

CHAPTER IV

RESULT AND DISCUSSION

4.1 Result of Research and Development

This research aims to develop a Concept Mapping strategy to enhance the background knowledge of English for eighth grade students at SMP Negeri 7 Gunungsitoli. The developing of Concept Mapping strategy in this research is very appropriate to use based on the validation results of media expert, material expert and language expert. Its development follows the ADDIE model which includes five stages: Analysis, Design, Development, Implementation, and Evaluation. The stages of designing and developing this Concept Mapping strategy can be described as follows:

4.1.1 Analysis Result

At this stage, the researcher identified problems related to students' needs in learning English. The researcher conducted analysis needs through preliminary study and interviews with English teacher to obtain information related to students' background knowledge and the learning strategies applied. Observations and interviews were conducted at SMP Negeri 7 Gunungsitoli.

Based on the results of the observations it was found that most of students still have low background knowledge of English. This can be seen from the lack of students' understanding of basic vocabulary, difficulty in connecting new information with previous knowledge, and low students participation in the learning process. Students appear passive, lack confidence, and tend to rely on teachers to understand the material. The following table presents the results of observations in classroom.

Table 4.1 Result of Observation

Observation Information	
Class	: VIII-B
Location	: SMP Negeri 7 Gunungsitoli
Subject	: English
Day Date	: Saturday, November 16 2024
Time	: 10.00 WIB – 11.00 WIB

No.	Aspect	Indicator	Yes (✓)	No (✗)	Description
1.	Students' Background Knowledge	Students are able to respond the basic English questions using vocabulary they already know.		✗	Most students hesitate and are unsure when asked simple questions like "Say what you know in this topic?"
		Students show familiarity with common vocabulary related to the topic.		✗	Vocabulary recognition is weak, especially with basic nouns and verbs.
2.	Vocabulary Mastery	Students understand and correctly use English vocabulary in context.		✗	Many students do not understand key vocabulary used in the lesson text.
		Students struggle to recall simple words and their meanings.	✓		Students often pause or remain silent when asked to translate basic words.
3.	Engagement in Learning	Students actively participate in class discussions or activities.		✗	Participation is low; most responses come from a few active students.
		Students appear passive, disengaged, or hesitant to respond in English.	✓		The majority of the students to speak up unless directly called upon.
4.	Confidence in Expressing Ideas	Students voluntarily answer questions in English.		✗	Almost no students raise hands to answer voluntarily.
		Students show reluctance or fear when speaking in English.	✓		Many laugh nervously or avoid eye contact when asked to speak.
5.	Ability to Connect Concepts	Students are able to relate new material with background knowledge.		✗	Students struggled to identify similarities between previous topics and the current lesson.
		Students struggle to understand the main idea or connection between topics.		✗	Teacher had to explain several times with repetition.
6.	Use of Learning Tools	Learning materials used are helpful in supporting understanding (e.g., visual aids).		✗	Materials used were only textbook-based; no supporting visuals were provided.
		Teacher uses strategies (e.g., mapping/visuals) to enhance comprehension.		✗	No visual tools like concept mapping were observed during the lesson.

In addition, from the report of the interview results with the English Teacher, it was also obtained that the learning process is still at the level of dominance of conventional methods based on textbooks without the use of

strategic media and visuals such as concept mapping that can help students understand the relationship between concepts more clearly. The teacher also said that she had never used strategic concept mapping in a structured way in teaching and learning activities, although this method is believed to be able to help students organize information and improve their understanding. The results of interviews with English teacher was presented in the following table.

Table 4.2 Result of Interview with English Teacher

Teachers' Identity			
Teacher's Name : Titian Hepi Gea, S.Pd. NUPTK : 4936773674230242 Location : SMP Negeri 7 Gunungsitoli Subject : English Day/Date : Saturday, November 16 2024 Time : 09.00 WIB – 10.00 WIB			
No.	Aspect	Question	Response
1.	General Information	How long have you been teaching English?	I have been teaching English for about 5 years at the junior high school level. Especially at SMP Negeri 7 Gunungsitoli for about 2 years.
		How do you assess the students' overall background knowledge in English?	In general, most students have low background knowledge, especially in vocabulary knowledge and contextual understanding. Their comprehension is weak, and they often have difficulty connecting previous knowledge with new material.
2.	Teaching Strategies and Challenges	What teaching strategies do you commonly use to teach English?	I usually use a combination of reading comprehension, vocabulary development, and text-based approaches such as BKO, MOT, JCOT, and ICOT as recommended in the <i>Kurikulum Merdeka</i> .
		What are the main challenges you face in enhancing students' English background knowledge?	Students have limited exposure to English in the classroom, lack motivation, and have difficulty remembering new vocabulary. Some also lack confidence to express their ideas in English.
		Have you tried using concept mapping as a teaching strategy? If yes, how effective was it?	I have heard of it but have not implemented it systematically. However, I believe it could be very useful to help students link background knowledge with new concepts in a visual way.
3.	Recommendations	In your opinion, what strategies could be implemented to improve	I think using visual aids like concept mapping, mind maps, and real-life context activities would

		students' English background knowledge?	help students connect their learning and retain information better.
		What kind of support do you think would help enhance your teaching strategy?	Training on interactive and student-centered strategies like concept mapping, and availability of practical teaching tools, modules, or guidance book aligned with the curriculum would be very helpful.

The results of interviews and observations indicate that an interactive, sequential, and graphical approach should be used to support the formation 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 developing of a Concept Mapping strategy is considered appropriate to answer these problems. Concept Mapping strategy was designed in the form of printed materials, adapting to the Concept Mapping model of Kripa Sundar (2022), and aligned with Kurikulum Merdeka. The adaptation was done in accordance with the learning competencies of the English for Nusantara textbook used by eighth grade at SMP Negeri 7 Gunungsitoli students, with an emphasis on the "Say What You Know" section in each unit. This strategy is an effective tool in enhancing background knowledge with new material, building students' understanding and students' confidence in learning English.

4.1.2. Design Result

At the design stage, the researcher began to design a Concept Mapping strategy as a learning product that aims to enhance students' background knowledge in learning English, especially in eighth grade students at SMP Negeri 7 Gunungsitoli. The design was carried out based on the results of the needs and analysis of principles in the ADDIE development model, and was aligned with the Merdeka Curriculum and the

English for Nusantara book. Product design includes three main components: media design, material content, and preparation for validation testing by experts.

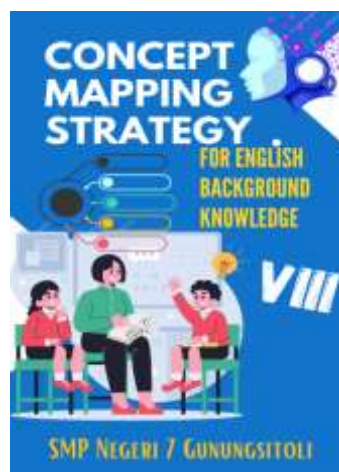
a. Media Design

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 made simple but informative, with an attractive visual structure and easy to use. The product form is made in accordance with ISO standards (content size A4/210 x 297 mm), textbook paper, the number of content pages is 37 pages, images and materials displayed using the Canva application.

Some features of media design:

1. The main colors used are blue and white, with modern graphic elements to enhance readability and visual appeal.
2. Each page contains a unit title, focus question, concept mapping template, and examples of filling in that are appropriate to the context of the topic.
3. The design follows the principle of visual clarity, namely using connecting lines, node shapes (boxes, ovals), and labels (linking words) that are easy to read.

The initial cover design of the book can be seen in the following image:



Picture. 4.1 Initial Cover Design of the Book

b. Content Design

The content design is based on English for Nusantara grade VIII, and focuses on the beginning of each unit, namely "Say What You Know". The purpose of the content is to help students relate personal experiences as background knowledge to learning topics through visual concepts. The initial design of the contents contained is outlined in the Table of Contents as follows.

1. Preface
2. Tabel of Contents
3. Introduction
 - a) Background
 - b) Purpose of developing
 - c) Benefit of product
 - d) Scope of Material
4. Theoretical Review
 - Concept Mapping
 - a) Definition of Concept Mapping
 - b) Elements of Concept Mapping
 - c) Advantages of Concept Mapping
 - d) Concept Mapping as Teaching Strategy
 - e) Characteristics of Effective Concept Mapping
 - Background Knowlegde
 - a) Definition of Background Knowledge
 - b) Function of Background Knowledge
 - c) Kinds of Background Knowledge
 - Concept Mappping Students' English Background Knowledg
- 5.. Implementation Concept Mapping Strategy
 - Initial instructions
 - Example of opening activity
 - Steps to make Concept Mapping
 - Concept Mapping template
6. Asessment Rubric

There are several important elements in the Concept Mapping Strategy Implementation section explained in the following table.

Table 4.3 Elements in the Concept Mapping Strategy Implementation

Elements	Description
Focus Question	Each unit begins with a trigger question that prompts students to recall previous experiences or knowledge. Example: “What do you usually do on Independence Day?”
Steps to make Concept Mapping	Explained systematically through the six stages: 1. Focusing 2. Brainstorming 3. Organizing 4. Layout 5. Linking 6. Revising
Concept Mapping Templates	There are 9 concept mapping templates, each tailored to a theme in Units 1–3 of Chapter 1–3. Themes such as Independence Day, Parade, Kindness, Friendship, and Environmental Action are developed into visual structures.
Example of Strategy Implementation	Each unit is accompanied by examples of concept mapping content based on student experience or possible students’ responses. Contextually arranged and close to student life and helps in developing critical thinking and language skills simultaneously.

The following is a material design adopted from the English Book for Nusantara for the eighth grade.

Table 4.4 Scope of Material in Product

CHAPTER 1 CELEBRATING INDEPENDENCE DAY		
Unit 1 Celebrating Independence Day	Unit 2 Going to a Parade	Unit 3 Congratulations! You Won the Game
Function: Talk about personal experiences in the past.	Function: Identify specific information about personal experiences.	Function: Sequence main events of personal experiences. Write a congratulation card for one’s achievement.
CHAPTER 2 KINDNESS BEGINS WITH ME		
Unit 1 Kindness Towards Differences	Unit 2 Kindness and Happiness	Unit 3 Kindness and Friendship
Function: Connect and sequence events in an imaginative story.	Function: Interpret characters’ action, feelings, and behavior in an imaginative story.	Function: Retell and rewrite an imaginative story.

CHAPTER 3 LOVE OUR WORLD		
Unit 1 Look Around You	Unit 2 This is the Way	Unit 3 Act Now
Function: Ask and give opinion about familiar topics around the school.	Function: Categorize based on the given situation.	Function: Write instructions in posters.

c. Preparation of Validation Product

Before entering the final product development stage, this design is prepared for validation by experts to ensure the appropriateness of the content, appearance, and language. The validation document is prepared in the form of a final product draft and accompanied by an assessment instrument. The validation preparation steps include:

1. Collection of Design Drafts

The complete product in the form of a module is prepared, including a cover, preface, table of contents, supporting theories, teacher guides, examples of concept mapping, and assessment rubrics.

2. Validation Instrument

There are three validation sheets are prepared namely media expert validation, material expert validation, and language expert validation. The instrument for media expert consists of 3 assessment aspects, namely the size of product developed, cover design and design content, which is described in 14 indicators. The instrument for material expert consists of 4 assessment aspects, namely the a compliance of material with core competencies , the accuracy of materials, update of material, encouraging curiosity which are described in 12 indicators. While for the language instrument consists of 5 assessment aspects, namely straightforward, communicative, dialogic and intellectual, suitability to student development, and conformity to language rules which is explained in 10 indicators. The form of scoring assessment for local wisdom-based learning materials uses a Likert scale with 4 criteria, namely very worthy, worthy, less worthy and unworthy.

4.1.3 Develop Results

The development stage is a continuation of the design stage in the ADDIE model. At this stage, the initial product that has been designed is then validated by experts, revised based on the input given, and tested on a small group of students to know the effectiveness of the initial product. This activity aims to ensure that the product being developed is feasible to use.

a. Validation Result

The validation process was carried out by three validators consisting of 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.

1. Material Validation Result

Validation of the material was carried out in some stages, with the validator Mrs. Yasminar Amaerita Telaumbanua, S.Pd., M.Pd. Validation was carried out start on May 8, 2024 until May 20, 2024. Material experts give an assessment relevance to the instrument provided. The results of the validator's assessment are as follows:

Table 4.4 Validation Result of Material Expert

No.	Assessment Aspect	Indicators	Score (1-4)
1	Material Compliance	No. 1–3	4, 4, 4
2	Material Accuracy	No. 4–8	4, 4, 4, 4, 4
3	Material Relevance & Updates	No. 9–10	4, 4
4	Stimulating Curiosity	No. 11–12	4, 4
Total Number			48
Average			4
Percentage			100
Category			Very Worthy

Information :

- 1) $25,00 < x = 43,75$, Unworthy.
- 2) $43,75 < x = 62,50$, Less Worthy.
- 3) $62,25 < x = 81,25$, Worthy.
- 4) $81,25 < x = 100$, Very Worthy.

Based on the validation results from the material expert, Ms. Yasminar Amaerita Telaumbanua, S.Pd., M.Pd., which was conducted on May 8, 2024, a total score of 48 was obtained from a maximum score of 48, with an average value of 4 and a feasibility percentage of 100%. The feasibility category given is "Very Worthy". 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. However, there are suggestions to increase the relevance to the context of everyday life and improve the ability of the material to form questioning skills. The results of Material Expert validation on each aspect can be seen in the following chart:

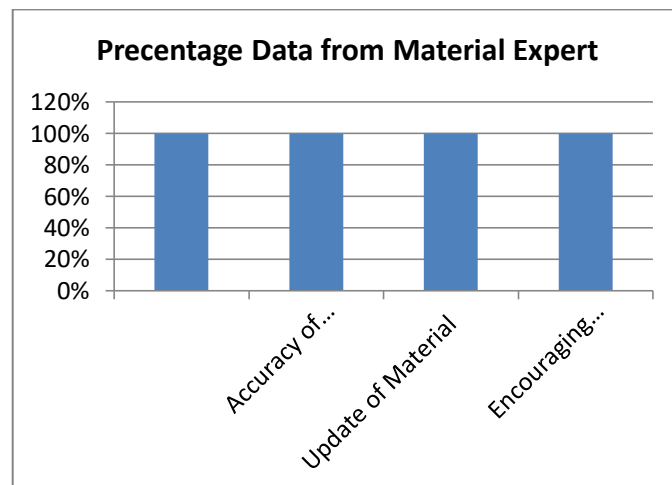


Figure 4.1 Percentage data from Material Expert

2. Media Validation Result

Media validation was carried out by Mr. Trisman Harefa, S.S., M.Pd. which was carried out on May 16, 2024. Media experts provided input on layout, visual consistency, color selection, and clarity of instructions. The results of the validator's assessment are as follows:

Table 4.5 Validation Result of Media Expert

No.	Assessment Aspect	No. Indicators	Score (1-4)
1	Product Size	1–2	3, 3
2	Cover Design	3–9	3, 4, 3, 4, 4, 4, 4

3	Content Design	10–14	4, 4, 3, 4, 3
Total Number			50
Average			3.5
Percentage			89
Category			Very Worthy

Information :

- 1) $25,00 < x = 43,75$, Unworthy.
- 2) $43,75 < x = 62,50$, Less Worthy.
- 3) $62,25 < x = 81,25$, Worthy.
- 4) $81,25 < x = 100$, Very Worthy.

Media validation was carried out by Mr. Trisman Harefa, S.S., M.Pd., on May 16, 2024. The assessment results obtained a score of 54 out of a maximum of 56, with an average value of 3.5 and a percentage of eligibility of 89%, which is also categorized as "Very Worthy". The aspects with the highest scores are layout consistency, letter readability, proportion of shape and size of images, and suitability of illustrations to the material. Meanwhile, the media expert provided important suggestions so that the cover color and layout were made more attractive and harmonious, and not to use too many combinations of fonts so as not to interfere with readability. In addition, it was also noted that the distance between text and images was more proportional. The results of Media Expert validation on each aspect can be seen in the following chart:

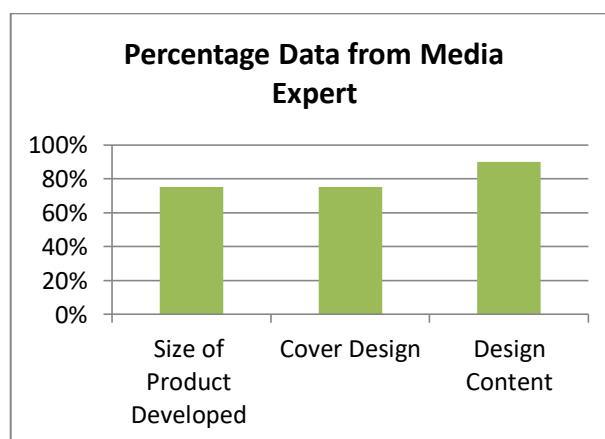


Figure 4.2 Percentage data from Media Expert

3. Language Validation Result

Language validation was conducted by Dr. Yaredi, S.S., M.Si. which was carried out on May 16, 2024. Linguists checked the accuracy of the use of English and Indonesian in the module. The results of the validator's assessment are as follows:

Table 4.6 Validation Result of Language Expert

No.	Assessment Aspect	Indicators	Scores (1-4)
1	Straightforwardness	1–2	4, 4
2	Communicative	No. 3	4
3	Dialogic and Interactive	No. 4–5	4, 3
4	Suitability to Development	No. 6–7	4, 4
5	Language Rule Conformity	No. 8–10	3, 3, 3
Total Number			36
Average			3.6
Percentage			90
Category			Very Worthy

Information :

- 1) $25,00 < x = 43,75$, Unworthy.
- 2) $43,75 < x = 62,50$, Less Worthy.
- 3) $62,25 < x = 81,25$, Worthy.
- 4) $81,25 < x = 100$, Very Worthy.

Language validation was conducted by Dr. Yaredi, S.S., M.Sc., on May 16, 2024. The assessment results showed a score of 36 out of a maximum of 40, with an average value of 3.6 and a feasibility percentage of 90%, included in the “Very Worthy” category. Aspects with the highest scores include sentence structure, language effectiveness, ability to motivate students, suitability to students' intellectual development, and consistency in the use of terms and symbols. Input from the language validator included directing instruction sentences, increasing the suitability of words to the developmental level of junior high school students, and ensuring there were no spelling or typographical errors. The results of Language Expert validation on each aspect can be seen in the following chart:

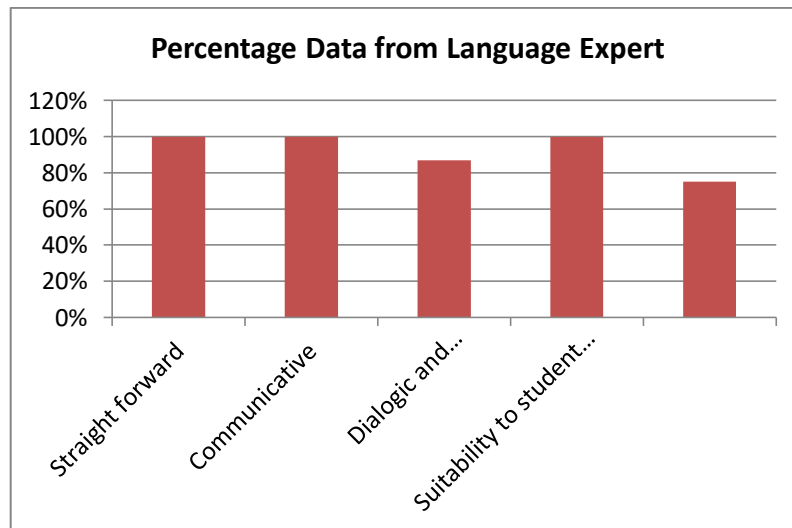


Figure 4.3 Percentage data from Language Expert

b. Product Revision

Based on the validation results conducted by material expert, media expert, and language expert, there are several revisions and improvements. Its purpose is to improve the quality of the content, visual appearance, and clarity of the language used in the product. Each validator provided constructive input according to their field of expertise, which became the basis for refining the product to make it more feasible and effective for use in learning.

1. Revision from Material Expert

After assessing the product of Concept Mapping Strategy, the material expert suggested the following:

- a) Adding one or two topics to be completed (functions and benefits of the product.
- b) Some ungrammatical sentences need to be revised.
- c) Some materials need to complete in certain topics.

2. Revision from Media Expert

Researcher received some suggestions from media experts to improve the visual design and layout of the book. Some of these suggestions include:

- a) Making changes to make it more attractive and eye-catching,
- b) strengthening color contrast on important elements,
- c) Adjusting the font size so that it remains clearly readable in all parts.
- d) One important suggestion from media experts is that the book cover image that originally used animated illustrations be replaced with original photos of students or documentation of ongoing learning activities. The goal is for the media display to look more contextual, authentic, and reflect the real learning atmosphere. Below is the revised cover image:



Picture 4.2 Last Design of Cover

3. Revision from Language Expert

From the results of the validation by language expert, there are several revisions and improvements, namely:

- a) Several sentences in English were found that needed to be simplified to suit the level of understanding of junior high school students.
- b) Several technical terms were also given Indonesian equivalents below them.

- c) The researcher revised the sentence structure in the instructions, clarified the use of linking words, and ensured consistency between English and Indonesian throughout the module.

c. Developmental Testing Result with Small Group Trial

Small group trials are the product trial stage on a small group of students, usually 6-10 students before being applied more widely. This stage aims to see how the product works in a more real but still limited context. The first trial of the Concept Mapping Strategy was carried out in class VIII-B on February 14, 2025. Small group trials were conducted on 10 students studied. Based on the testing of this strategy, students independently found several obstacles when using the product. Researchers found these obstacles based on student comments and complaints when making concept mapping. Researchers found these obstacles in below:

1. Difficulty understanding how to start making a concept mapping
2. Confusion in organizing ideas
3. Limited vocabulary to express concepts in English
4. Difficulty connecting ideas between concepts
5. Lack of confidence working independently

In the small group trial in class VIII-B consisting of 10 students, there were 5 obstacles experienced by students. After knowing the shortcomings in the small group trial, improvements were made to the implementation by conducting a trial on a large group in implementation stage

4.1.4 Implementation Result: Practicality and Effectiveness

After going through the design, the researcher continued to the implementation stage to see how the Concept Mapping strategy can be applied in real life in English learning in class VIII. This stage aims to determine the practicality and effectiveness of using Concept Mapping Strategy to enhancing students' English background knowledge, as well as observing student and teacher responses to the strategy that has been developed.

Similar to what has been explained previously, this study used Classroom Action Research (CAR) with two cycles. In each cycle, a pre-test and post-test were given to measure the success of the Concept Mapping Strategy being developed. In product implementation, the researcher conducted 3 meetings for each cycle. Students studied 2 materials from the two cycles in the English Book for Nusantara from the eighth grade. This implementation stage is a large group trial with a total of 22 students and to test students' practicality. The activities of the research schedule can be seen below:

Table 4.7 Schedule of Research and Development Implementation

No.	Day/Date	Activities	
1.	Friday, February 14, 2025	Cycle 1	Meeting 1: Pre-Test & Introducing of Concept Mapping Strategy
2.	Saturday, February 15, 2025		Pert. 2: Teaching and learning process with Concept Mapping (1 st Material)
3.	Friday, March 7, 2025		Pert. 3 Continuous learning + Test I
4.	Saturday, March 8, 2025	Cycle 2	Pert. 4 Revision and learning (2 nd Material)
5.	Friday, March 14, 2025		Pert. 5 Continuous learning with improving strategy
6.	Saturday, March 15, 2025		Pert. 6 Post-Test & Last Reflection + Test II

a. Finding in the Implementation of Cycle I

The implementation process in the first cycle was carried out from February 14 to March 7, 2025. The description of the research results is described as follows.

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

This strategy had potential but needed more practice and guidance so that students would get used to it. Based on the results of observations and evaluations in the first cycle, several adjustments were made for the second cycle:

- a) The researcher provided an example of a complete concept mapping on the board as a reference.
- b) The instructions were made simpler and given in two languages (Indonesian and English).
- c) The creation of concept mapping was done in groups so that students could discuss and exchange ideas with each other.

b. Finding in the Implementation of Cycle II

In the second cycle, students were more prepared and understood the steps to create a concept mapping. The researcher again gave focus questions and students were asked to fill in the concept mapping template based on the topic being studied. The results in Cycle II showed improvements:

- a) Students were more active in discussing and helping each other in compiling concept mapping.
- b) The contents of the concept mapping became more complete, with the use of vocabulary that was more contextual.
- c) Most students were able to explain the contents of their concept mapping in front of the class with confidence.

The teacher stated that this strategy was very helpful in activating students' prior knowledge and making learning more meaningful.

c. Result Concept Mapping of Students

In each cycle, students were assigned to create a concept mapping based on the materials taught using the Concept Mapping Strategy. The mapping were assessed based on seven criteria: Focus Question, Completeness of Concepts, Relationships Between Concepts, Structure, Connectivity to New Concepts, Neatness & Visual Clarity, and Student

Reflection. Each criterion was scored on a scale from 1 to 4, with a maximum total score of 28 per student.

Table 4.8 Result Concept Mapping of Students

No.	Student Name	Cycle 1 Score	Cycle 2 Score	Improvement
1	Student 1	19	28	9
2	Student 2	17	27	10
3	Student 3	18	27	9
4	Student 4	15	26	11
5	Student 5	16	27	11
6	Student 6	19	28	9
7	Student 7	17	26	9
8	Student 8	15	25	10
9	Student 9	14	25	11
10	Student 10	21	28	7
11	Student 11	16	26	10
12	Student 12	17	27	10
13	Student 13	15	26	11
14	Student 14	18	27	9
15	Student 15	17	26	9
16	Student 16	14	25	11
17	Student 17	13	25	12
18	Student 18	16	27	11
19	Student 19	19	28	9
20	Student 20	20	28	8
Total		336	532	196
Mean score		16.8	26.6	9.8
Percentage		60%	95%	35%
Category		Good	Excellent	Increase

In Cycle I, total score: 336, mean score: 16.8, percentage: 60%. Meanwhile, in Cycle II, total score: 532, mean score: 26.6, percentage: 95%. And the increase, total score: 196, mean score: 9.8, percentage: 35%. The

results of students' concept mapping showed substantial improvement from Cycle I to Cycle II. In Cycle I, the average performance was at a moderate level, indicating that students were still adapting to the concept mapping technique. However, in Cycle II, after more detailed revision and scaffolding, students improved significantly in building well-organized, reflective, and visually clear concept mapping.

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 deeper 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.

4.1.5 Evaluation Result

The evaluation stage is the final part of the product development process based on the ADDIE model. Evaluation is carried out to determine the effectiveness of the Concept Mapping strategy that has been developed and implemented in improving the background knowledge of class VIII students of SMP Negeri 7 Gunungsitoli. Evaluation is carried out through analysis of student learning outcomes, student response questionnaires, and teacher interviews regarding the use of products in the learning process.

a. Learning Outcome Evaluation (Test)

The evaluation was conducted by comparing the results of the pre-test and post-test of students given before and after the use of the Concept Mapping Strategy. This test aims to measure the increase in students' background knowledge of English learning topics.

Table 4.9 Result of Test

No.	Student Name	Score Cycle 1	Score Cycle 2	Improvement
1	Student 1	55	80	+25

2	Student 2	65	85	+20
3	Student 3	75	90	+15
4	Student 4	70	85	+15
5	Student 5	65	85	+20
6	Student 6	50	80	+30
7	Student 7	65	85	+20
8	Student 8	70	85	+15
9	Student 9	65	80	+15
10	Student 10	45	80	+35
11	Student 11	60	80	+20
12	Student 12	70	90	+20
13	Student 13	50	70	+20
14	Student 14	50	70	+20
15	Student 15	85	100	+25
16	Student 16	65	85	+20
17	Student 17	60	75	+15
18	Student 18	70	85	+15
19	Student 19	55	75	+20
20	Student 20	45	65	+25
Total		1235	1630	395
Mean score		61.75	81.5	19.75
Percentage		61.75%	81.5%	19.75%
Category		Not Completed	Completed	Increase

Based on the table above, it can be seen that the test scores from the two cycles. The percentage of scores in cycle I is 61.75% while in cycle II is 81.5%. So, there is a significant increase in students, namely 19.75%. This increase indicates a positive influence of the use of the Concept Mapping Strategy on students' initial understanding before entering the core material. Students are able to recognize and connect vocabulary, ideas, and personal experiences that are relevant to the learning topic.

b. Students' Practicality

To determine how practical the Concept Mapping Strategy was from the students' perspective, a practicality questionnaire was administered after the implementation in Cycle II. The questionnaire consisted of 12 statements, each rated on a Likert scale from 1 (strongly disagree) to 4 (strongly agree). The aspects measured included clarity of instructions,

layout of materials, usefulness in learning, ease of understanding, and student engagement. the researcher distributed questionnaires to 20 students after they used the product. The results of the questionnaire showed that:

Table 4.10 Students' Questionnaire Distribution

No.	Aspects	No. Item of Statement	Score				Total Score	Mean	Percentage (%)
			1	2	3	4			
1	Clarity of Instructions	1,4	0	0	0	20	80	4.00	100%
2	Ease of Use	2	0	0	2	18	74	3.70	92.5%
3	Visual Display	3	0	0	3	17	71	3.55	88.75%
4	Relevance to Background Knowledge	5, 6, 7	0	0	7	13	65	3.25	81.25%
5	Student Activation and Engagement	8, 10, 11	0	0	4	16	68	3.40	85%
6	Understanding the Material	9	0	2	3	15	71	3.55	88.75%
7	General Practicality	12	0	0	2	18	74	3.70	92.5%

Table 4.11 Representation of Students' Questionnaire Distribution

Aspect	Mean Score (Max 4)	Percentage	Interpretation
Overall Practicality Score	3.70	92.5%	Very Practical

With a percentage score of 92.5%, this product falls into the "Very Practical" category, showing that students were highly satisfied and positively engaged with the learning strategy. Based on the student responses, the Concept Mapping Strategy is considered very practical for use in English classrooms. It facilitated student learning by making abstract ideas more concrete, encouraging participation, and supporting independent thinking. This suggests the product is well-suited for wider classroom implementation.

c. Teacher's Practicality

To evaluate the practicality of the Concept Mapping Strategy from the teacher's point of view, a Teacher Practicality Sheet was used. The sheet contained 10 items measuring key aspects such as ease of use, clarity of

implementation procedures, suitability with teaching time, alignment with the curriculum, and impact on student learning. Each item was rated on a scale of 1 to 4, where 4 indicates "strongly agree" and 1 indicates "strongly disagree."

Table 4.12 Teachers' Questionnaire Distribution

No.	Aspects	No. Item of Statement	Score
1	Ease of Use	1, 2	4
2	Clarity of Guide	3	4
3	Time Efficiency	4	3
4	Curriculum Suitability	5	4
5	Student Activation and Engagement	6	4
6	Increased Understanding	7, 8	4
7	Reusability	9	4
8	General Practicality	10	4
Total Number			40
Mean			3.9
Percentage			97.5%
Category			Very Practical

Maximum score per item: 4

Maximum total score: $10 \times 4 = 40$

Total score obtained: 39

Based on the results of the practicality assessment by teacher, the Concept Mapping strategy is considered very practical to use in English learning. The mean score of 3.9 and the practicality percentage of 97.5% indicate that this product is easy to use, relevant to the curriculum, and can be implemented effectively.

d. Teacher Interview Evaluation

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) 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 Merdeka Curriculum.

- 3) Teacher suggested that this strategy be continued for subsequent topics because it can be used as an initial assessment tool and mapping of students' learning needs.

Based on the evaluation results conducted through pre-test and post-test analysis, student response questionnaires, and teacher interviews, it can be concluded that the Concept Mapping strategy developed has proven effective in improving the background knowledge of grade VIII students in learning English. The use of concept maps helps students think more structured, understand the relationship between ideas, and connect personal experiences with subject matter visually and contextually. The post-test results showed a significant increase in scores compared to the pre-test, and more than 85% of students stated that this media made it easier for them to understand. Teachers also gave positive responses to the practicality and usefulness of the product, and suggested 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 Merdeka Curriculum.

4.2. Discussion

The findings of this research affirm that the development and implementation of a Concept Mapping Strategy can significantly improve students' background knowledge, comprehension, and classroom engagement in English language learning. The improvement was observed not only in student test scores and concept map quality, but also in classroom dynamics, where students became more active and confident in participating.

This is aligned with Ausubel's (1963) theory of meaningful learning, which posits that the most crucial factor in learning is what the learner already knows. By designing the strategy to begin with focus questions, students were encouraged to retrieve and activate their existing knowledge, which formed the foundation for understanding new concepts. These focus questions served as cognitive prompts, helping students link prior experiences with the target vocabulary and themes in

the curriculum, particularly within the "Say What You Know" segments of the English for Nusantara textbook.

The visual and structured nature of concept mapping also supports the cognitive theories of Novak and Cañas (2022), who state that concept mapping function as external representations of students' internal knowledge structures. The mapping enabled students to visualize the relationship between known and new ideas, which is crucial in language learning where meaning often depends on context and conceptual connection. This directly contributed to an increase in students' understanding—as evidenced by improvements in their ability to explain and connect topics across cycles.

Furthermore, the research addressed the first question—How is the concept mapping strategy developed to enhance background knowledge?—by integrating theory and practice through the ADDIE model. This model provided a systematic structure ensuring that the product was not only pedagogically sound but also contextually relevant. The resulting product incorporated visually appealing, easy-to-follow templates with contextualized vocabulary and themes. These were aligned with the Merdeka Curriculum's emphasis on learner-centered, inquiry-based instruction (BSKAP, 2022).

In terms of effectiveness, the data shows a clear increase in the quality of students' concept mapping from an average score of 16.8 (60%) in Cycle I to 26.6 (95%) in Cycle II. This is consistent with findings by Rofiah et al. (2022) and Liu and Bu (2021), who emphasized that concept mapping enhances vocabulary acquisition, comprehension, and metacognitive awareness in EFL settings. The improvement in students' ability to connect ideas and use appropriate language confirms the strategy's capacity to support deep learning, rather than surface memorization.

Regarding feasibility and practicality, the validation results from experts in material, media, and language showed high feasibility scores (above 85%), and both teacher and student responses during implementation were overwhelmingly positive. Initial challenges, such as confusion in organizing ideas—were mitigated by peer collaboration and scaffolded instruction. As Zhou and Lin (2023) argue,

the success of concept mapping depends on guided practice and iteration, which were built into the two-cycle classroom action research design.

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:

By visualizing relationships between concepts, students engage in higher-order thinking analyzing, synthesizing, and evaluating information rather than passively receiving it. This aligns with cognitive constructivist principles and leads to deeper, more durable 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.