CHAPTER I INTRODUCTION

In this chapter, the writer provides an overview of the study, including the research questions, purposes, theoretical contributions, significance, and scope of the study. Additionally, the writer presents a conceptual framework, which outlines the key concepts and relationships being examined in the research.

A. Background of the Study

The advancement of science and technology in the 21st century and the Industry 4.0 revolution have impacted the millennial generation. It requires them to adapt through changes in mental attitude, knowledge, and skills (Zahra et al., 2022). An example of this is the improvement in English language proficiency. As educators, it is imperative to prioritize the enhancement of English language proficiency through both formal and non-formal education. It is necessary to adapt teaching strategies and methods to effectively address the specific needs of students.

At the junior and senior high school levels in Indonesia, teaching English as a foreign language is required as part of the curriculum. Students are taught the four primary language skills: listening, speaking, reading, and writing. In English instruction, four language skills are emphasized: structure, pronunciation, vocabulary, and grammar. Pursuant to Harmer (2003), as cited in Maming (2022), that these four aspects are essential for effective communication. In the classroom, teachers should integrate these skills as part of the teaching and learning process, with speaking and writing classified as productive skills, and reading and listening as receptive skills.

As referenced by Dewi (2022), Harmer (2001) states writing is an activity that involves conveying messages, thoughts, and emotions, such as ideas, information, opinions, and suggestions. Murcia and Olshtain (2000), as cited by Sukirlan (2016), affirmed that five key writing components should be considered: content, organization, vocabulary, language usage, and mechanics. Harmer (2004) also highlights four essential stages of writing, including planning, drafting, editing,

and finalizing. During the planning stage, writers must consider ideas that are relevant to the topic. Based on Muray, the planning or pre-writing step is a vital part of the writing process and should take up approximately 70% of the time allocated for writing (2022).

In schools in Indonesia, a variety of writing forms are studied as part of the curriculum. These include a narrative, an argumentative, a recount, a discussion, and a descriptive. The descriptive text involves describing a specific person, place, or object. Tarigan (2022) believes that writing descriptive text aims to engage readers and help them experience, understand, and appreciate the subject being described.

During the teaching practice at SMAN 26 Bandung, the writer identified an issue related to teaching writing in the classroom. Teachers and students still face difficulties in teaching learning writing, particularly in the case of descriptive writing. For teachers, they were challenging to engage students in learning writing techniques. Students may find writing techniques boring or unengaging, making it difficult for teachers to keep them interested and motivated. For students, the most common issue is developing ideas. For example, when the teacher asks the students to describe a "sweater," they describe only what they see with their eyes, like its shape, colour, and material. In contrast, the students can describe more than what they see. They can describe the function of the sweater, where the item was purchased, with whom they bought it, and many more. They get stuck because they need help to develop their ideas.

In summary, the root of the problem lies in the current state of media learning in teaching writing English. To address this, the writer suggests using the XMind application as a solution, aiming to enhance engagement, facilitate idea development, and improve the overall teaching and learning experience in the classroom.

Sulasti (2022) has identified other issues that need improvement, such as the lack of vocabulary, incorrect grammar usage, and insufficient motivation among students. Byrd (2022) suggests that it can be challenging for beginner writers to communicate their message effectively. Even when their grammar is accurate but

the choice of vocabulary may not be suitable. In addition, Richards and Renandya as cited in Nidayanti (2022), stated that the difficulty in writing lies in generating and organizing ideas but also translating these ideas into readable text. Those difficulties make the students not to be confident in writing.

The goal of the study is to investigate how the use of digital mind mapping in writing. Specifically, Xmind application can improve students' ability to write descriptive texts. There are two main types of mind mapping: hand-drawn and digital.

This study focuses on digital mind mapping using Xmind application. The techniques of digital mind mapping include outlining, brainstorming, and clustering. Goodnough and Woods (2002), as cited in Sentyawati (2022), have found that mind mapping has many benefits for students in the learning process, such as improved memory, note-taking, idea development, and thought organization. Mind mapping is a method of brainstorming and organizing ideas non-linear visually. Mind mapping aims to capture ideas and connect them in a way that promotes creativity, problem-solving, and decision-making.

Digital mind mapping has a specific type of application. One of such application is Xmind, a digital mind-mapping program with a file size of about 37 MB. The software makes it easy for beginners to create mind maps, brainstorming diagrams, presentations, and concept maps. With Xmind, users can visualize their thoughts and show a big picture of what students learn or work on.

Therefore, by implementing the digital mind mapping learning model in the classroom, it is expected that students will be able to overcome problems related to writing descriptive texts. Additionally, the learning and teaching of writing skills will be more effective, efficient, and enjoyable. For this reason, the research used the digital mind-mapping learning model to improve writing skills for tenth-grade students at senior high schools in Indonesia.

This research is distinct from previous studies. A study by Lestari Dewi (2022), aimed to investigate the improvement of the ability to use word classes after applying mind mapping. Subsequently, a research by Karim and Mustapha (2020), focused on investigating students' perceptions of the use of digital mind maps to

stimulate creativity and critical thinking in ESL writing courses. While this research focuses on exploring the use of Xmind application in writing descriptive text in senior high school.

The writer was interested in this topic because with the increasing use of technology in the classroom, it is crucial to investigate how digital tools can be effectively integrated into teaching practices to enhance student learning outcomes. Additionally, improving students' writing skills is an important goal for many educators, and finding effective teaching strategies that engage and motivate students can be a valuable pursuit. By researching the title "The Effectiveness of Using the Xmind Application for Teaching Writing Descriptive Texts to Senior High School Students," can provide valuable insights into how technology can be leveraged to improve student writing outcomes and enhance teaching practices.

B. Research Questions

Based on the background research, the researcher formulates the research questions as follows:

- a. What is the students' ability in writing descriptive text before using Xmind application?
- b. What is the students' ability in writing descriptive text after using Xmind application?
- c. How effective is the students' ability in writing descriptive text by using Xmind application?

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C. Research Purposes

Related to the research questions above, the aims of this research are as follows:

- a. To find out the students' ability in writing descriptive text before using Xmind application.
- b. To find out the students' ability in writing descriptive text after using Xmind application.
- c. To find out the effectiveness of students' ability in writing descriptive text by using Xmind application.

D. Theoretical Contributions

In accordance with the research findings, the following theoretical and practical contributions are anticipated:

a. Theoretical Significances

In education, theories serve as a starting point for guiding and developing students who are knowledgeable about technology. Additionally, it gives English teachers instruction in engaging classroom teaching techniques.

b. Practical Significances

This analysis provided teachers and students with valuable and essential information. Teachers' roles involved assisting students' learning and the development of their writing abilities. The research aimed to improve student's writing skills, particularly descriptive writing. They were encouraged to use digital mind mapping through the Xmind application to enhance their English.

E. Research Significance

This study focuses on digital mind mapping using the Xmind application to engage ESL students in writing descriptive text. As a result, the research significance upon which this research is set up continues. This research significance describes the relationship between several ideas in this study, such as writing a descriptive text and the Xmind application as a writing learning tool. The link of each note is depicted in **Figure.1.1**

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Figure I-1Research Significance

F. Research Scope

This study examined the use of digital mind mapping in writing descriptive text. The research scope included terms such as subject, object, and location. The subjects of this investigation were tenth-grade students in one of the senior high schools in Bandung. The objective of this analysis was to use the Xmind application to improve students' writing of descriptive text.

G. Conceptual Framework/ Rationale DUNG

In this part, the writer presents definition of writing, descriptive text, and digital mind mapping.

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Harmer (2001) as cited in Dewi (2022), states that writing is an activity that involves conveying messages, thoughts, and emotions, such as ideas, information, opinions, and suggestions. In line with Arafah (2022), Writing requires the cohesive ability (e.g., the ability to use proper word selection, punctuation, spelling, and correct grammar) and coherent ability (e.g., the ability to organize ideas properly, ability to arrange paragraphs in a good text structure, and the ability to use proper text type). Those things are not naturally acquired but can be learned, practiced, and mastered by the learners.

Harmer (2004) also highlights four essential stages of writing, including planning, drafting, editing, and finalizing. Based on Swanson, as mentioned in Daulay (2023), Planning itself consists of three elements: setting goals, generating ideas, and organizing those ideas into a plan for the written piece. Thus, during the planning stage, writers must consider ideas that are relevant to the topic.

Descriptive text is a form of writing that provides a detailed and explicit account of a person, place, object, or event. It aims to help the reader visualize and understand the subject being described. The text is usually written to allow the reader to imagine and feel the subject. The structure of the descriptive text, as outlined by Gerot and Wignell, as cited in Agung (2022), consists of two main components: identification and description.

Identification is the process of identifying a subject or phenomenon, while description provides specific details and characteristics of that subject. The identification section serves as an introduction and helps the writer develop ideas, while the description section is the most important part of the paragraph as it gives the reader a clear understanding of the subject. Writing should be well-organized and related to one another for easy understanding by the reader.

The concept of mind mapping was introduced and developed in 1960 by Tony Buzan, an English psychologist. Mind mapping is a method of organizing and

representing knowledge through diagrams. It is a visual representation of knowledge and the thought process (Liang, 2022). According to Buzan (2006), mind mapping can benefit students in terms of planning, communicating, becoming more creative, saving time, solving problems, focusing on learning, developing and clarifying thoughts, remembering better, and learning more quickly and efficiently.

As described by Buzan (1996), there are seven steps in creating a mind map:

- 1. Starting from the center of a blank piece of paper
- 2. Using pictures or photos for the central idea
- 3. Incorporating colors
- 4. Connecting main branches to the central image

- 5. Drawing curved lines instead of straight lines
- 6. Using one keyword for each line
- 7. Using pictures

These steps help to utilize imagination, focus, activate the brain, create an interesting structure, and add energy to creative thinking.

Digital mind mapping refers to creating mind maps using software or programs that can be accessed through smartphones, personal computers (PC), or laptops (Arrouays, 2021). Erdogan suggests that digital mind maps can be more efficient and flexible than traditional paper maps (Sudibyo, 2022). With digital mind maps, students can easily move and edit their ideas and save and share their mind maps with others. Digital mind maps also provide the ability to add multimedia such as videos, animations, and pictures to their notes. Additionally, digital mind maps allow for easy duplication and usage across multiple classes. Overall, the researcher has concluded that digital mind mapping is an effective method for organizing and communicating ideas through the use of visual elements and key words.

This study utilizes the Xmind application, which can be downloaded from the play store on a smartphone. Xmind is a mind mapping and brainstorming software created by Xmind Limited, a company based in Shanghai, China. The company was founded in 2003 by Tony Sun and his friends looking for a tool to help them better organize and structure their thoughts. According to Chandra (2021), as cited in Candera (2022), X-mind is a helpful software with a user-friendly interface and visual support. It allows users to create mind maps easily and add various elements such as images, audio, and video to make interactive presentations.

H. Hypothesis

The hypothesis of the study can be formulated as follows:

- **H**₀: There is no significant difference in descriptive writing ability after the EFL students being taught by using the Xmind application.
- H_{a:} There is significant difference in descriptive writing ability after the EFL students being taught by using the Xmind application.

I. Previous Study

This research differs from previous studies that have examined the mindmapping method. A study by Lestari Dewi (2022) aimed to investigate improving the ability to use word classes after applying mind mapping. The data were presented using descriptive and table-form methods for clear organization. The study's findings revealed that mind mapping effectively improved descriptive paragraph writing skills and the ability to use different word classes, as evidenced by the post-test results in the second cycle. Additionally, the study found that students could write more than ten sentences in a paragraph, and there was an increase in the use of adjectives in both the first and second cycles after the implementation of the mind-mapping learning method.

Subsequently, a research by Karim and Mustapha (2020) which focused on investigating students' perceptions of using digital mind maps to stimulate creativity and critical thinking in ESL writing courses. This study showed that students who used a digital mind-mapping tool found it beneficial for their writing skills. They felt that the tool helped with brainstorming ideas, increasing creativity, and promoting critical thinking. They also found the tool practical for writing, allowing faster and more organized writing. Additionally, the tool helped with their writing's fluency, originality, and elaboration. This analysis found a strong correlation between using the digital mind-mapping tool and improving creativity and critical thinking in their writing.

Furthermore, in other research by Chalak and Rastgoo (2021), this study aimed to examine the differences in the attitudes of language learners towards the use of traditional and digital mind-mapping methods in English writing classes. A descriptive research design was employed, and the sample consisted of 30 language learners from the Shokouh Institute in Tabas, Iran. The results of the data analysis revealed that the participants had a favourable view towards mind mapping, specifically the digital method. The research findings indicated that the digital mind-mapping technique assisted the students in organizing their texts. It also helped to improve their writing skills by organizing their ideas. As a result, digital mind mapping was particularly beneficial in helping students plan their English writing by encouraging them to gain a deeper understanding of the writing topics.

The writer distinguishes themselves from previous researchers in their approach to mind-mapping for a specific type of text - descriptive text. Additionally, the writer employs a pre-experimental research design and uses Xmind application for digital mind mapping. These three factors set the writer apart from prior studies in the field.

