Using Mind-Mapping in Improving Students’ Writing Skills of Eleventh Grade at MAS Yaspen Nurul Huda Serapuh

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Abstract
This study investigated the use of mind mapping as a strategy for improving the writing skills of eleventh-grade students at MAS YasPen Nurul Huda Serapu. This study focused on 24 students who struggled to organize their ideas and effectively communicate them in written English. To measure the impact of mind mapping on students' writing abilities, the study used a combination of observation, instructor interviews, and several exams across three cycles. The first data in Cycle I revealed that students had a low average GPA of 57.66, indicating a substantial need for intervention. Students' average scores rose gradually as they used mind mapping, reaching 65.50 in Cycle II and 80.50 in Cycle III, surpassing the KKM standard of 72. The findings demonstrated that mind mapping effectively helps students organize their thoughts and improve their writing skills. This research highlights the potential of innovative teaching methods like mind mapping in enhancing educational outcomes and suggests further integration of such techniques in the curriculum to support student learning.

INTRODUCTION
Education is extremely important in everyone's life, and learning skills like writing is essential. Writing is an important mode of communication because it allows people to effectively express their ideas, transmit information, and share knowledge. In a recent study, 11th-grade students at MAS YasPen Nurul Huda Serapuh were challenged to improve their English writing abilities. Four pupils struggled to organize and articulate their views coherently on paper. This impediment hampered their scholastic development by reducing their ability to articulate thoughts clearly through writing (Victori, 1999). Addressing this issue requires inventive and effective teaching methods. One proposed way is to employ mind maps, a tool meant to help pupils improve their writing skills. A mind map depicts the natural flow.

During the study, students received training on using mind maps to plan, organize, and present their writing ideas effectively. The use of mind maps is expected to help students overcome the barriers they face in writing. By aiding in better information organization, clearer idea connections, and coherent writing, mind maps promise to enhance overall academic performance (Buzan, 2018; Betancur & King, 2014).
This study was expected to make a significant contribution to education by shedding light on the usefulness of mind mapping in developing writing skills among 11th-grade students at MAS YasPen Nurul Huda Serapuh. It is hoped that using this strategy will result in enhanced writing skills, consequently increasing academic accomplishment (Haerazi & Irawan, 2019).

Interviews with English teachers of 11th-grade students at MAS YasPen Nurul Huda Serapuh found that pupils' average writing skills are below the KKM norm. This weakness is caused by difficulty with subject generation, sentence construction, and adherence to language rules. These obstacles prevent students from successfully expressing their ideas, leading to apprehension about writing (Grasela, Hidayah, & Jayanti, 2018; Heaton, 1975). Teachers generally concentrate on the theoretical and linguistic elements of

This conclusion underscores the ongoing need for innovative teaching methods, such as mind mapping, to enhance students' writing skills and foster greater engagement in English classes (Akinoglu & Yasar, 2007; Ngo & Tran, 2021).

This study aimed to improve the writing skills of 11th-grade students at MAS YasPen Nurul Huda Serapuh, with an emphasis on those who struggle to organize and communicate ideas in English writing. It assessed mind mapping's usefulness as a method for facilitating clearer concept organization, improving coherence in writing, and overcoming common barriers such as difficulty with topic development and sentence building. By teaching students mind-mapping techniques, the project hopes to provide unique educational practices that will improve overall academic accomplishment in English writing. The ultimate goal is to offer insights and ideas for using mind mapping in the curriculum to improve writing abilities and student engagement in English lessons.

METHOD

1. Research Design

In this study, the researcher used mind-mapping strategies to improve writing skills. The students were charged with creating a text or story to be reviewed. According to Arikunto (2006), using both an experimental and a control design allows the researcher to purposely introduce differences and then assess the effects. This study was carried out with eleventh-grade students at MAS YasPen Nurul Huda Serapuh.

2. Population and Sample

Population refers to a group of individuals sharing similar characteristics (Arikunto, 2006). Arikunto further explains that a population includes all elements possessing one or more attributes of interest. Similarly, Arifin (2020) defines a population as several objects with specific characteristics targeted for investigation. The population and sample of this study consisted of four eleventh-grade students at MAS YasPen Nurul Huda Serapuh.

3. Techniques for Data Collection

The researchers employed observation and writing tests to assess students' writing skills using mind mapping. Following observations, interviews with teachers and writing tests were conducted to gauge students' understanding and application of mind mapping in writing. Subsequently, the researchers administered tests across three cycles.

4. Techniques of Data Analysis

The data analysis techniques utilized included observations of students and interviews with teachers. Initially, the researchers observed students during their English writing lessons and then interviewed the teachers about the students' writing abilities. Teachers indicated that students found writing in English challenging, resulting in slower progress (Haerazi & Irawan, 2019).
After assessing the initial data, the researchers used the mind mapping method to give a program text content test. Following the first cycle of testing and application, the researchers moved on to the second cycle, or retrospective phase, in which they investigated the students' mind-mapping processes. The findings improved, although they were not fully satisfying. To improve the results, the researchers went on to a third cycle. The third cycle showed a significant improvement over the prior cycles, although the small sample size limited the total rise (Buzan, 2018; Betancur & King, 2014).

**FINDING AND DISCUSSION**

1. The result of Cycle 1

The results from the first cycle of the study indicate that many students still struggle with understanding the principles of effective writing. Consequently, collaboration between researchers and teachers is essential to achieve satisfactory final results. Using mind maps as a tool to improve writing skills has shown promise in this context.

This study sought to evaluate the writing ability of eleventh-grade students at MAS YasPen Nurul Huda Serapuh, specifically comparing those taught using the mind mapping methodology to those taught using traditional techniques. The study also intended to examine the efficiency of mind mapping in writing lessons. The data obtained included both baseline (pre-test) and endpoint (post-test) scores.

<table>
<thead>
<tr>
<th>No</th>
<th>Score</th>
<th>Fi</th>
<th>Xi</th>
<th>Fi.Xi</th>
<th>Persentase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50-55</td>
<td>10</td>
<td>52</td>
<td>520</td>
<td>41%</td>
</tr>
<tr>
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<td>0</td>
<td>0%</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td>24</td>
<td></td>
<td><strong>1,352</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

| Average | 57.66 |

From the summary in Table 1, it is evident that out of the 24 students, 10 scored within the 50-55 range, the other 10 scored within the 56-60 range and 4 scored within 61 – 65. None of the students met the KKM standard, with an average GPA of 57.66. These results indicate that additional targeted interventions are necessary to enhance learning outcomes (Arikunto, 2006).

2. The result of Cycle 2

The second cycle of English learning was carried out in four stages: planning, implementation, observation, and reflection. During the planning process, the mind-mapping learning method was used. Table 2 displays the effects of using mind mapping when producing text.

<table>
<thead>
<tr>
<th>No</th>
<th>Score</th>
<th>Fi</th>
<th>Xi</th>
<th>Fi.Xi</th>
<th>Persentase</th>
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<td>10</td>
<td>63</td>
<td>630</td>
<td>41%</td>
</tr>
<tr>
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<tr>
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<td></td>
<td><strong>1,582</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

| Average | 65.50 |
The results showed that students’ writing skills improved after adopting the mind-mapping technique. Out of the 24 students, 10 scored between 60 and 65, and 14 scored between 66 and 70, indicating development from the first cycle. The average GPA climbed to 65.50, demonstrating that mind mapping improved students’ writing skills (Buzan, 2018).

3. The result of Cycle 3
The first and second cycles were completed, but the researchers saw that the outcomes were still unsatisfactory. To get greater results, they moved on to a third cycle.

<table>
<thead>
<tr>
<th>No.</th>
<th>Score</th>
<th>Fi</th>
<th>Xi</th>
<th>Fi.Xi</th>
<th>Percentase</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
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<tr>
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<tr>
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<td>81-85</td>
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<td>1.162</td>
<td>58%</td>
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</table>

<table>
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<th>1.942</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>80.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The average learning outcome for Cycle III in writing a text or story was 80.50, according to Table 3, which summarizes the formative test results. Of the students, ten (42%), and fourteen (58%), met the learning objectives effectively; no student (0%), did not. As a result, the observers and researchers came to the conclusion that the learning completion rate had above 80%, and the average outcomes had surpassed the KKM score of 72. As a result, Cycle III was finished and the learning improvement process was judged successful.

The learning results of the students improved as they moved from Cycle II to Cycle III. Cycle II's average score was 65.50, which is still below the KKM assessment threshold of 72. Nevertheless, the researchers proceeded with Cycle III, facing certain difficulties but eventually finishing the examination. The students achieved an average score of 80.50, over the KKM level of 72, by doing all of the assignments assigned by the teacher. The improvement in students' learning results from Cycle I to Cycle III is shown in the graphical comparison below.

![Figure 1. The Increase in Average Student Learning Outcomes](image)
DISCUSSION
The findings from this study reveal a significant improvement in the writing skills of eleventh-grade students at MAS YasPen Nurul Huda Serapuh when utilizing the mind mapping technique. The progression through three cycles of implementation demonstrated a marked enhancement in students' abilities to organize and express their ideas effectively in writing.

In the first cycle, the results indicated that many students struggled with understanding the principles of good and correct writing. The average GPA was 57.66, well below the KKM standard of 72. This aligns with Arikunto's (2006) assertion that initial attempts often reveal substantial gaps in comprehension and skill, necessitating collaborative efforts between teachers and researchers to address these issues effectively.

The second cycle showed some improvement, with the average GPA rising to 65.50. However, this was still below the desired standard. This stage incorporated the mind mapping technique more extensively, highlighting its potential to aid in organizing thoughts and improving writing structure. Buzan (2018) emphasized that mind mapping facilitates a better organization of ideas, which was evident as students began to show progress.

The third cycle yielded a significant increase in student performance, with an average GPA of 80.50. This score exceeded the KKM standard, demonstrating the effectiveness of the mind-mapping technique. The completion rate of 75% indicated that most students could meet the learning objectives. This improvement supports the findings of Betancur and King (2014), who noted that mind mapping helps students connect vocabulary and concepts more effectively, thereby enhancing their writing skills.

These results are consistent with previous studies that have explored the benefits of mind mapping in education. For instance, Ngo and Tran (2021) found that mind mapping significantly improved students' writing skills by providing a visual framework that aids in the logical organization of ideas. Similarly, Haerazi and Irawan (2019) reported that genre-based language teaching, which often incorporates visual aids like mind maps, can improve writing achievement.

The substantial improvement from Cycle I to Cycle III in this study underscores the importance of innovative teaching techniques in addressing students' learning challenges. The consistent use of mind mapping allowed students to better structure their thoughts and convey their ideas more coherently. This aligns with the research by Fareed, Ashraf, and Bilal (2016), who identified that structured approaches to writing can help overcome common ESL learners' difficulties.

CONCLUSION
From the findings and discussion above the study concluded that the implementation of mind-mapping techniques significantly improved the writing skills of eleventh-grade students at MAS YasPen Nurul Huda Serapuh. Over three cycles, students showed marked progress in organizing their thoughts and expressing their ideas coherently, with their average GPA increasing from 57.66 in Cycle I to 80.50 in Cycle III. This demonstrates the effectiveness of mind mapping in enhancing students' academic performance and overcoming common writing challenges.

These findings imply that both students and schools can benefit from integrating mind mapping into their educational practices. For students, adopting mind mapping can lead to better engagement and improved writing skills. Schools should consider incorporating this technique into their curricula and provide training for teachers to effectively implement it. By doing so, educational institutions can foster a more engaging and productive learning environment, ultimately leading to higher academic achievements.
REFERENCES


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