

**IMPROVING READING COMPREHENSION OF FIRST GRADE  
STUDENTS AT SMA XAVERIUS PRINGSEWU IN NARRATIVE TEXT  
THROUGH MIND MAPPING TECHNIQUE**

**(Undergraduate Thesis)**

**By**  
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**ENGLISH EDUCATION STUDY PROGRAM  
DEPARTMENT OF LANGUAGE AND ARTS EDUCATION  
FACULTY OF TEACHER TRAINING AND EDUCATION  
UNIVERSITY OF LAMPUNG  
2026**

## **ABSTRACT**

# **IMPROVING READING COMPREHENSION OF FIRST GRADE STUDENTS AT SMA XAVERIUS PRINGSEWU IN NARRATIVE TEXT THROUGH MIND MAPPING TECHNIQUE**

By

Clara Elisabeth Artauli Simarmata

The objective of this research is to find out whether there is a significant improvement in students' reading comprehension of narrative text after being taught using the mind mapping technique. This research was conducted on 30 first-grade students at SMA Xaverius Pringsewu. This is a quantitative research with One Group Pre- test - Post-test design. The results showed that the students' mean score in the pre- test was 56.19 and in the post-test was 75.85. This indicated an improvement of 19.66 points after the students were taught through mind mapping technique. In addition, the highest score increased from 83.3 in the pre-test to 93.3 in the post- test. Likewise, the minimum score also increased from 33.3 in the pre-test to 56.6 in the post-test. The effectiveness of this technique was confirmed by T-Test result, which showed that t-value (17.53) was higher than t-table value (2.04). These findings show that mind mapping technique can improve reading comprehension of first grade students in narrative text.

**Keywords:** *Mind Mapping Technique, Narrative Text, Reading Comprehension*

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**By**

**Clara Elisabeth Artauli Simarmata**

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Submitted in a Partial Fulfillment of  
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in

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**ENGLISH EDUCATION STUDY PROGRAM  
DEPARTMENT OF LANGUAGE AND ARTS EDUCATION  
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**Research Title** : **IMPROVING READING COMPREHENSION OF  
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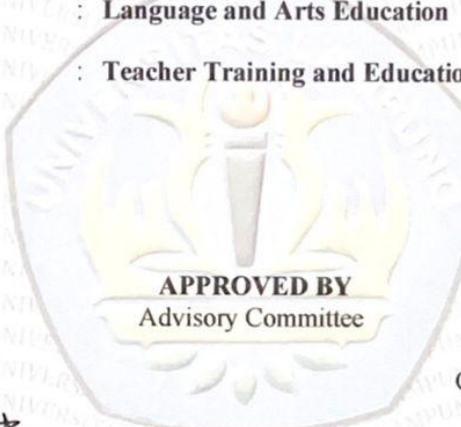
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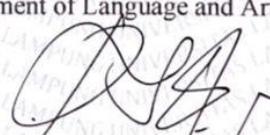
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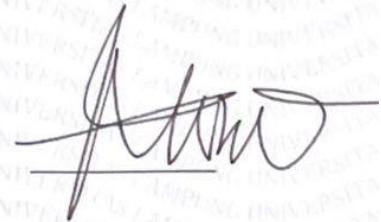


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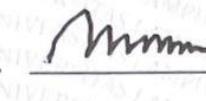
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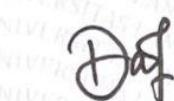
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Menyatakan bahwa skripsi ini adalah karya saya sendiri. Sepanjang pengetahuan saya, karya ini tidak berisi materi yang ditulis orang lain, kecuali bagian-bagian tertentu yang saya ambil sebagai acuan. Apabila ternyata terbukti bahwa pernyataan ini tidak benar, sepenuhnya menjadi tanggung jawab saya.

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## **CURRICULUM VITAE**

Clara Elisabeth Artauli Simarmata was born on October 12, 2003, in Kotabumi, North Lampung. She is the first of three children of M.S. Simarmata, S.Pd., and Hotma Roslinda, S.Pd. She has one sister named Merry Christina Ronauli Simarmata and one brother named Kevin Yehezkiel Hotmartua Simarmata.

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## **DEDICATION**

I dedicate this thesis to my beloved parents, my siblings, my family, and everyone who has helped and cheered me on throughout my college journey.

## **MOTTO**

“Don‘t be afraid, for I am with you. Don‘t be discouraged, for I am your God. I will strengthen you and help you. I will hold you up with my victorious right hand.”

(Isaiah 41: 10)

“Even in difficult times, light will eventually come to those who strive toward it.”

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## I INTRODUCTION

This section presents some points to give a brief explanation for the research. Those points are the background of the research, research question, objective of the research, the significance, scope of the research and definition of key terms.

### 1.1 Background

Reading has an important role for the learners in learning English. It is necessary for all English learners because mastering reading skill can bring success and excellence to them (Ali, 2022). Pang et al. (2003) define reading as a complex activity that involves both perception and thinking. It allows learners to gain wider insights, enrich new vocabulary, improve critical thinking and increase their creativity. In this regard, reading comprehension is a key, as it involves constructing a coherent mental representation of the information in a text. This is supported by Randi et al. (2006) who state reading comprehension as a complex cognitive process that involves summarizing, recalling and producing an interpretation of what is written in a text.

The importance of reading comprehension is one of the things that must be considered in education, especially in terms of how students are expected to understand the meaning and analyze various types of texts covered in the curriculum. According to Merdeka Curriculum, students at senior high school are required to learn various text genres. One of them is narrative text. Narrative refers to a type of text that usually in the form of fictional story and it presents a series of connected events that add up to something (Chatman and Attebery, 1993). This text requires good comprehension skills from students as a reader in order to understand its meaning and message contained. On the other hand, in reality, many senior high school students experience difficulties in comprehending this text and the majority of them show a low level of comprehension of the text.

This low level of comprehension raises questions about what actually happens during the learning process in the classroom, and how current teaching practices may contribute to the problem. The initial observation result at SMA Xaverius Pringsewu reveals that the students tend to rely heavily on teacher's interpretation about the text rather than constructing meaning independently. It is supported by the interview with several first grade students at SMA Xaverius Pringsewu, who admit that they are lack of vocabulary, and also they have difficulty in organizing and processing the information from the text they read so they only read the text at a glance without fully grasping the meaning or the relationships between information within the text. It means that the students cannot comprehend the text deeply. Consequently, this will contribute to students' low reading comprehension and lead them to get unsatisfying achievement in reading comprehension. Additionally, it indicates the need for technique that can help students construct their understanding and make sense of the text they read more effectively.

Considering this, it is very important for an English teacher to be able to facilitate students to improve their reading comprehension skill in a classroom with such an effective teaching technique. In order to achieve this goal, a teacher needs a technique that does not only help in delivering the content being studied but also train students to extract ideas and understand the information deeply. One such an effective technique can be used to teach reading comprehension is mind mapping. According to Buzan (2006) mind mapping is an interconnected graphical technique used to store, organize, and gain information using specific keywords or trigger words, encouraging new thoughts and ideas. It helps students to process the information effectively, increase their understanding of the text and help them remember important details. Moreover, mind mapping technique is closely related to the core process of reading comprehension. Reading comprehension, as explained by Klingner et al. (2007), is a complex and interactive process that involves the ability to identify, organize, and interpret information from a text. Mind mapping supports this process by providing a visual representation of the structure of the text content.

A number of researches have shown how mind mapping technique is integrated in learning process especially to improve students' reading comprehension at various levels of education. The first research comes from Simanjuntak et al. (2022). This research shows that students in third grade of junior high school experience an improvement on their reading comprehension in report text. Similarly, Novianti et al. (2021) state the reading comprehension of third grade junior high school students from various schools in Bandung improve significantly after using mind mapping technique. Another research conducted by Ganito et al. (2022) shows that mind mapping technique helps second grade of junior high school students in locating specific information. Similarly, research by Tatipang et al. (2021) highlights first grade of junior high school students experience improvement in understanding descriptive text. Furthermore, research conducted by Herdiah et al. (2022) states that the use of mind mapping technique can improve students' reading comprehension in recount text in vocational school. All of these researches show that mind mapping is effective in developing students' ability to understand text content in a more structured and in-depth way.

Although previous researches have revealed that mind mapping can improve reading comprehension across various levels of education, research specifically in senior high school students is still limited. Therefore, researcher is interested in finding out whether there is an improvement in first grade high school students' reading comprehension of narrative text after being taught using mind mapping technique. Based on that, this research was titled 'Improving Reading Comprehension of First Grade Students at SMA Xaverius Pringsewu in Narrative Text Through Mind Mapping Technique'.

## **1.2 Research Question**

Based on the background discussed above, the researcher formulated a problem as follows 'Is there any significant improvement in reading comprehension of first grade students at SMA Xaverius Pringsewu in narrative text after being taught through mind mapping technique?'

### **1.3 Objective of the Research**

Based on the research question above, the objective of the research was to find out whether there is a significant improvement in reading comprehension of first grade students at SMA Xaverius Pringsewu in narrative text after being taught through mind mapping technique.

### **1.4 The Significance**

The research can be valuable for both theoretical and practical purposes. The contributions of this research are as follows:

a. Theoretically

This research can support previous studies that highlight the use of mind mapping technique in improving students' reading comprehension, particularly text such as narrative. In addition, for future researchers, this research can be used as a consideration if they are interested in exploring similar topic. That way, researcher tries to make the best contribution.

b. Practically

This research is expected to provide English teachers with an alternative and effective technique to improve students' reading comprehension, particularly in understanding narrative text. Through the use of mind mapping, teachers can facilitate students in constructing and connecting information from a text in a more structured and visual way.

### **1.5 Scope of the Research**

Based on the research background, this research has a scope and limitations. This research investigated on the improvement in reading comprehension of first grade students at SMA Xaverius Pringsewu in academic year of 2025/2026, where the type of the narrative text used was folktale. In this research, the researcher also examined the improvement of students' reading comprehension after being taught through mind mapping technique in some aspect of reading which are main idea, specific information, reference, inference and vocabulary.

The limitation of this research lie within its focus and sample. This research is limited to a specific type of text, which is narrative text, and it is conducted in the context of a senior high school. Therefore, the findings of this research may not be

applicable to other types of text, grade levels, or different educational environment.

### **1.6 Definition of Terms**

In order to avoid any misconceptions, the researcher provides some key terms.

The key terms used in this research are explained as follows:

#### **1. Reading**

Reading is an interactive process that occurs between the text and the reader, involving both processing strategies and mastery of a set of word-level skills (Lems et al., 2010).

#### **2. Reading Comprehension**

Reading comprehension is a highly process that requires many interactions between readers, their background knowledge and also text related variables (Klingner et al., 2007).

#### **3. Mind Mapping Technique**

Mind mapping refers to a graphical, connected method of storing, organizing, and prioritizing information (usually on paper) and is identical to a set of keywords where each of the keywords will be connected to specific information and encourage the thinking of new ideas (Buzan, 2006).

#### **4. Narrative Text**

Narrative text is text that aims to entertain by introducing problems that need to be solved (Derewianka, 2016).

Those all above are what this chapter contains, such as background of the research, research question, objective of the research, the significance, scope of the research and definition of key terms.

## **II LITERATURE REVIEW**

This chapter discusses some reviews of relevant theories and studies about concept of reading, reading comprehension, aspect of reading comprehension, narrative text, concept of mind mapping technique, procedure of mind mapping technique, teaching reading comprehension in narrative text through mind mapping, procedures of teaching reading comprehension through mind mapping technique, advantages and disadvantages of teaching reading comprehension through mind mapping, theoretical assumption and hypotheses.

### **1.1 Concept of Reading**

Reading is one of the most useful skills in life for everyone. Among the language skills of speaking, reading and writing, reading is the most important one (Patel and Jain, 2008). It is a fundamental skill because reading enables us to recognize words, sentences and also paragraphs in order to acquire knowledge, communicate as effectively as possible, and engage with the environment around us. This idea is also in line with Lems et al. (2010) who define reading as an interactive process that occurs between the text and the reader, involving both processing strategies and mastery of a set of word-level skills.

In addition, Zare (2013) states that reading is an activity in which the reader involves with the writer through the text. It means that reading involves the ability to recognize printed symbols and language knowledge and the meaning is not flow automatically from the text to the reader which means the text contains clues that the reader uses to generate meaning. Therefore, reading is one of the language skills in English which gives a huge input to the learner. Likewise, reading is important since basically student need it for everything, obviously in education such as reading a book or text, they will need it to absorb as much knowledge as possible for life (Cambria and Guthrie, 2010).

From all of the explanation above, it can be concluded that reading is an activity of understanding the meaning and information from a text. Reading involves recognizing symbols such as letters, words, sentences, and connecting them to form a general meaning of what is read. It is one of the most important skills for foreign language learners, because by having this skill, students are able to gain various kinds of insights.

## **1.2 Reading Comprehension**

Reading comprehension refers to the process of constructing the meaning of a text. According to Grabe and Stoller (2002) reading comprehension is not just about understanding the content of the text read, but it is a word processing process, and an ability to form a representation of the general meaning of the ideas. Supporting this idea, Antoni (2010) emphasizes that reading comprehension is about seeking the writer's essence or intended message, rather than defining word by word in the text individually. If the readers do not read to understand, then they will read for nothing. Therefore, comprehension requires the reader to be an active constructor of meaning.

Expanding on that idea, as defined by Klingner et al. (2007), reading comprehension is a highly process that requires many interactions between readers, their background knowledge and also text related variables. For this reason, reading comprehension is considered as a deep cognitive activity. It is supported by Graesser (2015) who even states reading comprehension as one of the most complex human abilities where readers must integrate the meaning across sentences, activate their background knowledge, and take into consideration the writers' intention. This complexity indicates that reading comprehension involves the construction of a coherent mental representation of textual information, as explained by Butterfuss et al. (2020). The construction does not occur spontaneously through linear reading but through active cognitive processes such as selecting, organizing, and integrating information to structure ideas, supporting details, and relationships between ideas in the text.

In summary, reading comprehension is a complex cognitive process to understand and generate the meaning contained in a text in depth. It involves not only recognizing words, but also analyzing, interpreting, organizing and evaluating the information presented. In reading comprehension, the reader's background, knowledge and experience are also required and those things lead the reader to be an active constructor of the meaning.

### **1.3 Aspect of Reading Comprehension**

According to Heaton (1975), reading comprehension skills encompass a range of mutually supportive abilities in understanding text. Readers need to be able to distinguish the relationship between sounds and symbols in writing, as well as distinguish words and their forms. In addition, it is important for readers to understand vocabulary in context, grammatical sentence structure, and the relationship between ideas or the sequence of information in the text. In other words, readers must be able to understand main ideas, summarize implied information, find specific information quickly, and adapt their reading style critically and flexibly according to their goal.

From those various skills, it can be generally identified that the main aspects of reading comprehension consist of main ideas, specific information, inferences, references, and vocabulary. These five aspects reflect the most essential skills for understanding written texts and are relevant to the teaching objectives of reading at the school level. Here is an explanation of those five aspects.

#### **1. Main Idea**

Main idea is the primary message that the writer wants to convey in a text. Understanding the main idea is one of the essential skills in reading comprehension as it helps readers catch the core of what is discussed without having to understand every detail in the text. It is important for readers especially foreign language learners to recognize the main idea in order to understand the content of each paragraph, even though there may be words or parts that are not understood.

## 2. Vocabulary

Readers who have a good and deep vocabulary representation can read and understand texts accurately as well. This is because readers with a good command of vocabulary can access the meaning of words more quickly, which facilitates overall comprehension of the text.

## 3. Specific Information

Specific information refers to information that is clearly written in a text.

The skill of finding specific information is important for foreign language readers because it helps them navigate long texts more efficiently, especially in situations where they only need some detailed information to provide them a clear overview of the text content.

## 4. Reference

Reference refers to the way in which information is introduced, maintained and expanded in a text (Knapp and Peter, 2005). It is an aspect of reading comprehension as it helps readers connect the various elements in the text. If readers do not understand what the referential phrase refers to, they could misinterpret the text itself.

## 5. Inference

According to Mckoon and Ratcliff (1992) inference is defined as any piece of information that is not explicitly stated in a text. The ability to make inferences allows readers to comprehend implied messages, and gain a deeper understanding of the text. However, without good inference skills, readers' understanding tends to be limited to surface information, and they can miss the deeper meaning intended by the author.

Based on the explanation above, it can be concluded that to comprehend a text, readers at least must master five key aspects which are identifying the main idea, possessing a vocabulary, spotting specific information, understanding references, and making inferences. Recognizing the main idea allows readers to grasp the core message. The amount of vocabulary is known support quicker access to generate the word meanings.

Understanding references ensures coherence within the text, and inference skills enable readers to uncover implied meanings, providing a greater interpretation.

#### **1.4 Teaching Reading Comprehension**

This section discusses teaching reading comprehension. Teaching reading comprehension is a crucial aspect of the language learning process. The process of teaching reading comprehension involves several stages that are linked to each other. According to Nuttal (1996), there are three main stages in teaching reading, they are pre-reading, while-reading, and post-reading.

##### **1. Pre-reading**

In this stage the teacher will stimulate students' interest in reading, provide the necessary background knowledge, and connect the text to students' previous experiences. Pre-reading allows the teacher to provoke curiosity and encourage students to start reading the text with a focused and purposeful mindset.

##### **2. While-reading**

While-reading is defined as the stage that helps students to focus on aspects of the text. This stage refers to the situations where students as readers are directly involved with the content and apply reading technique to understand and analyze information. In the while-reading, the teacher can improve students' reading comprehension by using various strategies or techniques to help students understand the text, overcome language barriers, and identify important information.

##### **3. Post-reading**

At this point, the teacher encourages students to carry out activities such as summarizing, or reflecting the text. This stage is important in the learning process because in this stage students will try to transform the information they get from the text into a meaningful understanding that can be applied by them.

From the explanation above, it can be concluded that there are three important stages in teaching reading comprehension. The first stage is pre-reading, which is the beginning stage where the teacher stimulates and activates students' background knowledge of the text to be read.

The second stage is while reading as the core stage in teaching reading which involves students directly in the content of the text. The last is post-reading, the stage where teachers encourage students to be able to transform the information they get from the previous two stages into valuable understanding.

### **1.5 Narrative Text**

This section presents the definition, generic structure and language features of narrative text. Narrative text is one of the most commonly read in English language learning. Narrative text aims to entertain by introducing problems that need to be solved (Derewianka, 2016). The story presented in this type of text usually convey cultural traditions and values, or even provide insight about human conditions. It engages the reader by linking events that have temporal and cause- and-effect relationships into a unity story. This type of text is meant to engage the reader's emotions and imagination, sometimes with a moral lesson or message.

Additionally, this text consists of language features which generally appear in every part of it. These language features are types of processes such as material processes, behavioral processes, mental processes, and relational attribute clauses, the use of past tense, as well as the use of many adverbs of time and place such as once upon a time.

Furthermore, narrative text consists of three parts. It begins with an orientation, complication and the last is resolution (Gerot and Wignell, 1995). The structure of the text is as follows:

1. Orientation

Orientation is the first part of the story that introduces the characters, time, and place. This part gives an initial overview so that the reader understands the background of the story.

2. Complication

Complication is the part where the conflict or problem that the main character will face arises. This part becomes the main point of the story and functions as the trigger for the development of the plot as a whole.

### 3. Resolution

Resolution refers to the part where the main character begins to find the turning point of the conflict faced. The resolution is usually a happy ending or a sad ending, depending on the content and purpose of the story.

In addition, as highlighted by Sinamo et al. (2023) narrative text can be in a form of real stories or imagined stories such as fairy tale, folktale, fable, myth, and legend.

#### 1. Fairy Tale

Fairy tale is a story that is often read to children before bedtime. A fairy tale itself means magical stories that did not really happen or are merely imaginary.

#### 2. Folktale

Folktale is a story passed down from generation to generation, becoming a tradition. They are usually anonymous, which means that the original author is unknown, and often do not have a specific place or time.

#### 3. Fable

Fable is a story about animals that behave as if they were human beings. It is a type of narrative text that contains many moral messages.

#### 4. Myth

Myth is a story set in the past, which usually tells of gods and heroes and contains interpretations of the origins of the universe. It is generally considered to be a factual story that actually happened.

#### 5. Legend

Legend is a story that is believed to be true and is related to historical events or the origins of a particular place, figure, or event. Legends often contain elements of myth or the supernatural, but they are also connected to real places and times.

It can be summed up that narrative text is a kind of text that tells a story either real or imagined story. The purpose of this text is to entertain or convey a valuable message to readers. In this research, the researcher chose one of types of narrative text, which was folktale.

## 1.6 Mind Mapping Technique

This section presents the concept of mind mapping technique and procedure of mind mapping technique. Mind mapping is not a new concept. Tony Buzan is the figure who popularized and systematized this technique in the 1960s and 1970s. According to Buzan (2006) mind mapping is a connected graphical technique for storing, organizing, and prioritizing information that uses keywords to connect ideas, encourages active learning through visualization and association, and facilitates better understanding. A mind mapping generally consists of a central main idea, accompanied by supporting ideas that branch out around it, with these details connected by lines or arrows.

Mind mapping is sometimes referred to as a tree, because during the creation process, branches connect one piece of information to another. It allows us to note a lot of information on a single page and show the relationships among various concepts and ideas (Margulies, 1991). Mind mapping is said to be valuable in managing information effectively and increases potential for personal success. This is why mind mapping is widely used for organizing something. Additionally, mind mapping is also an excellent alternative for remembering. Remembering becomes easier than using traditional note-taking methods with this technique. The use of mind mapping can be combined with images and colors, where both elements can enhance creativity and facilitate understanding of the information obtained.

According to Baran et al. (2009) there are four main types of mind mapping. The first is Central Mind Mapping (Spider Mapping). This type refers to a mind map in which the topic is placed at the center, while the supporting ideas extend outward from the central point. The second is Hierarchy Mapping, in which the topic is located at the top and the all of the subtopic branches arranged hierarchically below it. The third is Flowchart Mapping, which refers to information mapped sequentially in a single flow instead of spreading out into different branches. The last is System Mapping. It is a more complex type than the other three because it consists of many interconnected lines and branches that show how different parts relate to one another as a unified whole.

In order to effectively use mind mapping technique, it is necessary to understand the systematic steps in preparing it. Since this technique not only demands creativity, but also follows a certain procedure so that the information obtained from the text can be well organized, therefore, this section will explain the procedure for using mind mapping technique based on the principles developed by Buzan (2006). There are several steps that have to be followed to apply mind mapping technique. The steps are as follows:

- a. Determine the main purpose of the mind map that will be created.
- b. Use a horizontal position (landscape) paper to provide ample space to add other branches in all directions.
- c. Create some shapes (such as a square or circle) and write one keyword in the center which represents the overall topic. This keyword can stimulate the imagination and strengthen the focus on the information to be organized.
- d. Draw lines as main branches radiating from the keyword center. These branches represent main ideas or subtopics that are directly related to the main topic.
- e. Write one keyword on each branch that has been created. The keyword should be short and trigger broader associations.
- f. Add several other empty branches according to the amount of information to stimulate the mind.
- g. Continue to create second, third and so on level branches. These branches contain more in-depth details and thoughts related to the main branch.

In summary, mind mapping is a visual technique widely recognized as effective for organizing and managing information systematically. By centering the main idea at the center and developing supporting branches around it, mind mapping facilitates understanding and memorization of information. In this research, the type of mind mapping used was Central Mind Mapping. It was appropriate because it allowed students to see all parts of the story connected to one topic in the center, making the overall content of the text easier to understand.

### **1.7 Teaching Reading Comprehension Through Mind Mapping Technique**

The use of mind mapping technique in reading comprehension is not only intended to help students visualize information, but also to improve their understanding of important aspects of reading, such as main ideas, specific information, vocabulary, references, and inferences. Through mind mapping, students can identify the main idea of each paragraph by writing it as the main branch, allowing them to focus on the core message of the text. Specific information, such as characters, background, events, and issues, can be organized under each main idea branch as supporting details, helping students to remember information more effectively.

In terms of vocabulary, students are encouraged to highlight then write down unfamiliar or important keywords with a line that connect the words and their meanings that aid contextual understanding rather than mechanical memorization. For the reference aspect, mind mapping technique helps students track pronouns or references back to their original nouns by explicitly marking them in the map structure, making it clear who or what the words refer to. Furthermore, inference is supported by encouraging students to draw conclusions or identify storyline as a whole from the relationships and patterns they build in their maps through the connection of the lines and branches. By integrating these aspects into a single visual representation, mind mapping transforms reading from a passive activity into an active cognitive process.

In line with this idea, there are several previous studies that implement mind mapping technique in teaching reading comprehension. Research by Simanjuntak et al. (2022) highlighted several key benefits of using mind mapping technique in teaching reading to third grade students at SMPN 2 Sinatar. Mind mapping technique helps students transition from passive reading to actively processing information by visually organizing main ideas and supporting details into structured branches. This technique helps students better comprehend text structure, particularly report texts, and retain information longer. The study concludes that mind mapping is a highly effective strategy for teaching reading comprehension, especially for EFL students.

Similarly, research by Novianti et al. (2021) revealed mind mapping technique improves third grade junior school students' comprehension. This research uses a qualitative approach with a case study design, involving six participants from various schools who take tutoring courses in Bandung. The research uses texts from different genres which are recount, descriptive and procedure. The interview results reveal that students feel that mind mapping helps them focus better, understand the content of the text more easily, and makes reading more enjoyable. Students also express that using this technique makes them better at spotting important themes and details, summarizing the text, making inferences, figuring out tricky words, and understanding what the writer is trying to convey.

In addition, research by Ganito et al. (2022) found the improvement of reading comprehension among second grade students at SMP Taman Dewasa Ibu Pawiyatan in Yogyakarta after using mind mapping technique. It uses a descriptive design with qualitative data from observations, interviews, daily notes, and documentation, as well as quantitative data from post-tests. The study focuses on narrative texts and parody texts from the curriculum. The results reveal that this technique helps students identify language features, and participate actively in lessons. In addition, based on the results of interviews, students who initially had difficulty recognizing vocabulary find it easier to understand the meaning of vocabulary in text after using the mind mapping technique. Students also report increased motivation and confidence.

Another previous study comes from Tatipang et al. (2021). This study reveals a significant improvement in the reading comprehension of first grade junior high school students in descriptive text. A pre-experimental design with pre-test and post-test assessments was applied, involving 15 students with an average post-test score (83.7) well above the pre-test score (26.6). The researchers find mind mapping helps students visually organize information from descriptive text, making it easier to understand and remember. This leads to an improvement in their ability to identify the main idea, specific information, and vocabulary meaning. Students also show higher levels of engagement and creativity when using this technique.

Furthermore, research conducted by Herdiah et al. (2022) stated that the use of mind mapping technique can improve students' reading comprehension in recount text. This research uses a case study approach on five students at a vocational school in Batujajar, West Bandung, and data is obtained through learning logs and semi-structured interviews. The results reveal that the application of mind mapping provides a number of positive benefits in improving students' reading comprehension. The students feel that it is easier to understand the content of the story, identify the structure of the text, find detailed information, and enrich their vocabulary.

Based on previous studies, it can be concluded that mind mapping technique effectively improve students' reading comprehension across various levels of education. However, most of these studies have not specifically examined the used of this technique in narrative text for first grade high school students. Therefore, this research is aim to investigate the improvement in first grade high school students' reading comprehension in narrative text through mind mapping technique.

## **1.8 Procedure of Teaching Reading Comprehension Through Mind Mapping Technique**

In teaching reading comprehension, there are three stages that the teacher should be concerned with, which are pre-reading, while reading, and post reading (Nuttal, 1996). These three stages will be combined with the steps of mind mapping technique to teach reading comprehension with narrative text as the material being taught. The steps are as follows.

1. Pre-reading
  - a. The teacher shows an example of a short narrative text to the students as an introductory material.
  - b. Students are given time to read the text independently.
  - c. Students are given apperception to build their prior understanding of the narrative text.

- d. Students are guided by the teacher to understand the purpose, general structure of the narrative text, as well as making prediction about the content of the text.
- e. After that, the teacher explains the concept of mind mapping technique and shows the example of it through power point.

2. While-reading

- a. The teacher distributes another narrative text for students to read thoroughly.
- b. Students read the text individually with a focus on understanding the content.
- c. In order to direct students' attention to key information, the teacher provides guiding questions related to the elements of narrative text.
- d. While answering and discussing the guiding questions, students highlight what parts of the text are relevant and take notes of the answers in a blank paper.
- e. Students are then given a blank paper and they are instructed by the teacher to start constructing their mind maps on that paper and asked to compose it based on the information they have obtained from the text.
- f. Students place the title in the center and add several branches such as main idea, orientation, characters, setting, complication, resolution, specific information, reference, new vocabularies and inference, along with keywords related to the story.
- g. Students are asked to answer some questions related to the text they have mapped in order to measure their level of comprehension of main idea, detail, inference, vocabulary, and reference based on the text after learning through mind mapping technique.

3. Post-reading

- a. The teacher provides clarification by discussing students' mind map, and also corrects misconceptions.
- b. The teacher reflects the lesson by asking the students about what they have learned.

It can be concluded that the procedure of teaching reading comprehension through mind mapping technique includes three main stages, namely pre-reading, while-reading, and post-reading, each of which is collaborated with the steps of using mind mapping technique. These teaching steps will be conducted with the aim of helping students understand the text thoroughly and structured through systematic visual technique.

### **1.9 Advantages and Disadvantages of Teaching Reading Comprehension Through Mind Mapping Technique**

This section focuses on advantages and disadvantages of teaching reading comprehension through mind mapping technique. According to Hofland (2007), there are several advantages and disadvantages of teaching reading comprehension through mind mapping technique. The advantages are as follows:

#### **1. Improve Memory Retention**

Mind map technique utilizes both left and right brain functions, making it easier for students to remember text details and the use of images, colors make the brain process information naturally.

#### **2. Better Comprehension**

Visualizing the text through key ideas into the branches of the mind map helps students understand the relationship between the information in the text as a whole more effectively.

#### **3. Active Engagement**

Mind mapping technique keeps students actively engaged with the text because creating mind maps requires students to interact with the text, predict the content, and summarize key points, which leads to deeper engagement.

Every technique has its own strengths and weaknesses. Hofland (2007) also states mind mapping technique has some disadvantages, those are as follows:

#### **1. Initial Resistance**

Mind mapping often causes confusion at first for students, especially beginners who are not yet familiar with this technique. Students may find it difficult to determine what information is important to include in the branches

of the mind map, because it is different from the note-taking methods they are used to.

## 2. Dependence on Visual

The mind mapping technique may not be suitable for students who are more comfortable with auditory learning styles. A mind map created without pictures or colors tends to be less effective for students.

In conclusion, teaching reading comprehension through mind mapping technique has both advantages and disadvantages. Based on its advantages, this technique can improve students' ability to remember, understand, and actively engage with text because it involves visualizing the information obtained from the text. However, mind mapping also has disadvantages, such as being confusing for beginners, time-consuming, and unsuitable for students with an auditory learning style.

### **1.10 Theoretical Assumption**

Reading comprehension is one of the main foundational skills that supports various activities in life, especially in education. For students, this skill is an important one that needs to be sharpened so that they can gain a deep understanding of what they read. In an attempt to improve reading comprehension, teachers can use a various effective technique.

One of those techniques chosen in this research is mind mapping. This technique is believed to help students organize information and understand the content of reading through systematic steps and visualization, which makes it easier for students to build an understanding of what they read. Therefore, researcher believes that the use of mind mapping technique has the potential to improve students' reading comprehension, particularly in aspects such as identifying main ideas, understanding vocabulary, finding specific information, determining references, and making inference in narrative text.

### **1.11 Hypotheses**

Based on the theoretical assumption above, the researcher proposes the following hypotheses:

There is an improvement in reading comprehension of first grade students at SMA Xaverius Pringsewu in narrative text after being taught through mind mapping technique. The researcher believes that the implementation of mind mapping technique can improve students' reading comprehension especially in narrative text, which includes vocabulary, references, inference, main idea and specific information.

This chapter has discussed some the topics including concept of reading, reading comprehension, aspect of reading comprehension, narrative text, concept of mind mapping technique, procedure of mind mapping technique, teaching reading comprehension in narrative text through mind mapping, procedures of teaching reading comprehension through mind mapping technique, advantages and disadvantages of teaching reading comprehension through mind mapping, theoretical assumption and hypotheses

### **III METHODS**

This chapter is divided into some points which are design, data variables, data sources, data collection instruments, data collection technique, research procedures, data analysis, and hypothesis testing.

#### **3.1 Design**

The research design used in this research was Pre-Experiment, which was One-Group Pre-test-Post-test Design. It was used because this research only involved one class, comparing pre-test result with post-test result without a comparison group. According to Setiyadi (2018), the research design is formulated as follows:

#### **T1 X T2**

Description:

1. T1 : Pre-test administered by the researcher to the students which was used to measure their initial reading comprehension skill before being taught through mind mapping technique.
2. X : The treatment given by researcher to students which was mind mapping technique.
3. T2 : Post-test administered by the researcher to the students which was used to measure the extent of students' reading comprehension after being taught through mind mapping technique.

The research design above has supported the researcher to assess whether the use of mind mapping technique could improve students' reading comprehension in narrative text.

### **3.2 Data Variables**

A variable is an attribute or characteristic of an individual studied by researcher (Creswell, 2012). In this research, mind mapping technique was an independent variable and students' scores in reading comprehension as dependent variable.

### **3.3 Data Source**

The population in this research was 154 first grade students at SMA Xaverius Pringsewu in the first semester in academic year of 2025/2026. In addition, the researcher used Cluster Random Sampling to determine the sample of the research, where one class randomly was selected from existing classes. From the result of sampling, the selected class was X-1 and the students of this class consisted of 31 students. All students in the selected class participated in this research.

### **3.4 Data Collection Instruments**

This section focuses on data collecting instruments. In collecting data, the researcher used test as the instrument. The tests were pre-test and post-test. Each student had to answer reading comprehension questions in the form of multiple choice related to the narrative text material. Each question had 4 answer choices in which only one answer must be chosen by the students as the correct answer. The pre-test instructions were the same as the post-test instructions, but the order of the texts and also the questions in pre-test and post-test used in this research were different. In making tests as research instruments, the researcher considered validity, reliability, level of difficulty, discrimination power and scoring system. The following is an explanation of each of these aspects:

#### ***3.4.1 Validity***

Validity refers to how accurately an instrument or test measures what it is intended to measure (Hughes, 2003). In this research, the researcher used two types of validity as below:

##### **1. Content Validity**

Content validity refers to whether the test items administrated is represented what has to be tested. In this research, the researcher made test related to narrative

text. The test was developed based on the elements of learning achievement (reading-viewing) and ATP (Alur Tujuan Pembelajaran) of first grade senior high school in Merdeka Curriculum.

## 2. Construct Validity

Construct validity is concerned with whether the test being administered is actually in line with the theory of what reading comprehension means or not. In this research, the researcher administered a test to measure students' reading comprehension related to narrative text. The specification of construct validity in this research is as follows:

**Table 3. 1 Specification of Reading Test for Try Out**

Topic	Number of Question
Determining the main idea	1, 7, 12, 18, 21, 27, 32, 38
Identifying specific details	2, 8, 11, 15, 22, 28, 31, 35
Understanding the meaning of vocabulary.	3, 5, 14, 16, 23, 25, 34, 36
Identifying references	4, 9, 10, 17, 24, 29, 30, 37
Making inferences	6, 13, 19, 20, 26, 33, 39, 40

**Table 3. 2 Specification of Reading Test for Pre-Test**

Topic	Number of Question
Determining the main idea	1, 8, 17, 20, 23, 26
Identifying specific details	2, 5, 6, 11, 21, 22,
Understanding the meaning of vocabulary.	3, 7, 14, 16, 19, 24
Identifying references	4, 9, 12, 18, 27, 29
Making inferences	10, 13, 15, 25, 28, 30

**Table 3. 3 Specification of Reading Test for Post-Test**

Topic	Number of Question
Determining the main idea	2, 6, 9, 11, 19, 28
Identifying specific details	1, 3, 18, 16, 24, 27
Understanding the meaning of vocabulary.	4, 7, 13, 17, 20, 30
Identifying references	5, 10, 14, 21, 22, 25
Making inferences	8, 12, 15, 23, 26, 29

Based on the tables above, the researcher made a test that measures aspects in reading comprehension which were main idea, specific details, vocabulary, references and inferences. The test for try out was in form of multiple choices which consisted of 40 items. In addition, pre-test consisted of 30 items multiple- choices and for post-test was also 30 items. Try out test, pre-test and post-test had to be answered by the students within 60 minutes.

### **3.4.2 Reliability**

Reliability can be defined as the extent to which the test is consistent in its scores and gives an indication of how accurate the test scores are (Hatch and Farhady, 1981). In this research, to measure reliability, researcher used Split-Half Method (Odd-Even). Additionally, this research used *Pearson Product Moment* in SPSS to measure the coefficient of the reliability between odd and even group. After the test reliability was obtained. The criteria are as follows.

- 0.00 – 0.49 = Low reliability
- 0.50 – 0.79 = Moderate reliability
- 0.80 – 1.00 = High reliability

### **3.4.3 Level of Difficulty**

Level of difficulty or facility value refers to how easy or difficult the item is from the perspective of the students taking the test (Heaton, 1989). A good test

is one that is neither too easy nor too difficult for students. In this research, the researcher used this formula to calculated level of difficulty of each item.

$$FV = \frac{R}{N}$$

Description:

FV : Level of Difficulty or Facility Value

R : The students who answer the item correctly

N : The total number of students participating in the test

The criteria are as follow:

$FV < 0,30$  = Difficult

$FV = 0,31 - 0,70$  = Moderate

$FV > 0,71 - 1,00$  = Easy

(Shohamy, 1985)

#### 3.4.4 *Discrimination Power*

Discrimination power refers to the ability of a test to distinguish between upper and lower students. According to Heaton (1989), the discrimination power can be measured by using this formula:

$$D = \frac{U-L}{n}$$

Description:

U : Number of upper students who answer the item correctly

L : Number of lower students who answer the item correctly

n : Number of the test-takers in one group

In this research, the researcher interpreted the results using the criteria below:

D :  $0,00 - 0,20$  = Poor

D :  $0,21 - 0,40$  = Satisfactory

D :  $0,41 - 0,70$  = Good

D :  $0,70 - 1,00$  = Very Good

### 3.4.5 Scoring System

The researcher calculated the score of the pre-test and post-test by using Arikunto's formula. The formula is as follows:

$$S = \frac{R}{N} \times 100$$

Description:

S = Score of the test

R = Correct answers

N = The total items

## 3.5 Data Collection Technique

This section will present about data collection techniques. In this research, the researcher collected data from the result of students' pre-test and post-test.

### 1. Pre-test

The pre-test was conducted on the first meeting. The researcher gave clear instruction to students so that they understood how to do the test correctly. In addition, the researcher monitored the classroom situation so that the result reflected the students' initial ability without any collaboration between students that could influence the accuracy of the data.

### 2. Post-test

After the intervention period was over, the researcher conducted post-test by using a previously determined instrument in the form of multiple choice questions. The questions on the post-test were similar in form and difficulty to the questions on the pre-test to ensure equivalence in measurement. This post-test was conducted to measure the improvement of students' reading comprehension after being taught through mind mapping technique.

In summary, the data collection process involved administering a pre-test and post-test to evaluate the implementation of mind mapping technique in improving students' reading comprehension. The pre-test established students' initial ability, while the post-test measured their progress after the intervention, ensuring the reliability and validity of the data collected.

### **3.6 Research Procedures**

This section will present about research procedures. In collecting data, this research was conducted based on the following steps:

1. Determining Subject

The researcher chose first grade students at SMA Xaverius Pringsewu as the population of this research. Based on Cluster Random Sampling, the researcher used X-1 class as the sample in this research.

2. Selecting Materials

The researcher selected the appropriate material based on ATP (Alur Tujuan Pembelajaran) and also the element competency. The material was in the form of reading passage. The topic was about narrative text which was folktale.

3. Determining Research Instrument

The researcher used multiple choice test items totaling 30 multiple-choice questions as a research instrument in pre-test and post-test. The test contained of narrative text which was folktale. In the test, there were four options to be chosen. One of them was the correct answer.

4. Administering Pre-test

In the first phase of the research, the teacher gave students a test on narrative text in form of multiple choice questions. This test was aimed to determine students' reading comprehension in the aspects such as main idea, vocabulary, specific information, reference and inference before being taught through mind mapping technique in the classroom.

5. Conducting Treatment

The students were taught about narrative text in 3 meetings. During the meetings, they were taught to apply mind mapping technique to help them in comprehending a narrative text.

6. Administering Post-test

Researcher administered post-test in order to measure students' reading comprehension of narrative text. The test consisted of 30 multiple-choice questions. It was aimed to determine students' reading comprehension in the aspects such as main idea, vocabulary, specific information, reference and inference after being taught through mind mapping technique.

## 7. Scoring Students' Test

Pre-test and post-test were scored using scoring system by the researcher. The scores were used by the researcher to identify the improvement of students' reading comprehension after being taught through mind mapping technique.

## 8. Analyzing Data

The students' scores from pre-test and post-test were analyzed using T-Test. It was used to find out whether there is an improvement of students' reading comprehension in narrative text after being taught through mind mapping technique or not.

In summary, the data collection steps in this study involved a series of systematic procedures. It started with the selection of research population, sample, instruments to be administered in pre-test and post-test, the implementation of the treatment through mind mapping technique, and analysis of the results. These steps were taken to ensure comprehensive results on mind mapping technique in improving students' reading comprehension in narrative text.

## 3.7 Data Analysis

The researcher computed the students score in order to find out the students improvement in reading comprehension of narrative text by using mind mapping technique. Here are several steps to analyze the data:

- a. Scoring pre-test and post-test.
- b. Tabulating and calculating the score of pre-test and post-test.
- c. Drawing the conclusion from the tabulated result of the test by using statistical computerization. In this research, the researcher used Repeated Measures T-Test of Statistical Package for Social Science (SPSS) to identify the value of the pre-test and post-test and how significant the increase was.

## 3.8 Hypothesis Testing

Hypothesis testing was used to prove whether the hypothesis proposed in this research is accepted or not. The improvement of students' reading comprehension in narrative text was approved at the significance level of 0.05 ( $p < 0.05$ ). According to Setiyadi (2018), in order to determine whether the hypothesis is

accepted or rejected, the following criteria of acceptance is used. Those criteria are:

$H_0$ : There is no improvement in students' reading comprehension in narrative text after being taught through mind mapping technique.

$H_A$ : There is an improvement in students' reading comprehension in narrative text after being taught through mind mapping technique.

The following explanation of those criteria is as follows:

1. If the significance value (p-value) is less than the significance level (0.05) and the t-value is more than the t-table, then  $H_0$  is rejected. It indicates that there is an improvement in students' reading comprehension after being taught through mind mapping technique.
2. If the significance value (p-value) is more than the significance level (0.05) and the t-value is less than the t table,  $H_0$  is accepted. It indicates that there is no improvement in students' reading comprehension after being taught through mind mapping technique.

This chapter has discussed research design, data variable, data sources, data collection instruments, data collection technique, research procedures, data analysis, and hypothesis testing.

## **V CONCLUSION AND SUGGESTION**

This chapter presents the conclusion of the research conducted and suggestions based on the results of data analysis and discussion in the previous chapter.

### **5.1 Conclusion**

Based on the findings and results of data analysis, it can be stated that there is an improvement in reading comprehension of first grade students at SMA Xaverius Pringsewu in narrative text after being taught through mind mapping technique. This conclusion is supported by the results of a comparison between the mean scores of pre-test and post-test, where there was an increase in student scores after being given treatment through the mind mapping technique. Moreover, mind mapping technique increased students' understanding in five aspects of reading comprehension, which were main idea, vocabulary, specific information, reference and inference. Inference showed the highest improvement among the five aspects of reading comprehension. This occurred because the technique encouraged and trained students to deduce implied meanings by analyzing the relationships between the ideas they had visualized in their mind map.

Through the implementation of mind mapping technique, students are trained to process the information they have read by selecting and grouping the information and supporting details into meaningful related branches. This process encourages them to enhance their focus on important aspect of narrative text, express their understanding of the story in their own words, and strengthen their overall comprehension in reading aspects. All in all, the results of this research affirm previous findings that mind mapping technique can improve students' reading comprehension in narrative text.

## **5.2 Suggestion**

Based on the findings of this research, the researcher provides several suggestions that are expected to be useful for teachers, and also future researchers.

### 1. English Teachers

English teachers who want to implement mind mapping technique in a class are recommended to always keep students focus while constructing their mind maps and consistently monitor them, so that each student can effectively organize all information from the text.

### 2. Future researchers

Future researchers are recommended to explore the implementation of mind mapping technique with a larger sample size and also longer treatment duration in order to provide more generalizable findings with similar topic.

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