OPTIMIZING ARABIC GRAMMAR LEARNING: COMBINATION OF ELECTRONIC AND CONVENTIONAL MIND MAPPING

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Abstract
This research discusses the results of action research aimed at enhancing the learning of Arabic Grammar through the combination of electronic and conventional mind mapping learning strategies. The problem addressed in this research is the low comprehension of students regarding Arabic Grammar material. Before the intervention, the student completion rate was only 55%, and their average score was low at 62. The research method employed in this study is action research, which involves a group of students in a continuous learning process over several cycles. The research results indicate that electronic and conventional mind mapping learning strategies significantly improved students' understanding of Arabic Grammar material. This improvement is evident in the completion rate, which increased to 81% in Cycle I and 90% in Cycle II. Students demonstrated an enhancement in their ability to identify and apply Arabic Grammar rules. Additionally, they displayed improvements in both oral and written communication skills in the Arabic language. Therefore, the combination of electronic and conventional mind mapping learning strategies can be an effective approach to enhance Arabic Grammar learning. The findings of this research offer valuable insights for educators seeking to improve the quality of Arabic Grammar.

Keywords: Grammar learning; Mind Mapping

Abstract

Keywords: Pembelajaran Nahwu; Mind mapping
INTRODUCTION

The learning of Arabic Grammar is a crucial aspect in the development of proficient and correct Arabic language skills. There are four language skills: speaking, listening, writing, and reading. These language skills are closely connected to Arabic Grammar, as Arabic Grammar strengthens and preserves these four language skills. Furthermore, a strong command of the Arabic language facilitates the worship and advancement of Islamic civilization. A sound understanding of Arabic Grammar is essential for profoundly comprehending various Islamic texts, including the Quran and the Hadith. Arabic Grammar serves as a tool for understanding the Quran and the sayings of the Prophet. Therefore, a comprehensive understanding of Arabic Grammar is vital for both language skills and religious knowledge.

Arabic Grammar is the science that studies the changes or non-changes in the final position of words in the Arabic language. In technical terms, Arabic Grammar is the science that examines the principles governing the Arabic words' status regarding the alteration or stability of word endings in sentences. Therefore, Arabic Grammar is concerned with the word's final position. Al-Ghalayini has defined Arabic Grammar as the science that examines the principles governing the status of words in Arabic concerning whether word endings change or remain constant in a sentence. In other words, through Arabic Grammar, we can understand how words should be placed in their forms of nasab, raf, jar, jazm within the context of a sentence. According to Hetti and others, Arabic Grammar is the science that discusses the role and function of words in...
sentence construction. Thus, Arabic Grammar delves into understanding the functions of words, the final vowels, or I’rab within a sentence.\textsuperscript{11} For those who wish to understand Arabic well, studying Arabic Grammar is essential because changes in the word endings in Arabic can alter the meaning of the words.

Teaching Arabic Grammar in Indonesia is a continuous effort, both in Islamic boarding schools (pondok pesantren) and Islamic educational institutions (madrasah). However, many issues are faced by teachers and students when it comes to learning Arabic Grammar. Many students in schools and educational institutions perceive Arabic Grammar as a complex and challenging subject,\textsuperscript{12} especially for Indonesians.\textsuperscript{13} The difficulties in understanding Arabic Grammar have even led some individuals to discontinue their Arabic language studies.\textsuperscript{14} The challenges in learning Arabic Grammar can be attributed to various factors, including the choice of inappropriate textbooks,\textsuperscript{15} the use of less effective teaching materials, improper teaching strategies, and more. One of the Islamic boarding schools in Indonesia that encounters issues with Arabic Grammar instruction is Pondok Pesantren Darul Mukhlisin in Aceh Taming.

The issues with Arabic Grammar instruction at Pondok Pesantren Darul Mukhlisin Aceh Tamiang are evident through the lack of student achievement. Firstly, when looking at the average grades of 2nd-year middle school students, it can be observed that they only reach an average score of 66. Moreover, out of 33 students, only 20 managed to pass the exam. This indicates that most students struggle to comprehend and apply Arabic Grammar concepts. This data was gathered through interviews with Arabic Grammar subject teachers. Secondly, the research's exam results show that students' understanding of Arabic Grammar is low. Their average score is only 62, with 14 students failing to reach the passing grade, which was set at 60. In a situation like this, seeking effective solutions to address the issues in Arabic Grammar instruction is essential. The objective is to enable students to achieve the expected learning outcomes and master this subject effectively.

One of the solutions that can be used to address the issues in Arabic Grammar instruction is to choose effective teaching strategies. Teaching strategies refer to the

\begin{footnotesize}
\begin{enumerate}
\item Sahab, “Ta’lim an-Nahw Bi Istikhdam Kitab Al-’Amruti Fi Madrasat Qasim Al-Hadi Al-Tshanawiyah Al-Islamiyah Semarang Wa Mushkilatuhu.”
\end{enumerate}
\end{footnotesize}
actions an instructor selects to deliver course material in a way that facilitates students' understanding of the material and aims to achieve the desired learning outcomes.\textsuperscript{16} Mind Mapping is one teaching strategy that can address the issues in Arabic Grammar instruction. Mind mapping is a teaching strategy developed by Tony Buzan. A Mind Map is an alternative to linear thinking, representing the whole brain's thought process. Mind Maps reach out in all directions, capturing various thoughts from multiple angles.\textsuperscript{17}

Mind mapping can be categorized into two types: electronic mind mapping and conventional mind mapping. First, electronic mind mapping involves creating and organizing mind maps using computer software. Second, conventional mind mapping is prepared traditionally using pen and paper.\textsuperscript{18} By using mind mapping, students can enhance their creativity, increase active engagement in learning, strengthen memory, boost knowledge retention, and encourage student autonomy in achieving their learning objectives.\textsuperscript{19} Therefore, the researcher will utilize the mind mapping strategy to enhance Arabic Grammar learning outcomes.

Research on the use of mind mapping in Arabic language learning, including Arabic Grammar, has been the subject of several previous studies. Some relevant studies that have been conducted include: (1) Laode Abdul Wahab, with the title "Pengembangan Bahan Ajar Qawaid Bahasa Arab Berbasis Mind Map untuk STAIN Kendari."\textsuperscript{20} (2) Endah dan Nasiruddin, with the title "Eksperimentasi Metode Mind Map pada Pembelajaran Arabic Grammar Bahasa Arab untuk Meningkatkan Hasil Belajar Siswa."\textsuperscript{21} (3) Shofwatul Fu'adah, with the title "Penggunaan Strategi Mind Mapping Dalam Pembelajaran Kosakata Bahasa Arab."\textsuperscript{22} (4) Rohmatun Hidayah, with the title "Kharithah

\textsuperscript{17} Tony Buzan, \textit{Buku Pintar Mind Map} (Jakarta: PT Gramadia Pustaka Utama, 2012), 2–4.

In summary, the key difference between this research and other studies lies in using mind mapping strategies in learning. For instance, other studies have employed the traditional form of mind mapping, where students create mind maps on paper using a pen, and these studies have been predominantly conducted in educational institutions in Indonesia. In contrast, other research has utilized electronic mind mapping in computer software in foreign educational institutions. This research combines both traditional and electronic mind mapping strategies collaboratively. Furthermore, this research employs the classroom action research method, less commonly used in previous studies.

So, previous research on mind mapping in Arabic language learning has been conducted quite frequently, including in Arabic Grammar. However, the novelty of this article lies in the attempt to combine two different strategies, namely conventional mind mapping and electronic mind mapping learning strategies. Previously, these two strategies were used separately. By combining them, this article creates a new strategy that can help enhance students’ understanding of Arabic Grammar materials.

Therefore, there is still room for further research that combines conventional teaching strategies with electronic mind mapping. This article makes a scholarly contribution by exploring the effectiveness of using a combination of electronic and conventional mind mapping learning strategies in enhancing students' understanding of Arabic Grammar material. This strategy is expected to bring about scientific novelty by providing a deeper understanding of the potential of this combined approach in improving student learning outcomes.

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26 Hidayah, “Kharithah Al-Mafaheem Ka Estrajiyat Li Ta’lim Maharat Al-Lughat Al-‘Arabiyyah.”

27 Al Najem, “The Effect of Electronic Mind Maps on Developing Immediate and Delayed Achievement and Habits of Mind in Teaching Al Fegh for High School Students.”

RESEARCH METHOD

This research employs an action research approach with several cycles. Each Cycle consists of four main stages: planning, implementation, observation, and reflection. The study was conducted in a junior high school with low levels of Arabic Grammar comprehension among its students, specifically in the 8th-grade class. The first Cycle began with the planning stage, in which the teacher designed the lesson using a combination of electronic and conventional mind mapping learning strategies. The implementation stage involved the application of these strategies in the teaching process. Subsequently, the observation stage was conducted to monitor and record the students' progress in understanding Arabic Grammar material. Lastly, the reflection stage allowed the teacher and researcher to evaluate the student's learning outcomes and adjust the lesson plan for the subsequent Cycle. Here is an illustration of the stages within each Cycle:

![Action Research Scheme](image)

This research is considered successful when the pass rate percentage obtained falls within the success indicator of this study, which ranges from 85% to 95%, with the high criteria.

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Table 1: Assessment Criteria

<table>
<thead>
<tr>
<th>No</th>
<th>Percentage (%)</th>
<th>Level of Learning Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>95-100</td>
<td>Very High</td>
</tr>
<tr>
<td>2</td>
<td>85-94</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>70-84</td>
<td>Moderate</td>
</tr>
<tr>
<td>4</td>
<td>55-69</td>
<td>Low</td>
</tr>
<tr>
<td>5</td>
<td>0-54</td>
<td>Very low</td>
</tr>
</tbody>
</table>

**FINDINGS AND DISCUSSION**

At the beginning of the first Cycle, lesson planning was carried out by creating a Lesson Plan (RPP) that combined electronic and conventional mind mapping. This plan included learning objectives, teaching materials, methods, and assessments.32 Once the planning was completed, the lesson was implemented according to the lesson plan. At the outset of the implementation, the students were introduced to mind mapping, its use in learning, and its benefits. Some benefits of mind mapping in education include aiding memory retention of the learning material, fostering the development of ideas and creativity, improving concentration, and many other advantages.33

Students actively engaged in individual and group mind mapping exercises during the learning sessions. The group tasks aimed to promote participation and mutual assistance in learning.34 All students were assigned the task of taking notes using mind mapping strategies. Computer software and a projector were employed for electronic mind mapping. Students benefited from direct learning through mind-mapping applications and PowerPoint presentations when the projector was used. Using PowerPoint was particularly advantageous as it increased students' interest in learning.35

The creation of electronic mind maps was carried out using computer software. Some examples of computer software for creating Mind Maps include Inspiration, Free Mind, iMindMap, Mind Master, and others.36 Below is an image showing the interface of the iMindMap software used for creating mind maps:

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36 Muhammad, “The Effectiveness of Applying Electronic Mind Maps in Developing Creative Thinking Skills in Science among The Ninth Grade Female Students in Gaza Strip.” P.164
Based on the evaluation of the learning outcomes data and the analysis conducted in Cycle I, it is evident that Cycle I cannot be considered successful according to the research's success standards. This is because the percentage of completion in learning in Cycle I does not yet meet the research success criteria, which require a minimum pass rate of 85%. In Cycle I, the completion rate percentage only reached 81%. Based on these criteria, the student's completion rate in the Arabic Grammar subject in Cycle I falls within the 70% - 84% range, which can be classified as a "moderate" criteria level. Below is an image of the conventional mind mapping learning conducted by the students:

Several obstacles can be identified as the reasons for not achieving the expected learning outcomes in Cycle I, as reflected upon (1) Students' ability to create mind maps
independently is still limited, requiring individual guidance in the mind mapping process. (2) Students have not fully grasped the concept of mind mapping. (3) The use of electronic mind mapping has not completely captured the interest of some students. (4) During group mind map creation, only one or two students are actively involved, while others are less active or contribute minimally.

The reflection on the results of Cycle I serves as the basis for improvements in the learning process in Cycle II. Therefore, it can be concluded that in Cycle I, the learning of the Arabic Grammar subject did not achieve the desired level of success, necessitating improvements in Cycle II. Based on the obstacles that hindered the improvement of student learning outcomes in Cycle 1, the following corrective actions will be implemented in the upcoming Cycle: (1) Encouraging and motivating students to use the mind mapping strategy in writing, as motivation will make them enthusiastic about learning and explaining that this strategy can facilitate memory and understanding of the learning material.\(^{37}\) (2) Re-explaining the concept of learning using mind mapping to students, with additional insights gained from literature and video tutorials illustrating the use of mind mapping. Students will be given training to develop their understanding through the mind mapping strategy. Mind mapping is created based on issues the teacher provides, and the notes generated in this process form an interconnected structure of ideas. The main topic is placed in the center of this structure, while subtopics and details are connected as branching lines. With this approach, mind mapping trains students to identify key points and master extracting keywords from the texts they read. They can illustrate these in the form of images or symbols.\(^{38}\) (3) Designing mind maps with more attractive shapes so students do not perceive the learning process as boring. Instead, they will view it as a fun activity where they can create attractive visual representations through mind mapping. (4) Providing rewards, such as prizes and assessment points, to students who actively participate in discussions individually and in groups. Such rewards will boost their motivation to learn using the mind mapping strategy.\(^{39}\) Here is a table showing the improvement from the pretest to Cycle 2:

### Table 2: Recapitulation of Action Research Results Data

<table>
<thead>
<tr>
<th>NO</th>
<th>Name</th>
<th>Pretest</th>
<th>Cycle 1</th>
<th>Cycle 2</th>
<th>Cycle 2 Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Respondent 1</td>
<td>80</td>
<td>81</td>
<td>85</td>
<td>Complete</td>
</tr>
<tr>
<td>2</td>
<td>Respondent 2</td>
<td>64</td>
<td>68</td>
<td>71</td>
<td>Complete</td>
</tr>
</tbody>
</table>

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P.166
The table above shows a positive change in students’ understanding of Arabic Grammar material in each action research cycle. In the pre-action test, 14 students did not succeed in learning, then at the end of the first Cycle, only six students did not, and finally, in the second Cycle, only three did not complete. The change in scores can be seen from the table highlighted in red above and decreases with each Cycle. Classroom observations and observations also indicate improved student participation in Arabic Grammar learning. Furthermore, the results of this research also show that the combination of electronic and conventional mind mapping learning strategies encourages
students to understand Arabic Grammar material. Here is an image of the implementation of electronic mind mapping:

Figure 4: Electronic Mind Mapping Learning

Based on the learning outcomes data in Cycle II, the research achieved the level of success per the established criteria, achieving a minimum completion percentage of 85%. The increase in the completion percentage from the pre-cycle to Cycle I is 26%, from 55% to 81%. This indicates a significant improvement in learning. Moreover, the completion percentage achieved in Cycle II exceeded this threshold, reaching 90%, categorizing it as high, falling within the 85% - 94% range. The increase in the completion percentage from Cycle I to Cycle II is 9%, from 81% to 90%. This demonstrates consistency in the improvement of student learning outcomes. Here is the graph illustrating the completion of students' learning in Arabic Grammar using a combination of conventional and electronic mind mapping:

Figure 5: Summary Graph of Action Research Results
Based on the above graph, a significant increase in the average score is also observed. In the pre-cycle, the average student score was 62. Then, in the first Cycle, there was an increase of 12 points, reaching a score of 74. Finally, in the last Cycle, there was an additional increase of 4 points, making the average student score reach 78. Thus, this research shows that using electronic and conventional mind mapping learning strategies in Arabic Grammar learning can significantly improve student understanding. The two cycles of action research conducted demonstrated that the use of a combination of conventional and electronic mind mapping strategies can enhance student understanding. This improvement in student understanding is reflected in the increased level of student mastery and their average scores. Furthermore, based on observations and interviews with students, it can be concluded that students enjoy learning using the combination of conventional and electronic mind mapping.

CONCLUSION

This research aims to enhance Arabic Grammar learning by combining electronic and conventional mind mapping learning strategies. The problem addressed is the low understanding of students regarding Arabic Grammar materials. The research results show that using a combination of electronic and conventional mind mapping learning strategies significantly improves students' understanding of Arabic Grammar materials. This improvement is reflected in the students' learning mastery level, which increased from 55% before the intervention to 90% after implementing the learning strategies. Moreover, students also demonstrated improvements in their ability to identify and apply Arabic Grammar rules and their oral and written communication skills in Arabic.

The research results indicate that combining electronic and conventional mind mapping learning strategies effectively enhances Arabic Grammar learning. This outcome provides valuable insights for educators seeking to enhance Arabic Grammar learning quality. The research contributes to the field by combining conventional and electronic learning strategies in the context of Arabic Grammar learning. The collaborative use of electronic and conventional mind mapping has improved students' understanding. Corrective actions to enhance student understanding include motivating students, explaining the concept of learning with mind mapping, creating attractive designs, and rewarding students to participate actively in learning.

Overall, this research provides substantial evidence that combining electronic and conventional mind mapping learning strategies can significantly enhance Arabic Grammar learning, delivering valuable outcomes for educators and students in the context of Arabic language learning.
REFERENCES


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