
THE EFFECT OF USING MIND MAPPING TECHNIQUE TO IMPROVE STUDENTS WRITING ABILITY IN SMP NEGERI 3 PEMATANGSIANTAR

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Abstract

This study examines the effect of using Mind Mapping Technique on students' writing ability in descriptive text at SMP Negeri 3 Pematangsiantar. It applies a quantitative research design with a pre-experimental approach using a one-group pre-test and post-test model. The sample consisted of 31 students from class VIII-6, selected through simple random sampling. The data were collected through writing tests administered before and after the treatment. The findings show a significant improvement in students' writing scores, with the mean pre-test score of 66.03 increasing to 77.84 in the post-test. The normality test indicated that the data were normally distributed, and the paired sample t-test revealed a significant difference between the two scores. This result indicates that the alternative hypothesis (H_a) was accepted. The Mind Mapping Technique proved effective in helping students generate ideas, organize content, and enrich their vocabulary. This study contributes to writing instruction by demonstrating that visual organization techniques can significantly enhance students' writing performance.

Keywords: Mind Mapping Technique, Writing Ability, Descriptive Text, Pre-Experimental Design.

I. Introduction

Writing is a crucial language skill that allows individuals to express ideas, thoughts, and feelings in written form. In the context of English as a Foreign Language



(EFL) learning, writing serves as a tool for communication and academic development. However, many students at SMP Negeri 3 Pematangsiantar face significant difficulties in writing. Preliminary observations revealed that students often struggle with a lack of ideas, limited vocabulary, and an inability to organize their thoughts systematically into a coherent paragraph. These challenges often lead to low motivation and underdeveloped writing products.

To address these issues, innovative teaching strategies are required. One such strategy is the Mind Mapping Technique. According to Buzan (2006), Mind Mapping is a diagram used to organize ideas and represent words, tasks, or other items linked to a central keyword. This technique functions as a visual aid that helps students "map out" their thoughts before constructing sentences. By using colors, images, and branches, Mind Mapping stimulates the brain, making the writing process more creative and structured. This study aims to investigate whether the application of Mind Mapping Technique has a significant effect on improving the writing ability of eighth-grade students at SMP Negeri 3 Pematangsiantar.

II. REVIEW OF LITERATUR

Defenition of Writing

Writing is a very crucial language skill and an expression of ideas, thoughts, and experiences in written form. It can be explained as the creation, structuring, and clear articulation of ideas to readers (Nurmaulia 2022). Fitria (2024) defines writing as an indirect communication method that is employed to communicate feelings and pass information. Despite writing being a complex and a difficult skill, it is essential that students learn to master this skill since it will enable them to be able to convert whatever they think in written form. As far as English learning is concerned, writing



helps students express their ideas, share the information and tell their experiences in the form of a written source. Writing is done to convey ideas, opinions and information to the readers in a clear manner. Relationships can be created with the help of writing because of the correct choice of words and logical presentation. It helps people to communicate emotions, persuade other people, as well as share knowledge. Putri (2022) identifies writing as an informative way, a persuasive one, self-expression, a creative process, problem-solving, and entertainment.

The purposes of writing are to express one self, to provide information to persuade, and to create a literary work. In addition, (Nazir 2010) believes that writing has two different meanings. The first is writing in the literal sense: writing on sheets of paper, diaries, notebook and so on. Writing in the second sense is writing for many people (public, society). Writing for the public means communicating with many people and therefore the ideas conveyed must be in the interest of many people, or in other words, the ideas conveyed must contain the interest of society. Final definition from (Kristiantari, 2011) defines writing as the activity of conveying messages or communication using written language as a tool or medium. In relation to writing skill, (Darus, 2011) claims that writing can be achieved by mastering some techniques of writing, such as how to get ideas to write on, how to express them chronologically and coherently and how to review and the to revise the composition until the writing is well-built.

Based on the opinions of the experts, the researcher concludes that writing is a process of copying ideas and notions in written language into a message by arranging letters to make words, and arranging word by word to make a sentence so that other people or readers can understand it. Writing skills are a person's ability to process ideas and ideas in the form of written language which is done continuously and repeatedly so



that it becomes a habit and creates creativity. Through writing, writers can convey messages from thoughts and feelings by choosing the things they write so that they form complete sentences to the reader.

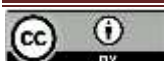
Assessment of Writing

According to Siahaan (2013) in the Journal of English and Education, which adopts Brown's principles, writing assessment is not merely about giving a score to the final result, but rather an evaluation procedure that covers micro-skills such as spelling and grammar, as well as macro-skills such as idea organization and text cohesion. Brown emphasizes that writing assessment must be analytical in order to provide a clear picture of students' strengths and weaknesses in each component of writing. Meanwhile, according to Hyland (as cited in Javadi-Safa, 2018) in the International Journal of Instruction, writing assessment is a complex activity that aims to evaluate students' ability to use language functionally in accordance with its rhetorical purpose. This assessment focuses on how writers (students) can manage information and use appropriate linguistic structures to convey messages effectively to readers.

Based on the criteria above the researcher creates the assessment of students' writing skill, especially in writing descriptive text which consist of five main aspect of writing as follow:

Table 2.1 Assessment of Writing Skills

| Assessment Aspects | Score | Assessment Criteria |
|---------------------------|--------------|--|
| Content (isi) | 30-27 | Excellent: Relevant to the topic, detailed, and substantive. |



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|--------------|-------|---|
| (Bobot 30%) | 26-22 | Good: Relevant to the topic but lacking in detail. |
| | 21-17 | Fair: Irrelevant, ideas are not developed, limited information. |
| | 16-13 | Poor: Not relevant, not sufficient for evaluation. |
| Organization | 20-18 | Excellent: The ideas flow smoothly and cohesively, and the organization is very clear. |
| (Bobot 20%) | 17-14 | Good: The organization is logical, but transitional support is sometimes interrupted. |
| | 13-10 | Fair: The sequence of ideas is illogical, and the transitions are confusing. |
| | 9-7 | Poor: Uncommunicative, disorganized, chaotic. |
| Vocabulary | 20-18 | Excellent: Appropriate word choice, sophisticated, effective use of idioms. |
| (Bobot 20%) | 17-14 | Good: The use of words is quite appropriate, but sometimes lacks variety. |
| | 13-10 | Fair: Limited vocabulary, frequent word choice errors. |
| | 9-7 | Poor: Very limited vocabulary, does not understand the meaning of words. |
| Grammar | 25-22 | Excellent: complex sentence construction, very few grammatical errors. |
| (Bobot 25%) | 21-18 | Good: Simple yet effective construction, there are a few minor errors. |
| | 17-11 | Fair: Many errors in tenses, prepositions, and sentence structure. |
| | 10-5 | Poor: Dominated by grammatical errors, difficult to understand. |
| Mechanics | 5 | Excellent: Master spelling, punctuation, and capitalization. |
| (Bobot 5%) | 4 | Good: There are some spelling/punctuation errors, but they do not interfere with the meaning. |
| | 3 | Fair: Frequent spelling and punctuation errors, messy writing. |
| | | Poor: Not mastering the rules of writing (spelling/punctuation) |



Teaching Writing by Using Mind Mapping Technique

Writing skills are one of the language skills taught to students. In addition, writing skills determine student's communicative competence in English. Teaching is a process of interaction between teachers and students that usually occurs in the classroom. Teaching how to write effectively is one of the most important skills educators impart to their students. When teaching writing, educators must be sure to select resources and supporting materials that will not only assist them in teaching how to write, but also be most effective in helping their students learn to write. According to the Kurikulum Merdeka for SMP Negeri 3 Pematangsiantar, English is taught as a compulsory subject for students. It covers four language skills, namely listening, speaking, reading, and writing.

Implementation of the Mind Mapping method is as follows, students and teachers choose the theme of the essay then write it on a blank sheet of paper. The researcher of keywords from the selected ideas is accompanied by symbols or colored images. After students make plans in Mind Maps, then students are assigned to write descriptive text essays. If there are still ideas that appear in the middle of the writing activity, then it can be stated in any branches or branches in the Mind Map to further elaborate in a descriptive essay.

Application the Mind Mapping method is implemented as follows. Students observe media images or photos provided by the teacher, followed by writing keywords of the selected ideas accompanied by colored pictures or symbols. Then students write the development of the keywords in the branches that surround the center of the essay idea. After students make plans in the form of Mind Maps, new students are assigned to describe them in the form of descriptive essays. Ideas that

arise amid writing activities, can be stated in any branches or branches in a Mind Map to further elaborate in a descriptive essay.

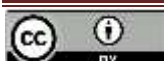
III. RESEARCH METHODOLOGY

This research uses a quantitative approach with a pre-experimental design. Specifically, it employs a one-group pre-test and post-test design. The research was conducted at SMP Negeri 3 Pematangsiantar. The population consisted of 341 eighth-grade students across eleven classes. The sample was selected using simple random sampling, resulting in the selection of class VIII-5, comprising 31 students, as the experimental group.

Data were collected using writing tests. The pre-test was administered to measure the students' initial writing ability in descriptive text. Subsequently, the treatment was applied, where students were taught to use Mind Mapping to organize their ideas before writing. Finally, a post-test was conducted to measure the improvement after the intervention. The data were analyzed using descriptive statistics to determine the mean scores, followed by a normality test (Kolmogorov-Smirnov) and a paired sample t-test to test the hypothesis.

Findings and Discussion

The findings indicate a significant improvement in the students' writing ability after the implementation of the Mind Mapping Technique. The descriptive statistics show that the mean score of the pre-test was 66.03, which increased to 77.84 in the post-test. The normality test confirmed that both the pre-test and post-test data were normally distributed. Furthermore, the hypothesis testing using the paired sample t-test revealed a significant value (Sig.) lower than 0.05, leading to the rejection of the null hypothesis (H₀) and acceptance of the alternative hypothesis (H_a).



The improvement is attributed to the effectiveness of Mind Mapping in facilitating the pre-writing stage. The technique provided a clear framework for students to organize their ideas, helping them overcome the common difficulty of "writer's block." By visualizing the structure of the text through branches and keywords, students found it easier to develop content and organize their paragraphs logically. The use of colors and images in the mind maps also stimulated creativity, making the writing process more engaging and reducing the cognitive load associated with vocabulary retrieval. These findings align with previous research suggesting that visual aids significantly enhance students' writing performance.

Conclusion and Suggestion

In conclusion, the Mind Mapping Technique has a significant effect on improving students' writing ability in descriptive text at SMP Negeri 3 Pematangsiantar. The statistical evidence confirms that students' post-test scores were significantly higher than their pre-test scores. The technique successfully addressed students' difficulties in generating and organizing ideas, resulting in better-structured and more content-rich writing.

Based on the results, several suggestions are proposed. English teachers are encouraged to implement the Mind Mapping Technique as a standard pre-writing activity to help students structure their essays effectively. For students, it is recommended to practice creating mind maps regularly to enhance their critical thinking and organizational skills. For future researchers, it is suggested to conduct comparative studies between Mind Mapping and other brainstorming techniques to further validate the efficacy of this method across different text types and educational levels.

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