



Developing concept mapping strategy to enhance eighth-grade students' English background knowledge

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ABSTRACT

This research aims to develop a Concept Mapping Strategy to enhance the background knowledge of eighth-grade students in English learning at SMP Negeri 7 Gunungsitoli. The research was motivated by the observed difficulty among students in connecting background knowledge with new English materials, which is essential for effective language learning, especially under the Kurikulum Merdeka that promotes student-centered and contextual learning. To address this issue, a strategy was developed using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation), with an emphasis on integrating visual and structured learning tools. The product was validated by three experts, material, media, and language, which were categorized as "Very Worthy". The implementation stage was conducted through two cycles of Classroom Action Research (CAR), involving tests, classroom observations, and questionnaires. The results showed significant improvements: students' average concept mapping scores increased, and test scores from Cycle I to Cycle II rose. Furthermore, both teacher and student responses indicated high levels of practicality. These findings demonstrate that the Concept Mapping Strategy is feasible, effective, and practical for enhancing students' background knowledge and engagement in junior high school English classrooms.

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ABSTRAK

Penelitian ini bertujuan untuk mengembangkan Strategi Pemetaan Konsep untuk meningkatkan pengetahuan latar belakang peserta didik kelas delapan dalam pembelajaran Bahasa Inggris di SMP Negeri 7 Gunungsitoli. Penelitian ini dimotivasi oleh kesulitan yang diamati di antara peserta didik dalam menghubungkan pengetahuan latar belakang dengan materi Bahasa Inggris baru, yang penting untuk pembelajaran bahasa yang efektif, terutama di bawah Kurikulum Merdeka yang mempromosikan pembelajaran yang berpusat pada peserta didik dan kontekstual. Untuk mengatasi masalah ini, sebuah strategi dikembangkan dengan menggunakan model ADDIE (Analisis, Desain, Pengembangan, Implementasi, dan Evaluasi), yang menekankan integrasi alat pembelajaran visual dan terstruktur. Produk tersebut divalidasi oleh tiga ahli materi, media, dan bahasa dengan kategori "Sangat Layak". Tahap implementasi dilakukan melalui dua siklus Penelitian Tindakan Kelas (PTK), yang melibatkan tes, observasi kelas, dan kuesioner. Hasilnya menunjukkan peningkatan yang signifikan: skor pemetaan konsep rata-rata peserta didik meningkat dan skor tes dari Siklus I ke Siklus II naik. Lebih lanjut, respons guru dan peserta didik menunjukkan tingkat kepraktisan yang tinggi. Temuan ini menunjukkan bahwa Strategi Pemetaan Konsep layak, efektif, dan praktis untuk meningkatkan pengetahuan dasar dan keterlibatan peserta didik dalam pembelajaran Bahasa Inggris di sekolah menengah pertama.

Kata Kunci: pembelajaran bahasa Inggris; pengetahuan latar belakang; strategi pemetaan konsep

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INTRODUCTION

English is one of the most widely spoken languages globally and is crucial for communication, education, and access to information in a rapidly globalizing world. English learning is an important subject for students in junior high school, as it lays the foundation for their future academic and professional success. Mastering English means that students have high proficiency, as they already have the background knowledge (Armea et al., 2022). Students' capacity to understand and remember new material is greatly influenced by their background knowledge when learning a language. Background knowledge refers to the information students already know about a particular subject, which helps them relate new concepts to existing mental frameworks. In English language learning, this knowledge includes vocabulary, grammar, cultural contexts, and prior experiences with language use. Students who possess a more substantial background knowledge can comprehend and apply new language concepts more effectively, which contributes to improved language acquisition outcomes (Smith et al., 2021). At this stage, students are expected to possess English skills in accordance with the Kurikulum Merdeka standards.

The student-centered approach of Kurikulum Merdeka also suggests that teachers should help activate and expand students' existing knowledge to foster deeper understanding and enhance learning outcomes (Ramadhan et al., 2024). However, based on the results of the preliminary study at SMP Negeri 7 Gunungsitoli, a significant difference was revealed between expectations and reality. Several problems are experienced by these students in learning English, including limited background knowledge in English, inadequate vocabulary mastery, low participation and self-confidence, and poor achievement of English learning competencies in the areas of listening, speaking, reading, viewing, writing, and stating, according to constructivist theories of learning that emphasize the importance of constructing new knowledge on prior understanding, highlighting the need for tools such as concept maps to organize and connect information effectively (Efgivia et al., 2021).

Concept mapping is a powerful tool for facilitating meaningful learning by helping students organize and integrate new knowledge into their existing background knowledge (Prasetya & Hirashima, 2022). They argue that concept maps serve as external representations of a learner's cognitive structure, enabling them to visualize relationships between concepts, which is crucial for effective learning. Therefore, to overcome the aforementioned problems, a tool is needed to help learners master English, particularly in enhancing their English background knowledge. Several previous research implementations have utilized the concept mapping approach. Structured concept mapping strategy has value in enhancing both educational outcomes and student engagement in learning (Prasetya et al., 2022). Their study revealed that the experimental group achieved significantly better results in terms of proposition quality and structural map scores compared to the control group. Similarly, concept mapping serves as a promising pedagogical approach in EFL contexts, as it enhances reading comprehension, promotes positive attitudes toward learning, and fosters the development of critical thinking skills (Andoko et al., 2020).

The application of concept mapping is further supported as an effective technique to reduce cognitive load, enhance comprehension, improve information retention and knowledge transfer, and connect new ideas with existing knowledge (Redhana et al, 2021). Concept

mapping has been highly effective in enhancing academic performance among international students, demonstrating its usefulness as a strategy for active learning and improved pedagogical practices (Ullah et al., 2021). Previous studies have demonstrated the effectiveness of concept mapping in enhancing educational outcomes, student engagement, reading comprehension, and critical thinking skills across various disciplines and learning environments. However, significant gaps remain regarding its application in developing English background knowledge, particularly for middle school students in rural contexts, such as SMP Negeri 7 Gunungsitoli. Existing research has primarily focused on general or advanced educational settings, resulting in a lack of practical, scalable models tailored to students with limited English proficiency and constrained resources. Furthermore, little attention has been given to integrating concept mapping techniques with Indonesia's Kurikulum Merdeka standards to address specific educational challenges in these contexts.

Research highlights the crucial role of background knowledge in language acquisition. Background knowledge enables learners to link new language input with their existing mental frameworks, thereby promoting deeper comprehension and long-term retention (Tarlani-Aliabadi et al., 2022). This underscores the importance of background knowledge in facilitating an effective second-language learning process. Learners' background knowledge constitutes the most crucial factor in determining the effectiveness of the learning process (Tian et al., 2020). His theory emphasizes the importance of connecting new knowledge to an individual's existing cognitive structure, which directly relates to the role of concept mapping in enhancing students' background knowledge. Teachers must employ effective teaching strategies when teaching English, particularly in addressing challenges related to differences in students' knowledge backgrounds (Rahmawati & Jamil, 2021). In line with this, teachers need to incorporate approaches that foster critical and independent thinking in students, while also providing constructive feedback that enhances their learning motivation (Mirza & Jabeen, 2024).

Based on the problem above, researchers developed Concept Mapping as a strategy that incorporates the elements proposed by the experts mentioned above. The initial prototype or old version of the concept mapping product on students' English language background knowledge was developed based on stages and includes three elements: meaning is conveyed by the spacing of concepts, the structure of the concepts, such as a hierarchy or cycle is clear, and connections between concepts are explicit and purposeful (Sundar, 2022). Concept mapping enables students to visually organize and relate linguistic elements, drawing on their background knowledge, thereby strengthening their English language competence. Therefore, the objectives of the research are to develop the Concept Mapping Strategy to enhance eighth-grade students' English background knowledge at SMP Negeri 7 Gunungsitoli and examine the quality of the developed concept mapping strategy in terms of effectiveness, feasibility, and practicality.

LITERATURE REVIEW

Developing

Developing, in general, refers to a pattern of growth or gradual change, encompassing diverse and varied elements. It is described as a tool that enables people to reach their

highest level of abilities by granting freedom of action, encompassing economic, social, and family aspects (Gustiani, 2019). From the definitions given above, it can be inferred that developing is a process involving the activation of resources, expansion of opportunities, and application of scientific principles to achieve progress and practical benefits.

Concept Mapping Strategy

Joseph Novak first proposed idea mapping in 1972 as a way to expand concept learning in science classes (Salehi et al., 2023). Concept maps, which are frequently displayed in a node-link-node style, are visual organizers or representations of knowledge (Sundar, 2022). They are made up of ideas, which are usually enclosed in boxes or circles of some sort, and the relationships between ideas, which are represented by a line joining two ideas. The words on the line, sometimes referred to as connecting words or linking phrases, define the relationship between the two concepts (Daboer et al., 2022). Concept mapping is a process that facilitates the creation of connections between concepts and their relationships (Ullah et al., 2021). The foundation of concept mapping lies in Ausubel's meaningful learning theory, which proposes that learning involves identifying an individual's existing knowledge framework and understanding how the concepts within it relate to one another as well as to new information (Boss et al., 2024).

The instructional design philosophy of concept mapping includes teaching objectives, steps, and strategies, which also serve as the guiding principle of teaching design (Wang, 2019). It provides a structured way for learners to organize and integrate knowledge, making abstract information more accessible and meaningful. As a pedagogical tool, concept mapping encourages active learning, critical thinking, and collaboration—key components in learner-centered education. Concept mapping puts this idea into practice by enabling students to organize and visualize their prior knowledge and its connections to new concepts. According to previous literature, an earlier version of the concept mapping product for students' English background knowledge was developed in stages and incorporates three main elements: 1) meaning conveyed through the spacing of concepts; 2) clear concept structures, such as hierarchies or cycles; and 3) explicit and purposeful relationships between concepts (Castaneda & Cuellar, 2020).

Concept mapping models emphasize the importance of organizing concepts in a way that enhances students' comprehension and retention of knowledge. Additionally, the structured representation of concepts allows students to establish meaningful connections, facilitating more profound understanding and critical thinking in language learning (Sundar, 2022). However, focusing questions on the mapping concept is the most important and primary aspect that aims to elicit background knowledge (Silva et al., 2022). Additionally, in concept mapping, ordering these concepts from general (above) to specific (below) in a hierarchical structure is crucial. By integrating focused questions, students are encouraged to think critically and actively retrieve relevant knowledge, making the learning process more dynamic and meaningful. Three essential components are necessary for effective mapping:

1. Concept spacing conveys meaning; two closely related concepts are positioned in proximity to one another. Consider the example of a family tree (Sundar, 2022).

2. The notions' hierarchy or cycle, for example, is evident. Many concept maps, for instance, read from top to bottom, beginning with the most general or expansive subject and working down to the specifics (Sundar, 2022).
3. Concepts are connected intentionally and clearly. These are shown as directed arrows with linked labels in idea mapping (Sundar, 2022).

It is necessary to know the main parts of a concept map, including nodes, linking verbs, proportions, and hierarchy, to create a good concept map of a subject or topic. Nodes: Concept mapping is a knowledge graph in which the network between concepts is shown graphically. These concepts are illustrated within various geometric shapes, including rectangles, squares, and circles. These are called nodes. Linking Verbs: To show the relationship between concepts, we use linking phrases such as 'gives,' 'rise to,' 'result in,' 'links to,' and 'involve.' Links between concepts can be unidirectional, bidirectional, or unidirectional. Proposition: Work to make the meaning of linking verbs clearer. Hierarchy: In concept mapping, information is arranged in descending order of importance. This sequence of organizing information can be organized in any order, horizontal or vertical (Yadav & Chaurasia, 2023). The implementation of the concept mapping strategy involves six structured steps, which can be effectively integrated with the instructional design framework to support meaningful learning (Sundar, 2022).

The first step is to identify the Focus Question, where the teacher sets a central theme or problem that guides the entire mapping process. This aligns with the recommendation to define clear instructional goals and determine essential concepts at the beginning of instruction. The second step is to Identify Key Concepts, in which teachers and students collaboratively extract important terms or ideas from instructional content. This step corresponds with the preparation where teachers analyze the textbook and select key terms that students must learn. The third step, Organize Concepts, requires students to arrange the identified concepts from general to specific. This organization is often scaffolded through visual aids and teacher guidance, ensuring students understand the relationships among concepts—an approach also emphasized through the use of hierarchy mapping, spider mapping, and mind mapping. The fourth step is to create a Preliminary Concept Map, where students begin constructing their maps, initially in groups. Cooperative learning is recommended at this stage because it encourages group collaboration, fostering creativity and peer learning (Wang, 2019).

The fifth step involves revising the concept map, where students engage in reflection, receive feedback, and refine their work through peer review and iterative redrawing of the concept map to enhance conceptual clarity and understanding. Finally, the sixth step is Finalize and Share the Concept Mapping, where students present their work to peers or the class, facilitating discussion and reinforcing learning through articulation. Based on the opinions of several experts above, Concept Mapping can be concluded as a teaching strategy that organizes and represents knowledge visually through a node-link-node format. An effective concept map requires a thoughtful arrangement, clear connections, and the use of appropriate symbols and structures to represent relationships and organize knowledge in a meaningful way visually. By using concept mapping, students are encouraged to integrate their existing background knowledge with new information, forming a cohesive visual representation of their learning. Constructing these maps enables students to identify

relationships between prior knowledge and newly acquired information within specific content areas.

Definition of Background Knowledge

The text-based approach to improving students' understanding consists of four stages: (1) Building Knowledge of Field (BKOF), (2) Text Modeling (MOT), (3) Joint Construction of Text (JCOT), and (4) Independent Construction of Text (ICOT). In the BKOF stage, teachers play a key role in developing students' background knowledge to help them comprehend the topic to be written about or discussed. This suggests that students require prior knowledge, which is then further developed through teacher facilitation (Triastuti & Riaz, 2020). In general, the terms prior knowledge and background knowledge are interchangeable. Simple academic facts that are necessary to acquire knowledge are significantly less complex than background knowledge, often known as earlier or prior knowledge. Background knowledge originates from various cultural and environmental factors, including social and physical contexts, socioeconomic status, as well as cognitive and physical capacities (Ge et al., 2021).

The term "background knowledge" describes the knowledge that kids pick up and retain in their minds about things, other people, themselves, and their surroundings. As children develop their oral language skills and engage in literacy activities, their prior knowledge facilitates a deeper understanding of new concepts and information (Smith et al., 2021). Background knowledge encompasses both factual knowledge, such as information about the world, and conceptual knowledge, including understanding how concepts are interrelated (Soto et al., 2019). In the learning context, it enables students to make sense of new information by linking it to their prior knowledge, thereby promoting more profound understanding and long-term retention (Kaefer, 2020). Based on the definition above, it can be concluded that Background knowledge refers to the information, experiences, and understanding that individuals already possess prior to learning new content. It serves as the foundation upon which new knowledge is built.

Kinds of English Background Knowledge

Recent research has identified several key types of background knowledge that are essential for English language learners:

1. Linguistic Knowledge: This encompasses understanding the structural aspects of the English language, including phonology, morphology, syntax, semantics, and pragmatics. A solid grasp of these elements enables learners to comprehend and produce language accurately (Crawford & Gross, 2019).
2. Content Knowledge; familiarity with the subject matter or topics discussed in English texts is crucial. This type of knowledge allows learners to make sense of new information by connecting it to what they already know, thereby enhancing comprehension (Nind, 2020).
3. Vocabulary knowledge: refers to learners' familiarity with English words and their meanings, which represents a core component of background knowledge in English. This includes both basic vocabulary and academic vocabulary. Basic vocabulary consists of high-frequency words used in daily communication, such as eat, run, house, and family, which serve as the foundation for general language use and interaction. Meanwhile,

academic vocabulary encompasses words frequently encountered in educational contexts, such as analyze, summarize, evaluate, interpret, and compare. These terms are essential for comprehending academic texts and completing learning tasks effectively (Zhang & Zhang, 2022).

These types of background knowledge are interrelated and collectively contribute to a learner's ability to understand and use English proficiently. Educators can enhance language acquisition by assessing and building upon these areas of knowledge in their instructional practices.

METHODS

This research aims to develop a concept mapping strategy to enhance students' English background knowledge at SMP Negeri 7 Gunungsitoli. The trial process and implementation of this development product were carried out on eighth-grade students from this school, totaling 20 students in class VIII-A. This research employs the Research and Development (R&D) method, a systematic approach commonly used in educational research to create and evaluate educational products and services. R&D involves the creation of new products or the generation of new knowledge to improve existing processes, which are then applied to enhance educational materials or practices.

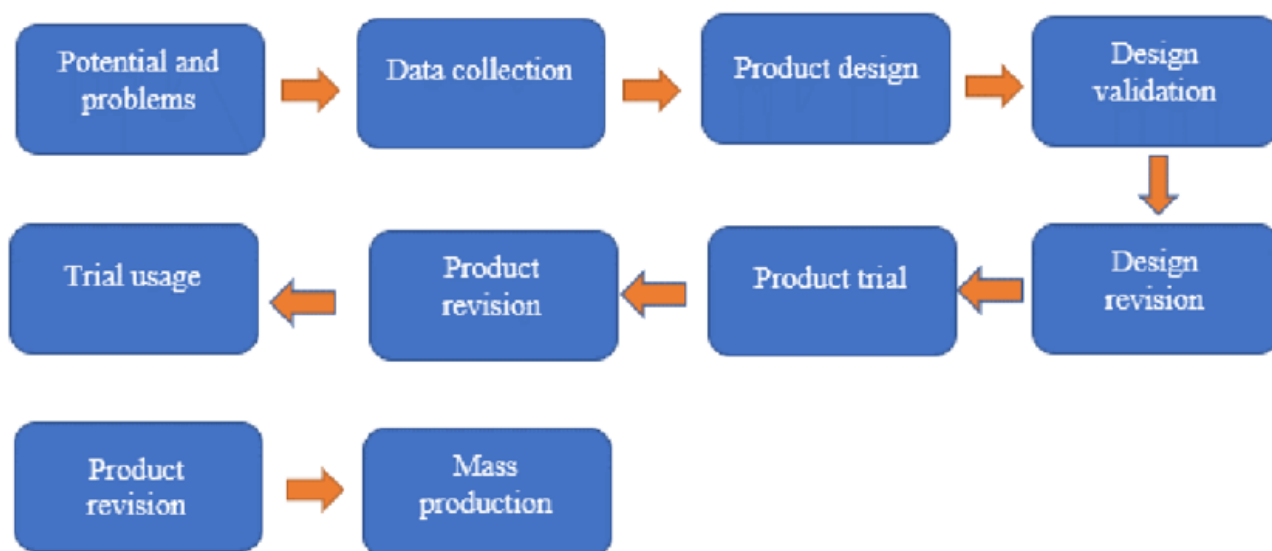


Figure 1. R&D Steps in General
Source: Radyuli et al., 2022

This research adopted the ADDIE model as a procedure for developing a concept mapping strategy to enhance students' English background knowledge (see **Figure 1**). The ADDIE model is a methodical framework that includes the stages of Analysis, Design, Development, Implementation, and Evaluation. The ADDIE model is a traditional curriculum design approach widely used in education and training, both domestically and internationally. Its steps are seen to be essential for creating a curriculum that works. In Implementation, teaching will be carried out in accordance with the flow of learning objectives, with collaboration from subject teachers to apply concept mapping to learning activities. The

Classroom Action Research (CAR) approach will be used to implement products through four cycles: planning, action, observation, and reflection. Classroom action research is an activity conducted to observe events in the classroom over several periods or cycles, utilizing contextual methods. This means that the variables to be understood are always related to the conditions of the classroom itself.

This research employs observation, interviews, and questionnaires to collect the data. Observation will be employed to obtain qualitative data related to the learning process, namely by directly witnessing and recording student behavior and interactions during the learning process. Observation is a method of obtaining data by watching people, events, or physical characteristics as they naturally occur. Interviews are a qualitative method of gathering data in which researchers ask participants open-ended questions to elicit thorough answers regarding their experiences, viewpoints, or perceptions. This method determines the feasibility of the product under development. The sources of the interview were English teachers and 8th-grade students at SMP Negeri 7 Gunungsitoli. A questionnaire is a tool for collecting data that consists of a list of questions intended to gather information from participants systematically. The questionnaire used in the development process consists of an expert validation questionnaire, involving material experts, media experts, and language experts. Analyze the data following the steps: data collection, reduction, data display, conclusion, and verification. The researchers ensure a thorough and reliable analysis of the effectiveness, practicality, and feasibility.

RESULTS AND DISCUSSION

Analysis Result

At this stage, the researcher identified problems related to students' needs in learning the English language. The researchers conducted a preliminary study and interviews with English teachers to gather information related to students' background knowledge and the learning strategies they applied. Observations and interviews were conducted at SMP Negeri 7 Gunungsitoli. Based on the observations, it was found that most students still have a low level of background knowledge in English. The results of interviews and observations suggest that an interactive, sequential, and graphical approach should be employed to support the development of students' background knowledge in learning English. The results of this analysis indicate an urgent need to develop learning strategies that can:

1. Enhance students' background knowledge systematically.
2. Help students understand concepts through visualization and grouping of information.
3. Increase students' active participation and involvement in the English learning process.

Therefore, the development of a Concept Mapping strategy is considered appropriate to answer these problems. The Concept Mapping strategy was designed in the form of printed materials, adapting to the Concept Mapping model and aligned with Kurikulum Merdeka (Sundar, 2022). The adaptation was made in accordance with the learning competencies outlined in the English for Nusantara textbook used by eighth-grade students at SMP Negeri 7 Gunungsitoli, with an emphasis on the "Say What You Know" section in each unit. This strategy is an effective tool for enhancing background knowledge with new material, building students' understanding, and increasing their confidence in learning the English language.

Design Result

At the design stage, the researchers began to design a Concept Mapping strategy as a learning product. The design was carried out based on the results of needs analysis and principles in the ADDIE development model. It was aligned with the Kurikulum Merdeka and the English for Nusantara book. The product form is made in accordance with ISO standards (content size: A4/210 x 297 mm), using textbook paper. The number of content pages is 37. Images and materials are displayed using the Canva application. The media is designed in the form of printed material containing guidelines for implementing the Concept Mapping strategy in the classroom. The design of this media is informative yet straightforward, featuring an attractive visual structure and an easy-to-use interface. The product form is made in accordance with ISO standards (content size: A4/210 x 297 mm), using textbook paper. The number of content pages is 37. Images and materials are displayed using the Canva application.

Develop Result

The development stage is a continuation of the design stage in the ADDIE model. At this stage, the initial product designed is then validated by experts, revised based on the input received, and tested on a small group of students to assess the effectiveness of the initial product. This activity aims to ensure that the product being developed is feasible to use. The cover design of the book can be seen in the following **Figure 2**.



Figure 2. Initial Cover Design of the Book
Source: researchers' product

The validation process was conducted by three validators, comprising material experts, media experts, and language experts. Each provided an assessment of certain aspects of the product, both in terms of content, visual appearance, and language use. The validation results from the material expert showed consistently high scores across all assessed aspects. The product was considered fully compliant with the learning objectives, accurate in terms of content, updated with relevant information, and encouraging for student learning. Each criterion received a percentage of around 100%, resulting in an overall score of 92.5%, which falls into the outstanding category. It is known that, from all aspects of the assessment, the aspect with the highest feasibility percentage is the suitability of the material to the Basic Competencies, the depth of the material, the accuracy of the terms, and the ability of the material to encourage students' curiosity.

The media expert's validation results also showed excellent quality. The developed product received high ratings in terms of design layout, visual clarity, and ease of use. Each criterion received a nearly perfect percentage, contributing to an overall score of 97.5%, which is categorized as very good. This demonstrates that the media aspects of the concept mapping product, such as its appearance and accessibility, were judged to be highly effective in supporting students' learning. Meanwhile, the language expert's assessment confirmed the appropriateness of the language used in the product. Criteria such as grammatical accuracy, clarity of instructions, and readability were rated very well. The overall percentage achieved was 95%, which belongs to the outstanding category. This indicates that the language aspects of the product are clear, accurate, and well-suited to the comprehension level of eighth-grade students.

Implementation Result

Based on the implementation of cycle I, the description of the research results is as follows.

1. Some students were not yet accustomed to using concept mapping and needed more guidance in organizing ideas visually.
2. Some students still had difficulty understanding instructions and choosing the right words to fill in the concept mapping branches.
3. The results of students' concept mapping did not describe the relationship between ideas in a complete and structured manner.

In Cycle II, students were more prepared and understood the steps to create a concept map. The researchers again provided focus questions, and students were asked to complete the concept mapping template based on the topic being studied. The results in Cycle II showed improvements.

1. Students were more active in discussing and helping each other in compiling concept mapping.
2. The contents of the concept mapping became more complete, with the use of vocabulary that was more contextual.
3. Most students were able to explain the contents of their concept mapping in front of the class with confidence.
4. The teacher stated that this strategy was very helpful in activating students' prior knowledge and making learning more meaningful.

Using the Concept Mapping Strategy, students were required to produce a concept map for each cycle based on the lessons they had learned. The following table presents the results of concept mapping by 20 students.

Table 1. Result Concept Mapping of Students

	Score Cycle 1	Score Cycle 2	Improvement
Total	336	532	196
Mean score	16.8	26.6	9.8
Percentage	60%	95%	35%
Category	Good	Excellent	Increase

Source: Processed by researchers 2025

This improvement confirms that the Concept Mapping Strategy is not only effective in helping students activate and connect their background knowledge, but also in promoting more profound understanding and better conceptual organization in English learning. Therefore, the use of this strategy can be considered very effective and recommended for further teaching practice.

Evaluation Result

The evaluation was conducted by comparing the results of the test in Cycle I and Cycle II for students who received the test before and after using the Concept Mapping Strategy. This test aims to measure the increase in students' background knowledge of English learning topics. The results of the students' test are presented in **Table 2**.

Table 2. Result of Test

	Score Cycle 1	Score Cycle 2	Improvement
Total	1235	1630	395
Mean score	61.75	81.5	19.75
Percentage	61.75%	81.5%	19.75%
Category	Not Completed	Completed	Increase

Source: processed by researchers 2025

Additionally, questionnaires have been distributed to students and teachers to assess the practicality of the developed products. The results of students' practicality and teachers' practicality can be seen in the following table.

Table 3. Students' Questionnaire Distribution

Aspect	Mean Score (Max 4)	Percentage	Interpretation
1. Clarity of Instructions	3.70	92.5%	Very Practical
2. Ease of Use			
3. Visual Display			
4. Relevance to Background Knowledge			

Aspect	Mean Score (Max 4)	Percentage	Interpretation
5. Student Activation and Engagement			
6. Understanding the Material			
7. General Practicality			

Source: Processed by researchers 2025

Table 3 shows that the mean score of the students' questionnaire is 3.70, with a percentage of 92.5%, and an interpretation of "Very Practical".

Table 4. Teachers' Questionnaire Distribution

Aspect	Mean Score (Max 4)	Percentage	Interpretation
1. Ease of Use			
2. Clarity of Guide			
3. Time Efficiency			
4. Curriculum Suitability			
5. Student Activation and Engagement	3.90	97.5%	Very Practical
6. Increased Understanding			
7. Reusability			
8. General Practicality			

Source: Processed by researchers 2025

Table 4 shows that the mean score of the teachers' questionnaire is 3.90, with a percentage of 97.5%, and an interpretation of "Very Practical". The English teacher was also asked for their opinions regarding the effectiveness and ease of using the strategy in the learning process. The interview results showed that:

1. The teacher considered that Concept Mapping was very helpful in activating knowledge and opening up meaningful initial discussions.
2. This strategy was easy to use and in accordance with the Kurikulum Merdeka.
3. The teacher suggested that this strategy be continued for the following topics because it can be used as an initial assessment tool and mapping of students' learning needs.

Based on the evaluation results conducted through test analysis, student response questionnaires, and teacher interviews, it can be concluded that this development has proven effective in enhancing the background knowledge of grade VIII students in learning English. The use of concept maps helps students think more structurally, understand the relationship between ideas, and connect personal experiences with subject matter visually and contextually. Teachers also provided positive feedback on the practicality and usefulness of the product, suggesting that this strategy be continued for other topics. Therefore, the Concept Mapping Strategy is considered feasible, practical, and can be widely applied as an initial strategy in English learning based on the Kurikulum Merdeka.

Discussion

The research findings show that the creation and application of the Concept Mapping Strategy greatly enhanced students' background knowledge, comprehension, and engagement in

learning English. This is consistent with Ausubel's theory of meaningful learning, which asserts that new knowledge is most effectively acquired when it is meaningfully connected to prior knowledge (Tian et al., 2020). By engaging students in structured mapping activities, the strategy helped them connect existing mental frameworks with new material, thereby facilitating meaningful learning rather than rote memorization. The increase in students' concept mapping scores and test performance is consistent with the view that concept maps function as external representations of learners' internal knowledge structures (Evans & Jeong, 2023). The visual connections enabled learners to organize information better and identify relationships between linguistic elements, which is essential in language acquisition.

Furthermore, the increased classroom participation observed during Cycle II aligns with the principles of constructivist learning theory, which posits that learners actively construct new knowledge based on their prior experiences (Efgivia et al., 2021). Concept mapping provided a collaborative and interactive medium for students to construct knowledge, supporting the student-centered approach of the *Kurikulum Merdeka*. The findings also align with previous studies that highlight the benefits of concept mapping in EFL contexts. For example, the effectiveness of concept mapping in improving comprehension and critical thinking has been demonstrated, while its role in reducing cognitive load and enhancing retention has also been emphasized (Redhana et al., 2021). In this study, similar results were seen as students became more confident in presenting their concept maps and applying contextual vocabulary. Most importantly, this research demonstrates that concept mapping is more than just a graphic organizer; it is a pedagogical tool that holistically supports three critical dimensions of learning:

1. **Enhancing Students' Background Knowledge:** The strategy activates prior knowledge through structured prompts and visual mapping. This helps bridge the gap between students' existing mental frameworks and new material, addressing a key barrier in rural EFL contexts.
2. **Improving Students' Understanding:** Students use higher-order thinking skills to analyze, synthesize, and evaluate knowledge rather than just passively absorbing it when they see the connections between ideas. This aligns with cognitive constructivist principles, resulting in more profound and more lasting learning.
3. **Increasing Students' Engagement:** The collaborative, creative, and visually driven nature of concept mapping encourages students to participate actively. They gain ownership of their learning process, which boosts confidence, motivation, and willingness to communicate in English.

In conclusion, the developed Concept Mapping Strategy has proven to be an effective and practical instructional tool, particularly suited for enhancing English background knowledge among junior high school students. It promotes meaningful learning, supports curriculum goals, and creates a more engaging and empowering classroom environment.

CONCLUSION

Based on the research result above, it can be concluded that the concept mapping strategy was successfully developed as a structured and visually engaging tool that helps students to enhance their background knowledge in English. The strategy includes focus questions,

concept templates, and contextual topics adapted from the English for Nusantara textbook. It enhances students' background knowledge, supports deep understanding, and increases classroom engagement, all of which are essential for effective English language acquisition. The development process ensured the strategy was feasible, aligned with curriculum standards, and practical for classroom use, as reflected in the expert validations and positive responses from both students and teachers. These outcomes indicate that concept mapping is not merely an instructional tool but a meaningful learning strategy that supports deep learning and knowledge construction in line with the Kurikulum Merdeka. Future research may explore the application of the Concept Mapping Strategy in other areas of English language learning, such as writing and speaking skills, across different educational levels, or in digital formats to enhance technology-integrated instruction. Further research can be conducted to expand the implementation of the Concept Mapping Strategy in other language skills (e.g., writing, speaking), across different grade levels, or to integrate digital versions of concept mapping to support technology-based learning.

AUTHOR'S NOTE

The author declares that there is no conflict of interest regarding the publication of this article. The author confirms that the data and content of the article are free from plagiarism.

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