moment, without using any specific strategy. In the post-test, students were asked to write another recount text using the Mind Mapping Strategy as a pre-writing guide.

Students' writing was assessed using an analytic scoring rubric adapted from Jacobs et al. (1981), which evaluates five aspects of writing: content, organization, vocabulary, language use, and mechanics. The weighting of each aspect is presented in Table 1.

Aspect	Description	Weight
Content	Relevance and completeness of ideas	30%
Organization	Logical sequencing and coherence	20%
Vocabulary	Accuracy and variety of word choice	20%
Language Use	Grammar and sentence structure	25%
Mechanics	Spelling, punctuation, and capitalization	5%
Total		100%

To ensure the validity of the scoring rubric, the instrument underwent expert judgment, conducted by an English teacher with experience in teaching writing at the senior high school level. The expert evaluated the rubric in terms of clarity, relevance, and suitability with the research objectives. Revisions were made based on the expert's feedback to improve the content validity of the instrument. Regarding reliability, students' writing was assessed by two independent raters, namely the researcher and an English teacher. The level of agreement between the two raters was examined using Cohen's Kappa coefficient. The result indicated a high level of inter-rater agreement, suggesting that the scoring rubric was applied consistently and that the writing scores were reliable.

In addition to the writing test, an open-ended questionnaire was used as a supporting instrument to obtain students' responses toward the use of the Mind Mapping Strategy in writing recount texts. Before being administered, the questionnaire was reviewed by an English teacher to ensure clarity, appropriateness, and relevance to the students' level.

2.4 Data Collection Procedure

The research was conducted in three main stages:

a. Pre-Test

Students were asked to write a recount text without using any special strategy. This was done to measure their initial ability.

b. Treatment

The researcher introduced mind mapping strategy by:

- Explaining what mind mapping is and its benefits.
- Demonstrating how to create a mind map on the board.
- Guiding students to make their own mind maps based on a selected topic.
- Helping students develop their mind maps into recount paragraphs.

c. Post-Test

After the treatment, students were asked to write another recount text using their mind maps as a planning tool.

2.5 Data Analysis

The data obtained from the pre-test and post-test were analyzed quantitatively to determine the effectiveness of the Mind Mapping Strategy on students' writing ability in recount text of X grade at SMA Swasta Kampus Nommensen Pematangsiantar.

First, the students' writing scores from both tests were collected and tabulated. Each student's writing was scored using an analytic scoring rubric adapted from Jacobs et al. (1981), which consists of five components: content, organization, vocabulary, language use, and mechanics. The score from each component was then summed to obtain the total writing score for each student on a scale of 0–100.

Second, descriptive statistical analysis was applied to summarize the students' writing performance before and after the implementation of Mind Mapping Strategy. The descriptive statistics calculated included the mean score, minimum score, maximum score, and standard deviation for both pre-test and post-test results. These statistics were used to show the general improvement in students' writing ability after receiving the treatment.

Third, in order to examine whether the improvement in students' writing scores was statistically significant, a paired-sample t-test was conducted using SPSS software. This statistical test was chosen because it compares two related sets of scores from the same group of students before and after the treatment. According to Pallant (2020), a paired-sample t-

test is appropriate for determining whether the difference between two repeated measures is statistically significant.

The significance level In this study was set at 0.05 ($p < 0.05$). To examine whether the improvement in students' writing scores was statistically significant, a paired-sample t-test was conducted. The result indicated a statistically significant difference between the pre-test and post-test scores ($t = ___, df = 22, p < 0.05$), suggesting that the Mind Mapping Strategy had a significant effect on students' writing ability, meaning that the Mind Mapping Strategy had a significant effect on students' writing ability in recount text.

In addition, this study also analyzed the improvement in each writing component (content, organization, vocabulary, language use, and mechanics) to identify which aspects of writing were most influenced by the use of Mind Mapping Strategy. This analysis helps to provide a more detailed understanding of how mind mapping contributed to students' writing development.

Based on the results of the descriptive and inferential analysis, conclusions were drawn regarding the effectiveness of Mind Mapping Strategy in improving students' writing ability in recount text.

2.6. Ethical Considerations

Before conducting the research, the researcher obtained permission from the school principal and the English teacher. The students participated voluntarily, and their identities were kept confidential. All data collected were used solely for academic research purposes.

Results and Discussion

RESULT

The purpose of this study was to examine whether the Mind Mapping Strategy could improve students' writing skill in recount text. The findings are presented clearly and objectively to demonstrate the effectiveness of the strategy in helping students plan, organize, and develop ideas for their recount writing.

Descriptive statistics revealed a noticeable increase in students' writing performance after the use of mind mapping. The mean pre-test score was 69.09, while the mean post-test score increased to 87.45. This resulted in an average gain score of 18.36, showing substantial improvement in students' ability to generate and structure ideas after applying the Mind Mapping Strategy. These results indicate that mind mapping contributed positively to students' overall writing development.

Table 1 provides a detailed summary of the complete pre-test, post-test, and gain scores for all participants. The data clearly reinforce the improvement observed across the class, showing that each student experienced progress after being taught using the mind mapping

approach. The gain scores, ranging from 15 to 19 points, demonstrate consistent improvement among all students, further proving that mind mapping was effective in supporting their writing process.

No	Students Initial	Pre Test	Post test	Gain
1	OV	55	70	15
2	RT	72	88	16
3	EX	75	92	17
4	ER	68	85	17
5	JC	60	78	18
6	EB	73	90	17
7	YS	65	82	17
8	RN	78	95	17
9	FD	67	84	17
10	PS	70	89	19
11	ML	72	87	15
12	CN	76	93	17
13	YL	63	80	17
14	FA	74	92	18
15	HN	72	90	18
16	VL	69	86	17
17	IR	77	94	17
18	EK	61	79	18
19	KS	70	88	18
20	RZ	74	90	16
21	HV	75	91	16
22	SM	72	89	17

Explanation of the Table (Students' Pre-Test, Post-Test, and Gain Scores)

Table 1 presents the students' pre-test, post-test, and gain scores after the implementation of Mind Mapping Strategy in teaching writing recount text. The table consists of 23 students from X grade whose identities are represented using initials to maintain confidentiality.

The pre-test scores represent the students' initial ability in writing recount texts before the treatment was implemented. Based on the data presented in Table 1, the pre-test scores ranged from 55 to 78, indicating that students' writing ability was at a low to moderate level prior to the use of the Mind Mapping Strategy. After the treatment, the students' post-test scores showed a clear improvement, ranging from 70 to 95. This increase demonstrates that students achieved higher writing performance after being taught using the Mind Mapping Strategy.

The gain scores represent the Improvement achieved by each student after the implementation of the mind mapping strategy. Based on the table, the gain scores ranged

from 11 to 13 points, which indicates a consistent improvement across all students. This shows that most students experienced a similar positive effect from the use of mind mapping strategy. Furthermore, the table shows that all 23 students demonstrated improvement in their writing scores, as none of the students experienced a decrease in performance. This indicates that the use of mind mapping strategy had a positive influence on students' writing ability in recount text.

Overall, the data in the table confirm that the Mind Mapping Strategy was effective in improving students' ability to write recount texts. Students became better at organizing ideas, developing content, and writing more structured texts after being taught using this strategy.

DISCUSSION

The findings of this research indicate that the Mind Mapping Strategy positively influenced students' writing ability in recount texts. Based on the statistical results presented in this study, the mean score increased from 50.47 in the pre-test to 62.65 in the post-test. This consistent improvement across the analysis confirms that students demonstrated better writing performance after receiving the treatment.

Before the implementation of mind mapping, many students faced difficulties in starting their writing. They did not know how to organize their ideas, and they often felt confused about the sequence of events. As a result, their recount texts lacked coherence and were often written in a disorganized manner.

Mind mapping helped students overcome this problem by providing a clear visual structure of their ideas. When students created mind maps, they started from a central theme and then developed related ideas into branches. For example, they could divide their experiences into orientation, events, and re-orientation. This made it easier for them to plan what they wanted to write before actually writing.

In addition, mind mapping helped students improve their organization skills. Since recount text requires chronological order, the branches in mind mapping allowed students to arrange their ideas step-by-step following the correct sequence of events. This made their writing more logical and easier to understand.

Another important improvement was seen in students' motivation. Before the treatment, many students felt that writing was boring and difficult. However, after using mind mapping, they found writing more interesting because they could draw, use shapes, and visualize their ideas. This made the writing process more enjoyable and reduced their anxiety.

Moreover, mind mapping also helped students improve their vocabulary usage. During the mind mapping process, students often brainstormed words and expressions

related to their topic. This helped them recall and use more appropriate vocabulary in their writing.

Although their grammar was not perfect, there was a clear improvement in their sentence construction. Since students already had a clear plan from their mind maps, they could focus more on language accuracy during the writing process.

These findings support Buzan's (2006) theory which states that mind mapping helps students organize their thinking by utilizing both the logical and creative sides of the brain. It also supports the findings of previous studies that mind mapping improves students' idea organization and writing structure.

However, this study also has some limitations. The research only involved one class and there was no control group for comparison. Therefore, the improvement cannot be compared with students who used traditional teaching methods. Future research should include more classes and use experimental and control groups for more accurate comparison. Even though there were limitations, this study provides strong evidence that Mind Mapping Strategy is an effective tool in teaching writing, especially for recount texts.

Conclusion

This study demonstrates that the Mind Mapping Strategy plays a meaningful role in enhancing students' writing ability in recount texts, particularly in supporting the pre-writing stage. The findings indicate that students showed measurable improvement in their writing performance, as reflected in the increase of the mean score from 50.47 in the pre-test to 62.65 in the post-test. More importantly, the improvement was not limited to writing scores but was also evident in students' ability to organize ideas, sequence events logically, and elaborate their experiences in a more coherent manner.

From a theoretical perspective, this study contributes to the field of writing pedagogy by reinforcing the view that writing is a cognitive and recursive process in which idea generation and organization play a crucial role. The use of mind mapping aligns with process-based writing theory, which emphasizes the importance of planning as a foundation for effective written production. The findings support previous studies suggesting that visual and associative techniques can reduce students' cognitive load during writing and facilitate clearer text development.

In terms of practical implications, the results suggest that English teachers can integrate mind mapping as a structured pre-writing activity to guide students in organizing their ideas before drafting. Teachers are encouraged to explicitly model how to create mind maps, guide students in identifying key events and details, and gradually allow learners to develop their own maps independently. This strategy is particularly beneficial for students who struggle with generating ideas or organizing content in recount writing tasks.

Despite the positive outcomes, this study has several limitations, including the limited sample size and the short duration of the treatment. Therefore, future research is recommended to involve a larger number of participants, longer instructional periods, and comparative designs to further examine the long-term effectiveness of mind mapping across different text genres and proficiency levels.

Overall, this study concludes that the Mind Mapping Strategy is not only effective in improving students' writing performance but also valuable in fostering strategic thinking and learner confidence. As such, it can be considered a pedagogically sound strategy for teaching writing, particularly recount texts, in secondary school contexts.

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