



APPLICATION OF THE MIND MAPPING TECHNIQUE TO IMPROVE STUDENT MEMORY IN PAI SUBJECTS

PENERAPAN TEKNIK MIND MAPPING UNTUK MENINGKATKAN DAYA INGAT SISWA DALAM MATA PELAJARAN PAI

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Abstract

This study examines the effectiveness of the mind mapping method in improving student memory in Islamic Religious Education (PAI) subjects. Conventional learning methods are often less effective in stimulating students' memory because they only activate the left brain. Mind mapping, as a visual and holistic approach, is believed to overcome this limitation by involving the right brain in information processing. The results showed a significant improvement in students' memory and understanding of PAI materials after the implementation of the mind mapping method. Mind mapping's ability to systematically connect ideas and build comprehensive understanding contributed to the improvement in memory. This method proved to be flexible and effective for various PAI materials, including fiqh, SKI, akidah akhlak, and Al-Qur'an Hadith. This study recommends the use of mind mapping as an innovative learning strategy to improve the quality of PAI learning and student learning outcomes

Keywords : Mind mapping, Islamic religious education, student recall

Abstrak

Penelitian ini mengkaji efektivitas metode mind mapping dalam meningkatkan daya ingat siswa pada mata pelajaran Pendidikan Agama Islam (PAI). Metode pembelajaran konvensional seringkali kurang efektif dalam merangsang daya ingat siswa karena hanya



mengaktifkan otak kiri. Mind mapping, sebagai pendekatan visual dan holistik, diyakini dapat mengatasi keterbatasan ini dengan melibatkan otak kanan dalam pemrosesan informasi. Hasil penelitian menunjukkan peningkatan signifikan dalam daya ingat dan pemahaman siswa terhadap materi PAI setelah diterapkannya metode mind mapping. Kemampuan mind mapping dalam menghubungkan ide-ide secara sistematis dan membangun pemahaman komprehensif berkontribusi pada peningkatan daya ingat. Metode ini terbukti fleksibel dan efektif untuk berbagai materi PAI, termasuk fiqih, SKI, akidah akhlak, dan Al-Qur'an Hadits. Penelitian ini merekomendasikan penggunaan mind mapping sebagai strategi pembelajaran inovatif untuk meningkatkan kualitas pembelajaran PAI dan hasil belajar siswa.

Kata Kunci : Mind mapping, pendidikan agama islam, daya ingat siswa

1. INTRODUCTION

Education is a fundamental human need. Its role is crucial in the development of an individual's physical, creative and intellectual potential, enabling lifelong self-actualization. Education equips knowledge to address life's challenges through a learning process that integrates theory and practical experience into a social context. This process is sustainable, encouraging the conscious development of one's potential. Islamic education, in particular, aims to build a comprehensive understanding and practice of Islamic teachings as a guide to life. The correct practice of Islamic teachings forms a noble character and has a positive impact on the behavior of individual Muslims in all aspects of life. Therefore, Islamic religious education is an important element in the development of the younger generation and society as a whole, which needs to be taught formally and nonformally.

Education serves as a fundamental pillar of a nation's progress. Its main goal is the comprehensive development of the individual, both physically and spiritually, to create an intelligent, peaceful, inclusive and democratic society. Improving the quality of education requires structuring an effective and efficient system. In the context of Islamic Religious Education (PAI), conventional teaching methods such as lectures, discussions, questions and answers, and assignments, often result in boredom and decreased interest in learning in students. The incompatibility of learning methods with the brain's working mechanism is one of the factors causing learning difficulties. Learning methods that focus on reading and memorizing written text tend to only activate the left brain, which processes verbal information and has a short-term memory. As a result, information is easily forgotten. Therefore, it is important to involve the right brain in the learning process to improve memory and understanding. Mind mapping is one of the strategies that can be implemented to achieve this goal, by utilizing the right brain's ability to process visual and holistic information. The use of mind mapping is expected to increase students' absorption and understanding of PAI materials, as well as overcome the limitations of conventional learning methods that tend to be monotonous and lack creativity. (Akbar et al., 2024)

Mind mapping has been globally recognized as an effective learning medium capable of stimulating higher-order thinking skills in learners by utilizing brain management principles to optimize cognitive potential. Nihilkumar's research shows the superiority of mind mapping over traditional teaching methods, as evidenced by the increase in average test scores. Lilisari et al's research also showed significant differences in improvement in creative thinking aspects between interactive multimedia learning (including mind mapping) and PowerPoint-based learning. Klentien and Kamnungwut noted an increase in students' attention and learning



activities through the use of interactive computer media, including text, images, video, animation, audio and simulation.(Dadi et al., 2019) These findings prove how important mind mapping is as a learning method.

Mind mapping, beyond its function as a conventional note-taking tool, acts as a visual representation of structured and connected thought patterns, rather than simply a linear presentation of information. In an era of information overload, the ability to process information efficiently has become crucial in both academic and professional contexts. However, the ability to effectively manage information remains a challenge for most individuals, leaving them behind in the global competition. Further analysis shows that the main bottleneck lies in the process of recording and presenting data. Linear note-taking, which is often direct copying from the source of information, results in difficulties in recalling and effectively utilizing the information. This practice not only hinders the achievement of optimal learning outcomes, but also imposes a cognitive burden by dividing the focus between the recording process and the comprehension process. This results in inefficient use of brain capacity, where physical activity (writing) dominates compared to cognitive activity (thinking and understanding). Furthermore, the habit of copying information without critical evaluation reduces deep understanding and internalization of knowledge. Therefore, the use of mind mapping as an alternative strategy for recording and presenting information is considered to be able to overcome these obstacles, by facilitating more holistic understanding and more effective recall through structured and connected visual representations. Further research is needed to comprehensively examine the effectiveness of mind mapping in improving information processing skills and learning outcomes.(Akbar et al., 2024)

2. RESEARCH METHOD

This study uses a library research approach to investigate the relevance of mind mapping techniques in improving the effectiveness of Islamic Religious Education (PAI) learning. This research does not involve field data collection, but rather focuses on analyzing relevant literature. The data source of this study researchers used secondary sources, namely quality journals obtained by using keywords student memory, mind mapping, PAI, and others. Then after collecting the required references the author conducts literature selection and literature analysis, Data analysis is carried out qualitatively, focusing on interpretation and synthesis of information from various sources. Thematic analysis techniques will be used to identify the main themes and sub-themes that emerge from the reviewed literature. The results of the analysis will be presented in a systematic and structured manner to answer the formulation of research problems.

3. RESULTS AND DISCUSSION

1. Islamic Education Subjects

The word "education" is rooted in the word "educate," which refers to the act, process, and method of developing individuals. Religious education, or religious education, aims to form individuals who are faithful and pious. This process is not limited to the transmission of religious knowledge alone, but also emphasizes affective aspects, personal values, and religious practices. In Arabic, there are several relevant terms, namely ta'lim (teaching), ta'dib (educating), and tarbiyah (educating). Learning is defined as the modification and strengthening of behavior through experience. Hilgard and Bower describe learning as: (1) acquiring knowledge or mastery through experience or study; (2) storing in the mind or



memory; (3) acquiring through experience; and (4) acquiring information or discovering. Based on these definitions, learning is a process experienced by individuals to gain knowledge and experience, which leads to changes in behavior. (Kurniati & Ervina, 2020) However, according to al-Attas (in Hasan Langgulung), ta'dib is more appropriately used in the context of Islamic religious education because its scope is more specific than ta'lim and not as broad as tarbiyah which also includes the raising of animals and plants. Along with the development of science, the term adab is more often associated with literature, while tarbiyah remains a term commonly used in Islamic education. Therefore, Islamic religious education in schools aims to increase the belief, understanding, appreciation, and practice of Islamic religious teachings in a comprehensive manner.

Nazarudin Rahman identified several crucial aspects in learning Islamic Religious Education (PAI): First, PAI as a conscious and planned effort that aims to guide, teach, and train students. Second, the preparation of students to achieve PAI learning objectives. Third, the preparation of teachers of Islamic Education (GPAI) in planning and implementing guidance, teaching, and training. Fourth, PAI learning is directed to increase belief, understanding, appreciation, and practice of Islamic teachings. These four aspects are interrelated and need to be considered simultaneously to achieve the effectiveness of PAI learning.

The learning method of Islamic Religious Education (PAI) as an integral part of the science of Islamic education must be inherently directed at achieving the goals of Islamic religious education. The objectives of PAI in public schools, as formulated by the Ministry of National Education, emphasize two main aspects. First, the development of students' faith through the provision, fertilization, and development of knowledge, appreciation, practice, habituation, and religious experience, so as to realize the growing faith and piety in Allah SWT. This aspect emphasizes the internalization of religious values holistically, involving cognitive, affective, and psychomotor aspects. Second, the purpose of PAI is directed at the formation of Indonesian human characters who are pious, noble, knowledgeable, diligent in worship, intelligent, productive, honest, fair, disciplined, tolerant (tasamuh), and able to maintain personal and social harmony. This aspect emphasizes the integration of religious values into daily life, forming individuals with integrity and contributing positively to society. Therefore, an effective PAI learning method must be able to accommodate both aspects, by designing innovative and contextual learning strategies, so that students not only acquire religious knowledge, but are also able to live and practice it in real life. It is important to remember that the successful achievement of PAI objectives is highly dependent on the harmony between the learning methods used with the characteristics of learners and their socio-cultural context. (Hidayat et al., 2024)

2. Application of mind mapping method in improving student memory

Memory, or recall, is a fundamental cognitive ability that enables individuals to receive, store and reproduce information, ideas and understandings. Santrock defines memory as a key element in cognitive development, which includes the entire process of storing information received throughout an individual's life. The ability to remember has a very significant role in the learning process and academic achievement. Strong memory is positively correlated with high academic achievement, while weak memory can result in low academic achievement. This is because good memory enables individuals to access and process information needed to understand concepts, solve problems and complete academic tasks. Conversely, difficulty in remembering information will hinder the learning process and reduce the ability to achieve



maximum academic potential. Factors affecting memory are diverse, including biological factors such as brain health and genetics, psychological factors such as motivation and learning strategies, and environmental factors such as sleep quality and cognitive stimulation. Therefore, improving memory requires a holistic approach that considers these various factors. Effective interventions to improve memory may include healthy lifestyle changes, the use of effective learning techniques, and structured cognitive training. (Siti Anisah & Maulidah, 2022)

Mind mapping, as an innovative learning strategy, is designed to facilitate students' knowledge development through the creative process of organizing the main ideas of a concept into an easy-to-understand mind map. Learning success can be measured through student learning outcomes as one of the key indicators. Various internal and external factors influence the achievement of learning outcomes. Internal factors include discipline, responsiveness, and student motivation, while external factors include the learning environment, teacher creativity in choosing learning media, and the learning methods applied. The selection of appropriate learning methods is crucial in creating a learning atmosphere that is enjoyable and conducive to the development of student creativity. The use of mind mapping, with its visual and holistic approach, has the potential to overcome some of the obstacles often faced in conventional learning processes. This method allows students to be actively involved in the information processing process, leading them to connect ideas systematically and build a more comprehensive understanding. Mind mapping's ability to activate various cognitive aspects, such as recalling, analyzing, and synthesizing information, also contributes to the improvement of students' memory and understanding. (Artha Taruji Borneo, 2023)

3. Correlation of mind mapping with Islamic learning

Mind mapping, as an innovative learning approach, has significant potential in improving students' simulation skills and creativity. The goals of education, namely the formation of a good personality and broad insight, form the basis of the study of the relevance of mind mapping to Islamic education. This research explores how mind mapping can contribute to the achievement of Islamic education goals. The Ushuliyah principle, "al-amru bi syai'in amru bi wasilihi, wa li-wasilihi hukmu almaqshudi," emphasizes the importance of appropriate methods in achieving educational goals. This means that the command to do something (in this case, education) includes an order to find the right method, and the method has an equally important position as the goal to be achieved. The adaptation of the mind mapping learning model in the context of Islamic education integrates inductive methods, drill techniques, simulation, and note-taking techniques. Mind mapping, with its ability to activate both the right and left brain simultaneously, allows for structured and visual note-taking. This method is highly relevant in the presentation of concept maps, especially in Islamic Religious Education (PAI) subjects. For example, Qur'an and Hadith material, which is often delivered monotonously through the lecture method, can be realized more effectively and interestingly through mind mapping. Thus, mind mapping offers an innovative alternative learning strategy that has the potential to improve students' understanding and absorption of Islamic Education materials, while encouraging their creativity and active participation in the learning process.

Mind mapping, as a creative note-taking technique, has the potential to improve learners' ability to recall information. This research explores the application of mind mapping in Islamic Religious Education (PAI) learning by combining discovery learning model, scientific learning approach, discussion, and assignment. The flexibility of mind mapping allows its application to various PAI materials, such as fiqh, Islamic Personality Studies (SKI), akidah akhlak, and Al-Qur'an Hadith. The adaptation of mind mapping in the context of Islamic education is



reflected in teaching and learning strategies that involve both educators and learners. mind mapping can be used as an experiential approach to developing a syllabus. Syllabus, as a common teaching document in higher education, has various functions, especially as a communication tool that conveys information about lecturers, courses, assessment, and other policies. The use of mind mapping in syllabus preparation can improve clarity, readability, and students' understanding of the syllabus content. Thus, mind mapping not only serves as a tool for recalling information, but also as an aid in planning and delivering effective and efficient learning. (Nur Hakim, 2023)

The relationship between mind mapping and Islamic religious education lies in its ability to organize notes that integrate right and left brain functions, facilitating the presentation of concept maps in Islamic religious education (PAI) learning. Effective PAI learning methods, such as interactive dialog (discussion and question and answer), are reinforced by continuous note-taking and assignment techniques. The use of mind mapping in PAI lesson planning aims to activate students' right and left brains, stimulate active learning, and facilitate understanding of the material in a varied, educative, effective, and innovative way. Mind mapping allows students to represent their mental models, encouraging creativity in the use of knowledge. Therefore, mind mapping is seen as an effective tool to encourage creativity through visualization and organization of information, facilitating the generation and integration of new ideas.

4. CONCLUSION

This study examines the application of mind mapping technique to improve students' memory in Islamic Religious Education (PAI) subject. The results showed that mind mapping, as a visual and holistic learning method, is effective in improving students' memory and understanding of PAI materials. Mind mapping overcomes the limitations of conventional learning methods that tend to be monotonous and lack creativity by involving the right brain in the information processing process. Mind mapping's ability to systematically connect ideas and build comprehensive understanding contributes to the improvement of students' memory and comprehension. The application of mind mapping in various PAI materials, such as fiqh, SKI, akidah akhlak, and Al-Qur'an Hadith, has proven to be effective and flexible. Besides improving memory, mind mapping also encourages students' creativity and active participation in the learning process. The use of mind mapping in syllabus preparation also improves students' clarity and understanding of the syllabus content. Overall, this study supports the use of mind mapping as an innovative and effective learning method to improve students' memory and understanding in PAI subjects.

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