CHAPTER II
LITERATURE REVIEW

A. Speaking Skills in Language Learning

1. The Concept of Speaking Skills in Education

According to Brown (2015), speaking is an interactive process of constructing meaning that involves producing, receiving, and processing information. In the context of language education, speaking skills are regarded as a productive oral competence that requires not only linguistic mastery but also the ability to organize and structure ideas effectively before oral expression. For learners of a foreign or second language, difficulties in speaking often arise not merely from limited vocabulary or grammar, but from the inability to plan and organize thoughts coherently in real-time communication. According to Asratie (2023), speaking performance refers to learners' ability to communicate ideas effectively through oral interaction by integrating vocabulary, grammar, pronunciation, and fluency. Successful speaking enables learners to express ideas clearly and engage in meaningful communication in different contexts. Sun (2023) explains that speaking skill is the ability to communicate effectively in English by combining pronunciation, fluency, vocabulary, and grammatical accuracy to achieve successful oral interaction.

From a pedagogical perspective, Sharma (2024) conceptualizes speaking skills as a set of abilities developed through directed instruction that helps learners articulate thoughts coherently, express ideas fluently, and communicate effectively

through interactive activities. This view highlights that successful speaking performance is closely linked to pre-speaking cognitive preparation, in which learners are supported to generate, connect, and structure ideas before delivering oral messages. This cognitive foundation becomes particularly essential when considering that, according to (Guebba, 2021), speaking is inherently an interactive process as it embodies a dynamic exchange between two or more interlocutors within a given situation. Consequently, spoken language varies according to social contexts; the language used in formal settings differs markedly from that used in informal interactions. To address this variability, novel pedagogical approaches such as situational language teaching advocate for the use of authenticity in learning materials and activities to make the development of speaking skills more effective and approachable.

Extending this argument, Yingsheng Liu dan Pui-sze Yeung (2023) explain that speaking is one of the primary goals of second language learning; however, speech production is a complex cognitive process that requires planning, formulation, articulation, and continuous practice. Consequently, learners need instructional support and repeated opportunities to develop their speaking proficiency. Esther De Vrind et al. (2024) argue that improving foreign language speaking skills requires explicit learning strategies, self-regulated practice, and continuous instructional support rather than relying solely on natural language exposure.

Thus, the guided, scaffolded approach to developing speaking skills rooted in both cognitive preparation and authentic

interactive practice becomes indispensable for equipping second language learners to achieve communicative competence across diverse social situations. Speaking skills in language learning can be understood as having a dual dimension: as a communicative outcome and as a cognitive instructional process. Speaking as an outcome requires learners to convey ideas fluently and meaningfully in social interaction, while speaking as a process necessitates instructional str ategies that assist learners in organizing ideas and reducing cognitive load during oral production.

2. Dimensions of speaking

Based on the conceptualization of speaking as both a communicative outcome and a cognitively organized process, it is necessary to examine the specific components that constitute effective speaking performance. To evaluate speaking skills in an educational context, Brown (2004), in his book Language Assessment: Principles and Classroom Practices, proposes five components of speaking assessment, which include: pronunciation, including intonation and word stress; grammar, particularly the sentence structures used in spoken communication; vocabulary, namely the accuracy and variety of words; fluency, which refers to the ability to speak naturally and without disruptive pauses; and comprehensibility, namely the ability to understand the speaker's discourse. Brown emphasizes that these components do not stand alone but are interrelated in creating effective oral communication. Meanwhile, The assessment of speaking ability remains a complex endeavor due to the simultaneous use of vocabulary, grammar, pronunciation, and

fluency. Recent research by Ockey and Li (2024) identifies four key sub-abilities of oral communication: 1) interactional competence; 2) appropriate use of phonology; 3) appropriate and accurate use of vocabulary and grammar; and 4) appropriate fluency.

Heaton (1988) proposes that speaking ability can be systematically assessed through several core components, namely fluency, accuracy, pronunciation, and comprehensibility

1. fluency

   Fluency is one of the main aspects of speaking skills that is often used as an indicator of the success of language learners in producing speech effectively. In the study of language skills, *fluency* is seen as the ability to produce language continuously, spontaneously, and not be hampered by temporal distractions such as long pauses, doubts, or unnecessary repetitive improvements. Ghasemi & Mozaheb, (2021) explained that speech fluency is closely related to temporal characteristics and speech improvement, such as the speed of articulation, the number of pauses, and the frequency of *self-repair* carried out by the speaker when speaking. This view shows that fluency is not just the ability to speak quickly, but rather how the speaker manages the flow of speech so that communication continues to run naturally and can be understood by the listener.

2. Accuracy

   It is one of the important components in the assessment of speaking ability that is directly related to the accuracy of language use. In the context of language learning, accuracy is understood as the ability to produce correct utterances in

accordance with grammatical rules, vocabulary selection, and proper pronunciation. (Wang et al., 2024) explain that Accuracy refers to the correctness of language production, particularly in terms of grammatical accuracy and adherence to the rules and structures of the target language. In speaking, accuracy reflects learners' ability to produce grammatically correct utterances with appropriate vocabulary and sentence structures . They define accuracy as the ability to speak correctly according to linguistic rules so that speech can be understood clearly and free from errors. This emphasizes that accuracy is not only related to the correct sentence structure, but also includes the suitability of meaning, accuracy of diction, and articulation that allow the message to be conveyed without ambiguity.

3. Pronounciation

It is one of the fundamental components in speaking skills that has an important role in the success of oral communication. Pronunciation is not only considered a mechanical element in sound production, but it is an important aspect that determines the extent to which the message can be clearly understood by the listener. (Wagner et al., 2024) define pronunciation as the way a person produces individual sounds, prosody speed, speech speed, and sound quality when speaking. In this context, pronunciation includes phonemes, word pressure, intonation, rhythm, as well as other suprasegmental aspects that make up the characteristics of speech. Experts emphasize that pronunciation is a very important element for the listener because the quality of

pronunciation determines the level of ease of understanding speech.

4. Comprehensibility

In the context of second language research, comprehensibility is identified as a central perceptual construct defined as the degree of ease perceived by a listener in processing and understanding a speaker's utterances (Uchihara et al., 2022). This construct occupies a unique position because it serves as a bridge between the speaker's language production performance such as: pronunciation, grammar, and vocabulary and the listener's cognitive processing results. Comprehensibility is influenced by various factors, both linguistic phonological accuracy, grammatical complexity and non linguistic familiarity with accents, discourse context. Understanding the dynamics of comprehensibility is crucial, as it directly correlates with the success of communicative interactions and can have implications for language learners' motivation and self-confidence.

The three experts agree that speaking ability is a multidimensional construct that encompasses linguistic aspects (pronunciation, grammar, vocabulary) and performance aspects (fluency, comprehensibility), although the approaches of Brown and Harris provide a more distinct breakdown; Heaton’s framework is considered the most appropriate, practical, and relevant for addressing the research question of this study, which examines the effect of mind mapping techniques on students’ speaking skills.

3. Techniques of teaching speaking

In English language learning, the use of appropriate teaching techniques is crucial for improving students' speaking skills. One technique frequently used is role play. Dwiyanti and Lolita (2023) state that role play is an activity in which learners are assigned roles and act out situations that simulate real-life communication. This quote indicates that the role-play technique provides students with the opportunity to practice language use in communication situations that resemble real life, thereby helping to improve their speaking skills.

Additionally, another technique that can be used in speaking instruction is task-based learning. Ellis (2022) explains that "task-based language teaching focuses on the use of authentic language through meaningful tasks that require learners to communicate in the target language." This indicates that task-based learning encourages students to actively use English in completing communication tasks, thereby allowing their speaking skills to develop more naturally.

(Macalister & Nation, 2020) states that teaching speaking techniques should not focus on just one aspect (for example, only speaking continuously without correction, or only memorizing grammar). Instead, there should be an equal amount of time and opportunity to develop the following four strands:

a. Meaning Focused Output (Learning through Language Production): Students learn to speak by speaking. They try to convey messages to others communicatively.
b. Meaning Focused Output: Learning through speaking and writing to convey messages to others.

c. Language Focused Learning: Learning that is deliberate and focused on linguistic aspects such as pronunciation, vocabulary, and grammar.
d. Fluency Development: Developing fluency in using what is already known, with easy material and pressure to speak faster.

According to Nation (2025), techniques such as prepared talks and storytelling are recommended because they allow students to practice meaningful speaking while developing fluency.

Although these various learning techniques can improve students' speaking skills, many students still struggle with organizing their ideas before speaking. Therefore, a technique is needed to help students organize their ideas systematically. One technique that can be used is Mind mapping. Berta and Mulat (2024) states that "mind mapping is an effective learning strategy that helps students organize ideas visually and improve their language skills by connecting key concepts and supporting information." This statement indicates that mind mapping can help students organize ideas visually, thereby making it easier for them to develop their ideas when speaking. Additionally, Berta and Mulat (2024) also explain that "mind mapping activates both hemispheres of the brain and assists learners in recalling information and expressing their ideas more effectively." This indicates that the use of mind mapping in speaking instruction not only helps students organize ideas but also enhances their ability to recall information and convey ideas more effectively.

Based on the opinions of these experts, it can be concluded that although techniques such as role play and task based learning can help improve students' speaking skills, mind mapping has the advantage of helping students organize their ideas before speaking. Therefore, mind mapping was selected in this study as a learning strategy to help students improve their speaking skills.

4. Speaking Rubric

Brown (2004) views the assessment of speaking skills as a complex process that encompasses a taxonomy of oral production types. Brown classifies speaking tasks into five categories: imitative, intensive, responsive, interactive, and extensive (monologue) (Brown & Abeywickrama, 2018). Additionally, Brown identifies eleven microskills such as phoneme pronunciation, word structure, intonation, and pauses, as well as five macroskills such as communicative functions and sociolinguistic features, that learners must master. However, Brown does not provide a standardized rubric with a numerical scale and ready to use descriptors. The framework offered by Brown is more theoretical and comprehensive for designing various types of speaking tasks, but requires significant adaptation if it is to be used as a direct scoring instrument in a study.

In contrast to Brown, Heaton (1988) developed a more structured and practical speaking assessment rubric. The rubric designed by Heaton focuses on four main components: fluency, accuracy, pronunciation, and comprehensibility (Heaton, 1988). The strength of this rubric lies in the availability of qualitative descriptors for each score range, allowing evaluators to directly match student performance with the available descriptors without having to develop indicators from scratch.

Based on the comparison above, this study decided to use Heaton's (1988) speaking assessment rubric as the primary reference. Heaton's assessment rubric is ready to use, featuring a numerical scale and clear descriptors, thereby fulfilling the principle of practicality in language assessment. The speaking rubric was adapted from Heaton (1988) and modified to suit the objectives and classroom context of this study.

Table 2.1 Speaking Rubric

Indicator	5 – Excellent	4 –Good	3 – Fair	2 – Poor	1 – Very Poor
Fluency	Very fluent, natural flow.	Mostly fluent, minor pauses.	Some pauses and repetitions.	Frequent pauses, hard to follow.	Not fluent, constant breakdowns.
Accuracy	Highly accurate, varied vocabulary.	Minor errors, meaning clear.	Frequent errors but meaning intact.	Many errors affecting meaning.	Not understandable.
Pronunciati on	Clear, natural pronunciatio n.	Mostly clear, minor issues.	Understandable but influenced by L1.	Often unclear, affects understanding.	Not understandable.
Comprehen sibility	Listeners can easily understand the entire message without any effort.	Listeners understan d the message with minimal effort.	Listeners understand most messages with moderate effort.	Listeners understand only a small part of the message with great effort.	Listeners hardly understand the message at all.

Source: Adapted from Heaton (1988, p. 100)

B. Mind Mapping Techniques

1. Definition and Basic Principles of Mind Mapping

According to Buzan (2018), mind mapping is a visual thinking tool that helps individuals organize information systematically through diagrams centered on a single main idea. This diagram uses branches that connect relevant ideas or keywords, and utilizes colors, images, and curved lines to create associations that reflect the brain's natural way of working. With this radial structure, mind mapping supports non-linear thinking processes that facilitate idea development, strengthen memory, and improve overall understanding.

Furthermore, Buzan emphasizes that mind maps allow the brain to work using both the left and right hemispheres simultaneously, which has been less than optimal in traditional linear note-taking methods. The use of visual elements such as colors and images in mind maps not only makes the learning process more interesting, but also helps users to remember information more effectively. Therefore, mind maps are not only a technique for summarizing material, but also a learning strategy that stimulates creativity and critical thinking skills. Thus, the application of mind maps in academic settings, particularly in English language learning, is believed to improve students' ability to understand concepts in depth and organize information in a more structured way.

In line with Buzan's (2018) theory, Mind Mapping is considered an effective strategy for organizing and connecting information. The visual representation of ideas enables learners to identify relationships among concepts, develop critical thinking skills, and structure information systematically. Consequently,

students may find it easier to understand complex topics, generate ideas, and retain information for future learning.

In addition, Mayer's (2021) Cognitive Theory of Multimedia Learning suggests that learning becomes more effective when learners process information through both verbal and visual channels. The use of visual elements in mind maps, such as colors, images, and keywords, helps students organize information more meaningfully and maintain their attention during learning activities. Furthermore, the visual structure of mind maps encourages active participation by allowing students to explore and connect ideas independently. As a result, mind mapping may enhance students' motivation, engagement, understanding, and retention of information throughout the learning process.

Based on the opinions and findings of these experts, it can be concluded that mind mapping is a learning method that has great potential in improving the quality of the learning process for students. With its ability to organize information visually and support critical thinking, mind mapping contributes to increased knowledge retention, creativity, and student engagement in learning.

2. Principles of Effective Mind Mapping Construction

According to Buzan (2018), effective mind mapping follows five main principles: (1) using images or symbols as the center of the map, (2) developing main branches that represent core concepts, (3) using a single keyword per branch, (4) applying different colors for different categories, and (5) creating visual associations between elements. These principles are also supported by Mayer's (2021) Cognitive Theory of Multimedia Learning, which emphasizes that learners understand information more effectively

when verbal and visual elements are meaningfully integrated. Through the use of colors, images, keywords, and hierarchical branches, mind maps help learners organize and connect ideas systematically. Consequently, students may find it easier to generate ideas, structure their thoughts, and express them more confidently during speaking activities. The basic principles of mind mapping as outlined by Tony Buzan include several important aspects that support the effectiveness of this technique in the learning process. First, the use of central images that serve as the main focal point in mind maps. These images represent the main ideas and are visually appealing, making it easier for the brain to remember and connect related information. Second, there are branches that originate from the central image, connecting the main ideas with relevant sub-ideas. These branches are usually curved lines that organically mimic tree branches, in order to match the natural way the brain processes information. Third, mind maps use short and concise keywords in each branch to stimulate association and creativity. Buzan emphasizes that one word per branch is sufficient to trigger various ideas because the keyword can develop into many associations. Fourth, the use of different colors to distinguish each branch and categorize different ideas. These colors not only make mind maps more visually appealing, but also help the brain organize and remember information better. Fifth, the principle of association, which is at the core of mind mapping, where each element is connected in a network that allows for the creation of idea connections, strengthens understanding, and enables broader and more creative thinking. These connections reflect how the human brain works, not in a straight line but through complex associative

relationships.

Thus, applying these mind mapping principles helps improve learning abilities in a more visual, creative, and comprehensive way, in line with the natural way the human brain processes information.

3. The Benefits of Mind Mapping in the Context of Education

Mind mapping is a highly effective learning technique that helps students organize information visually and systematically. According to Buzan (2018), mind mapping applies visual principles that allow learners to focus on one main idea connected to branches containing keywords, the use of colors, and interrelated associations to represent the relationships between pieces of information. This technique strengthens memory and understanding of complex concepts more comprehensively. Furthermore, the effectiveness of mind maps can be explained through Mayer's (2021) Cognitive Theory of Multimedia Learning, which suggests that learners process information more effectively when verbal and visual representations are combined meaningfully. The use of colors, images, and keywords in mind maps encourages active engagement with learning materials and allows students to explore ideas more creatively. As a result, learning becomes more interactive and motivating for students.

In addition, Ausubel's (1968) Meaningful Learning Theory emphasizes that new knowledge is learned more effectively when it is connected to existing cognitive structures. Through the visual organization of concepts and the use of associations among ideas, mind maps help learners identify relationships between concepts and integrate new information with prior knowledge. Consequently,

students may find it easier to understand, remember, and apply information in various learning contexts. In addition to facilitating organization and creativity, mind mapping also plays an important role in improving critical thinking skills. An et al. (2024) reported that mind mapping supports collaborative knowledge construction by helping learners externalize, connect, and refine ideas, resulting in deeper cognitive processing and better synthesis of information.

Thus, the application of mind mapping in the learning process has been proven effective in improving students' information organization, creativity, comprehensibility, and critical thinking skills, all of which play a very important role in supporting more optimal learning outcomes

4. The Relationship Between Mind Mapping and Speaking

The relationship between mind mapping and speaking is symbiotic and supported by cognitive learning theory. Mind mapping functions as a blueprint or mental mapping before and during speaking activities.

a) Mind Mapping as a Tool for Planning and Organizing Ideas

Recent studies have shown that Mind Mapping can facilitate students' idea generation and organization before speaking. Berta and Mulat (2024) reported that students were able to develop ideas more systematically when using Mind Mapping, which contributed to better speaking performance. Through the visual organization of concepts, students can identify key points and arrange them into a logical sequence before delivering their speech.

b) Mind Mapping as a Memory Trigger and Anxiety Reducer

According to Buzan (2018), Mind Mapping is a visual technique that allows learners to organize information through keywords, branches, images, and associations. By using Mind Mapping, students can develop a clear framework of ideas before speaking. Instead of memorizing complete sentences, students can rely on keywords and key concepts that guide them in producing spoken language more naturally. This process may reduce students' anxiety and help them focus on communicating their ideas effectively.

Furthermore, Mind Mapping has the potential to improve several aspects of speaking ability. When students organize their ideas logically, they are more likely to speak fluently because they can follow the sequence of information in their mind maps. The use of keywords also encourages students to construct sentences spontaneously, which can contribute to the development of accuracy and grammatical awareness. In addition, repeated speaking practice based on mind maps may help students improve their pronunciation and overall comprehensibility. Several previous studies have also reported positive outcomes regarding the use of Mind Mapping in speaking instruction. The findings suggest that students become more active and confident in expressing their ideas when they are provided with a visual tool to organize their thoughts. Mind Mapping enables learners to generate ideas more easily and maintain the flow of communication during speaking activities.

Therefore, Mind Mapping Technique is considered a suitable strategy for teaching speaking because it facilitates idea generation, idea organization, and oral expression. Through the use of Mind Mapping, students are expected to improve their speaking ability, particularly in terms of fluency, accuracy, pronunciation, and comprehensibility.

C. The Implementation of Mind Mapping Technique In Teaching Speaking

Teaching speaking, as a crucial component of second language acquisition, requires a strategic approach to help learners overcome the inherent complexities of oral communication. According to Brown (2001), teaching speaking involves guiding students to produce meaningful utterances by mastering micro skills such as grammar, pronunciation, and vocabulary, while simultaneously managing the macro-skills of discourse and interaction. Various techniques have been developed to facilitate this process, ranging from controlled activities like drilling and dialogues to more communicative approaches such as role plays, debates, and discussions (Harmer, 2007). The primary goal of any speaking technique is to reduce learners' cognitive load and anxiety, enabling them to organize their thoughts and express ideas fluently and coherently (Goh & Burns, 2012).

Among these diverse instructional strategies, Mind Mapping has emerged as a particularly effective cognitive tool for enhancing speaking performance. Pioneered by Tony Buzan (2006), a mind mapping is a visual, non linear diagram that represents ideas radiating from a central concept, utilizing keywords, colors, images, and branches to mirror the brain's associative thinking process. In the context of language learning, Mind Mapping serves as a pre speaking strategy that

helps learners generate, categorize, and visualize ideas before they begin to speak, thereby reducing the cognitive load imposed by simultaneous linguistic processing (Sweller, 1988; Kobayashi, 2021). By externalizing their thoughts, students can focus their working memory on producing fluent and accurate speech rather than struggling to recall what to say next.

In the eleventh grade of senior high school, based on the Kurikulum Merdeka, students are introduced to various text types, one of which is Analytical Exposition. This text type aims to persuade listeners or readers that a certain idea or opinion is important and worthy of attention. The theme selected for this study is "Healthy Life," which includes topics such as the importance of breakfast, the benefits of exercise, and the dangers of junk food. By using Mind Mapping, students can visually organize the generic structure of analytical exposition:thesis, arguments, and reiteration into a clear and memorable diagram, making it easier for them to prepare and deliver their spoken monologues.

In the context of this study, the implementation of Mind Mapping is specifically tailored to teach analytical exposition texts on the theme "Healthy Life" for eleventh grade students. As outlined by Hoa and Trang (2020), Mind Mapping is particularly effective for argumentative texts because its non-linear, branching structure mirrors the hierarchical relationship between a thesis statement (central idea) and its supporting arguments (main branches and sub branches).

1. Determining the Main Topic and Central Image

   The first step in creating a mind map is determining the main topic to be discussed. This topic is placed at the center of the paper and becomes the primary focus of the entire mind map. According

to Buzan (2018), the use of an image or symbol at the center of the mind map is highly recommended because images are more easily remembered by the brain than plain text. This central image should be colorful and eye-catching, as the brain is naturally drawn to prominent visual elements.

For example, if the topic is "The Importance of Breakfast," students can draw simple images such as a bowl of cereal, a fried egg, or an apple in the center of the paper. This image serves as a visual reminder of the main topic and helps activate memory and idea associations. Buzan emphasizes that the central image should use at least three colors to stimulate right-brain activity and make the mind map more memorable.

2. Developing Main Branches

After the central image is created, the next step is to develop main branches that radiate from the center. These branches represent the main ideas or key categories related to the topic. In the context of analytical exposition texts, these main branches typically consist of three structural parts: thesis statement, arguments, and reiteration.

Main branches should be drawn with curved, thick lines that flow from the center outward. Buzan (2018) explains that curved lines are more natural and align with the brain's functioning compared to straight lines, because the human brain works through associative connections that are non-linear. Each main branch should have a different color to distinguish categories and facilitate visual recognition. For instance, the thesis branch can be colored red, the arguments branch blue, and the reiteration branch green.

3. Adding Supporting Branches (Sub-Branches)

After the main branches are formed, the next step is to add supporting branches or sub-branches that radiate from each main branch. These sub-branches contain more specific ideas or details that support the main idea on the branch above them. In analytical exposition texts, sub-branches under the arguments branch can contain specific reasons, examples, or supporting facts.

For example, under the first argument branch "Provides Energy," sub-branches can contain keywords such as "carbohydrates," "focus," and "activity." Under the second argument branch "Helps Concentration," sub-branches can contain keywords such as "brain," "learning," and "memory." These supporting branches use thinner lines compared to the main branches, showing a clear visual hierarchy between ideas.

4. Using Keywords, Not Complete Sentences

One of the most important principles in mind mapping is the use of keywords rather than complete sentences. Buzan (2018) emphasizes that a single keyword per branch is sufficient to trigger various associations and ideas, whereas complete sentences actually limit the brain's ability to create and remember information. Keywords function as triggers that allow students to spontaneously develop complete sentences when speaking.

In the context of teaching speaking, the use of keywords is crucial because it prevents students from reading a script verbatim. For example, instead of writing "Breakfast provides enough energy to start daily activities," students simply write "energy" as a keyword. When speaking, students can develop this keyword into varied complete sentences, making their speech sound more natural

and less like rote memorization.

5. Using Colors for Categorization and Visualization

The use of colors is an important element in creating an effective mind map. Buzan (2018) recommends using different colors for each main branch and their related sub-branches. Colors serve to distinguish categories, strengthen memory, and make the mind map more visually appealing. Additionally, colors help the brain organize information more efficiently because the brain processes color before shape and text.

In practice, students can assign one color to each main branch and use lighter or darker variations of that color for the sub-branches beneath it. For example, all branches related to the first argument can use dark blue, while its sub-branches use light blue. This color consistency helps students track their thought flow more easily when speaking.

6. Adding Images and Symbols to Strengthen Memory

In addition to keywords and colors, adding simple images or symbols to certain branches can greatly help strengthen memory and understanding. Buzan (2018) explains that images are more easily remembered than words because the brain processes images holistically and more quickly. Small images placed next to keywords can help students remember the idea more effectively when speaking.

For example, on a branch labeled "energy," students can add a simple image such as a star or a sun. On the branch "concentration," students can add an image of a brain or a book. These images do not need to be perfect or artistic; what matters is that the image has personal meaning for the student and can trigger

memory of the idea it represents.

7. Creating Connections and Associations Between Branches

The final step in creating a mind map is to create connections or associations between different branches. Buzan (2018) refers to this as the principle of "association," where related ideas are connected using arrows, dotted lines, or the same color coding. These connections reflect the associative way the brain works, where one idea triggers another related idea.

In the context of analytical exposition, students can connect one argument to another using linking words such as "first," "second," "furthermore," or "in addition." These visual connections help students see the overall structure of their arguments as a whole and make it easier for them to organize the flow of their speech when delivering a monologue. With clear connections between branches, students can speak more fluently because they can easily move from one idea to the next without losing their train of thought.

By following these seven stages, students can create mind maps for various purposes, particularly in preparing for monologues or oral presentations. These stages not only help students organize their ideas but also train critical thinking skills, creativity, and the ability to remember information more effectively (Mayer, 2021; Berta & Mulat, 2024).

D. Previous Studies

Previous studies on The use of mind mapping techniques to improve English speaking skills has been the focus of various studies in recent years. Various studies have been conducted to test the effectiveness of this technique from various methodological and educational perspectives.

Fundamental research was conducted by Saepuloh et al. (2025) entitled “Enhancing Students' Speaking Skills Through Mind Mapping Technique”. Through a Classroom Action Research (CAR) design at the college level, they found a significant increase in learning completeness from 22.87% to 77.14% in two cycles. These findings were reinforced more specifically by Nasution (2020), who researched this technique in descriptive text material. Nasution noted that mind mapping not only increased students' average scores to a mastery level of 86.36%, but also effectively touched on five important aspects of speaking: vocabulary, pronunciation, fluency, grammar, and comprehensibility. These two studies provide a strong foundation that mind mapping is a multifunctional tool for students' linguistic development.

Entering the cognitive aspect, Berta and Mulat (2024) in their latest study entitled “Mind Mapping: An Effective Technique for EFL Students' Language Skills Improvement” highlight that this technique worked by strengthening recall. They argue that the visualization of information in mind maps triggers the systematic development of language skills, making it easier for students to remember information when performing orally. This is in line with the findings of Hòa and Trang (2020) in their case study at Danang University. They report that this technique has a significant facilitating effect on the pre-speaking stages, where students feel more mentally prepared because they have an organized framework of thinking before they start speaking.

Support for this technique comes not only from student learning outcomes data, but also from education practitioners. Bsharat (2023) conducted a qualitative study to explore the perspectives of English teachers in Palestine. The results of semi-structured interviews showed that teachers considered mind mapping strategies to be one of the most

influential methods for improving EFL students' speaking skills. Teachers emphasized that this strategy reduced students' speaking anxiety and made the classroom atmosphere more active and engaging.

Although previous studies have demonstrated the potential of Mind Mapping techniques in improving speaking skills, several methodological and contextual gaps remain unaddressed within the existing Classroom Action Research (CAR) framework. First, while studies such as Saepuloh et al. (2025) and (Dina Syarifah Nasution, 2020) employed CAR designs, they primarily reported general improvements in speaking scores without systematically measuring the specific sub components of speaking ability namely fluency, accuracy, pronunciation, and comprehensibility as outlined by Heaton (1988).

This lack of specificity limits our understanding of how Mind Mapping contributes to each dimension of oral proficiency. Second, most existing CAR studies on Mind Mapping have focused on university level participants (e.g., Berta & Mulat, 2024; Hòa & Trang, 2020), leaving a significant gap in the application of this technique for senior high school students. These younger learners exhibit different cognitive load characteristics, higher levels of speaking anxiety, and greater difficulty organizing ideas spontaneously compared to adult learners. Third, the majority of previous CAR studies have not provided sufficiently detailed documentation of the cyclical process specifically the planning, acting, observing, and reflecting phases that would allow other practitioners to replicate the intervention in similar classroom contexts.

Based on the previous studies above, the researcher found that most studies focused on general speaking improvement and university students, with limited attention to the specific components of speaking

ability (fluency, accuracy, pronunciation, and comprehensibility) in the senior high school context. Therefore, this study addresses these gaps by focusing on eleventh-grade students, specifically analyzing the four speaking components, and providing empirical evidence from a collaborative Classroom Action Research conducted at SMA Negeri 6 Kota Bengkulu.

E. Conceptual Framework

The conceptual framework of this study is based on a real world problem in Class XI F at State High School 6 in Bengkulu City, where students experience cognitive difficulties in organizing their ideas coherently when speaking. As a solution, this study applies the Mind Mapping technique as an intervention within a cyclical Classroom Action Research (CAR) model, encompassing planning, action, observation, and reflection. The Mind Mapping technique is used as a pre-speaking planning tool to help students visualize the structure of their thoughts through keywords, colors, and branches.

Mind Mapping helps students organize ideas before speaking. By using keywords and branches, students can remember important points more easily and speak more confidently, allowing them to focus more on the language production process as argued by Mayer,s (2021) and Kobayashi (2021). Theoretically, this reduction in cognitive load will have a positive impact on the four main components of speaking ability according to Heaton (1988), namely:

Fluency: Students can speak more smoothly because they already prepare their ideas before speaking. Accuracy: Students can reduce grammar and vocabulary mistakes because they have prepared keywords in their mind maps. Comprehensibility: Students' ideas become easier to understand because the mind maps help them speak

more systematically. Pronunciation: Increased speaking practice through Mind Mapping activities provides students with more opportunities to produce spoken language, which may contribute to clearer pronunciation and greater confidence in oral communication.

Through reflection at each cycle, the researcher and collaborators can adjust interventions such as the use of dictionaries or the selection of more engaging topics to ensure that improvements in students' speaking ability reach the established minimum competency standard (KKM), which is 70. The success of this study is measured not only by test scores (product) but also by positive changes in student participation and enthusiasm in the classroom (process).

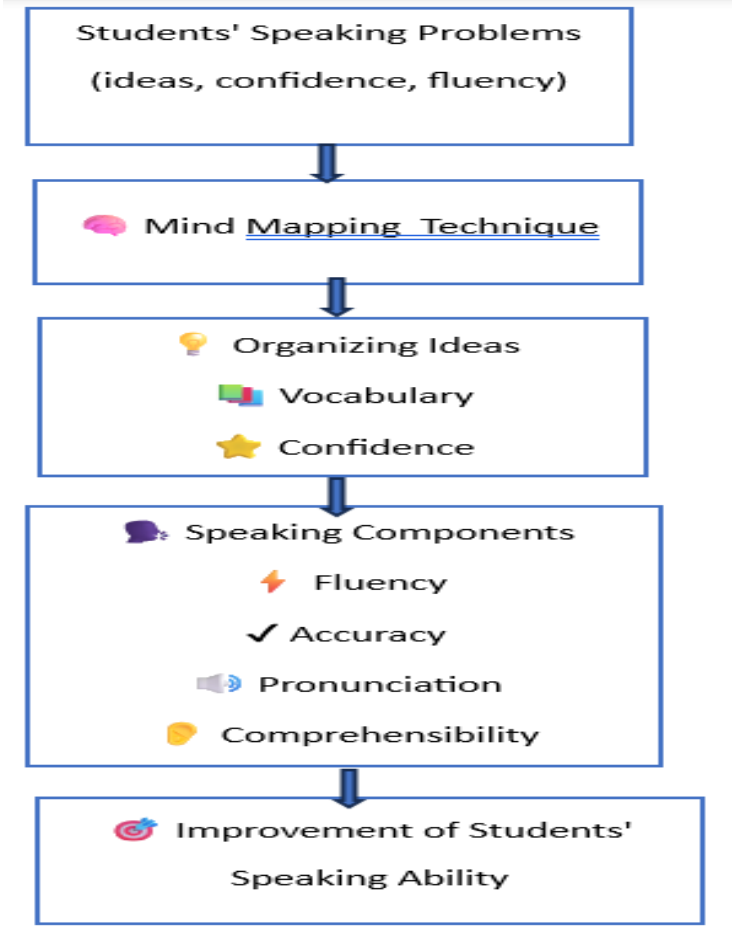

Figure 2.1 Conceptual Framework

F. Research Assumptions

This study is grounded in several foundational assumptions that support the implementation of the Classroom Action Research (CAR) design. It is assumed that the eleventh-grade students at SMA Negeri 6 Kota Bengkulu possess basic English speaking competence, allowing them to actively participate in speaking activities that require the organization and oral expression of ideas. The researcher assumes that Mind Mapping technique can help students organize ideas before speaking and make students more confident during speaking activities. The collaborative CAR model, which involves the researcher working together with the English teacher, is assumed to facilitate continuous reflection and instructional improvement, thereby supporting meaningful development in teaching practices.

Students' speaking performance is assumed to be observable and measurable using a valid and reliable analytical rubric based on Heaton's (1988) framework, which assesses fluency, accuracy, pronunciation, and comprehensibility. Additionally, it is assumed that students will participate actively and consistently throughout the two research cycles, enabling the researcher to observe meaningful changes in their speaking ability as a direct result of the intervention. Finally, it is assumed that the classroom environment remains conducive to the implementation of the Mind Mapping technique.