

# CHAPTER I

## INTRODUCTION

### A. The Background of the Research

In this rapidly advancing technological era, English has become an essential skill. English is not only used as a means of international communication but also serves as the primary language in various fields such as science, technology, business, and education. According to Irawan, Sasongko and Afriani, the main reason is English is a universal language allowing easier access to update new content, technology, and best practices produced by major global industry players.<sup>1</sup> Proficiency in English enables individuals to access the latest information, participate in global discussions, and enhance career opportunities. Therefore, having good English language skills is an indispensable need.

To be proficient in English, having a broad and strong vocabulary is crucial. A strong vocabulary allows individuals to understand and produce spoken and written texts more effectively. Richard and Renandya stated that vocabulary is a fundamental aspect of language proficiency and provides a substantial foundation for how well language learners speak, listen, read, and write.<sup>2</sup> Mastery of vocabulary will affect the preparation of English sentences and understanding of English. According to Ur, If students do not have a sufficient vocabulary, they will find themselves in unfavorable circumstances, and it will be difficult for them to communicate their

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<sup>1</sup> Cahya Budhi Irawan, Budi Sasongko, and Imro'atul Afriani, "The Role of English and Technology on Human Performance in International Business," *International Journal of Applied Business and International Management* 7, no. 2 (2022): 30–40.

<sup>2</sup> Jack C. Richards & Willy A. Renandya, "Methodology in Language Teaching An Anthology of Current Practice," *Cambridge University Press*, 2002, 1–29.

sentences or their thoughts.<sup>3</sup> It means having a strong vocabulary is crucial for effective communication, making it an essential component in English language.

Referring to the English curriculum based on the Merdeka Curriculum, the objective of English lessons for junior and senior high school students (phase D) is to use English in spoken, written, and visual texts to interact and communicate in various formal and informal contexts.<sup>4</sup> Ideally, this curriculum is designed to help students master a sufficiently broad English particularly vocabulary to meet the set competency standards. According to Hidayat and Habibi, students are expected to master at least 1000 English words during their studies in junior high school level.<sup>5</sup> This amount is considered sufficient to enable students to participate effectively in various communication and English language learning activities. Mastering 1000 words also provides a strong foundation for the development of other language skills.

Based on preliminary interviews with the English teacher and the principal of MTsN 1 Kota Serang, it was known that the minimum passing score for English lesson especially vocabulary is 73. However, the reality in the field showed that many students still struggle to meet this standard that many students were unable to achieve this score. In addition, based on the preliminary observation,

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<sup>3</sup> Penny Ur. *A Course in Language Teaching: Practice and Theory*. (Cambridge: Cambridge University Press, 2003), 60

<sup>4</sup> Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi Republik Indonesia, *Keputusan Badan Standar, Kurikulum, dan Asesmen Pendidikan No. 033/H/KR/2022 tentang Capaian Pembelajaran pada PAUD, Jenjang Pendidikan Dasar, dan Jenjang Pendidikan Menengah pada Kurikulum Merdeka*, 160.

<sup>5</sup> Khoirul Hidayat & Fajri Habibi, "The Effect of Puzzle Games by Smart Phone in Vocabulary Mastery to the Student Junior High School", *Attractive: Innovative Education Journal*, Vol. 6 No. 1, (2024), 99.

the conventional and less varied teaching methods were one of the main causes of the low vocabulary mastery among students. The monotonous learning process that did not actively engage students made vocabulary learning less effective and interesting.

One of the strategies in teaching vocabulary is semantic mapping which emerges as a noteworthy strategy in enhancing vocabulary memorization. This visual representation of word relationships and meanings offers a holistic and interconnected view of the vocabulary landscape. According to Hung and Sun, semantic mapping has been commonly used in the classroom for different purposes, such as reading comprehension, word learning, across grades and contexts. It is a flexible and effective teaching method with one potential drawback.<sup>6</sup> In an era where students are accustomed to visual stimuli and interactive learning experiences, the importance of semantic mapping as a pedagogical tool cannot be overstated. By employing this strategy, educators can tap into the cognitive benefits of visual learning, promoting a deeper understanding and retention of vocabulary.

Previous studies have substantiated the efficacy of semantic mapping as a valuable tool in enhancing students' vocabulary memorization. Research by Dilek and Yürük conducted in a pre-intermediate level educational setting demonstrated that students who engaged in semantic mapping exercises exhibited a more nuanced understanding and retention of vocabulary compared to those using

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<sup>6</sup> Pei-fang Hung and Lei Sun, *Semantic Processing and Word Finding Difficulty Across the Lifespan: A Practical Guide for Speech-Language Pathologists* (San Diego: Plural Publishing, Incorporated, 2021), 92.

traditional methods.<sup>7</sup> The visual and organizational aspects of semantic mapping were found to stimulate cognitive processes, aiding in establishing meaningful connections between words. Furthermore, a study by Thaledon underscored the transferability of semantic mapping on vocabulary comprehension to college students, suggesting its versatility as an effective pedagogical strategy even for the college level.<sup>8</sup> These findings collectively highlight the positive impact of semantic mapping on vocabulary development, providing a theoretical foundation for the current research.

Unlike the previous study, this research focuses on the integration of semantic mapping into vocabulary instruction is further enriched through the incorporation of technology. Recognizing the pivotal role technology plays in the lives of contemporary students, this study embraces a holistic approach by leveraging digital tools to enhance the effectiveness of semantic mapping. According to Tarihoran, the utilization of technology in English as a Foreign Language (EFL) lessons has a substantial impact on the future of educators. There are repercussions regarding the role of teachers, the educational technique, and the instructional materials.<sup>9</sup> By integrating technology, such as interactive software or digital platforms specifically designed for semantic mapping exercises, the research aims to create an engaging and immersive learning experience for students. This innovative approach not only aligns with the

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<sup>7</sup> Yeşim Dilek and Nurcihan Yürük, "Using Semantic Mapping Technique in Vocabulary Teaching at Pre-Intermediate Level," *Procedia - Social and Behavioral Sciences* 70 (2013): 1531–44,

<sup>8</sup> Sriphloi Thaledon, "Thye Use of Semantic Mapping to Improve Vocabulary Comprehension," *HRD JOURNAL* VoLUME 11. (2020): 8–21.

<sup>9</sup> Nafan Tarihoran, "Teacher Candidates' View on Using Technology in Developing English Language Teaching Materials," *International Journal of Psychosocial Rehabilitation*, Vol.24, No.8, (2020), 3005.

preferences of tech-savvy learners but also capitalizes on the interactive and dynamic nature of digital media to reinforce semantic connections among words.

Based on the explanation above, researcher is interested to conduct the research related to the problem of memorizing vocabulary and are assisted by semantic mapping strategies. The convergence of the technological landscape and the pedagogical challenges in teaching vocabulary necessitates a comprehensive exploration of effective strategies. By delving into the intersection of technology, vocabulary instruction, and the unique context of the chosen school, this research seeks to contribute valuable insights to the field of language education and inform future instructional practices. Therefore, the title of this research is **“The Effectiveness Of Using Semantic Mapping Strategy (X-Mind Application) On Students’ Vocabulary Memorization”**.

## **B. The Focus of the Research**

This research focuses on the use of semantic mapping as a method to improve students' vocabulary mastery at MTsN 1 Kota Serang. The main objective of this study is to examine the effectiveness of the semantic mapping technique in helping students organize and remember English vocabulary, with the hope of improving their vocabulary mastery scores, which are currently many students' score below the minimum standard of 73. This research will explore how semantic mapping, integrated with the use of technology, can be applied in the English learning process and measure its impact on students' language abilities, particularly in the aspect of vocabulary mastery.

### **C. The Question of the Research**

Based on the background of the problem above, the problem can be formulated “Is there any effectiveness of using semantic mapping strategy towards vocabulary memorization?”.

### **D. The Objectivities of the Research**

Based on the background of the problem above, the objectives of this research can be identified “To find out whether there is or not any significant difference between students using the Semantic Mapping strategy and without using the Semantic Mapping strategy in developing their vocabulary memorizing”.

### **E. The Significances of the Research**

#### **1. Theoretical Significance**

This research establishes a robust conceptual groundwork for educators to craft more impactful curricula, grasp students' cognitive involvement, and synchronize teaching methods with cognitive learning principles. Theoretical benefits for students include comprehending how the semantic mapping strategy can enhance their grasp of vocabulary. Additionally, the outcomes of this study serve as a basis for future research endeavors, enabling exploration into the cognitive dimensions of the semantic mapping strategy and its influence on the vocabulary acquisition process.

#### **2. Practical Significance**

Educators can implement these discoveries in their teaching routines by incorporating the semantic mapping strategy into their lesson plans. Moreover, students can directly utilize this strategy when memorizing vocabulary. These practical implications offer

valuable guidance for designing innovative and efficient learning approaches, which future researchers can explore and refine further.

## **F. The Previous of the Research**

1. **Yesim Dilek, Nurcihan Yuruk nstructor, Selcuk University, Konya, Turkey, *Procedia - Social and Behavioral Sciences* 70 ( 2013 ) 1531 – 1544. The research is entitled “Using semantic mapping technique in Vocabulary Teaching at Pre-intermediate level”.**<sup>10</sup>

The aim of this study is to investigate the effects of using the Semantic Mapping Technique in comparison to traditional techniques in vocabulary learning and to find out whether there about vocabulary learning strategies (VLSs) and what strategies they prefer to use. 32 students at the pre-intermediate level of English from Selcuk University, at the Department of School of Foreign Languages, took part in the study. Quantitative data was collected through a two preferences were related. Vocabulary Learning Strategies Questionnaire (VLSQ). The reliability coefficient, Cronbach alpha of the questionnaire was .82. The questionnaire was administered by the class teachers. For the experimental study, target vocabulary items were taught with Semantic Mapping technique to experimental group and control group was introduced with traditional technique. To analyze the difference between semantic mapping technique and traditional technique, t-test calculations were used with the results of the pre-test and post-test. According to the results, semantic mapping technique is more effective than the traditional technique in

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<sup>10</sup> Yeşim Dilek and Nurcihan Yürük, “Using Semantic Mapping Technique in Vocabulary Teaching at Pre-Intermediate Level,” *Procedia - Social and Behavioral Sciences* 70 (2013): 1531–44,

vocabulary learning.

2. **Sriphloi Thaledon.** *Department of international graduate studies in human Resource development, faculty of education, Brupha University,Thailand, Vol. 11, No. 2, (2020).* The research is entitled **“The Use of Semantic Mapping to Improve Vocabulary Comprehension”**.<sup>11</sup>

This study was designed to investigate Banglamung Inter-Tech College, Thailand majoring in computer business and majoring in marketing“ This leads to the implication that the semantic mapping can improve high vocational students’ vocabulary comprehension and is promising for vocabulary teaching and learning, However, the studies carried out by the previous researchers compared the effectiveness of semantic mapping and other techniques (context clue approach, the traditional dictionary-definition-plus-example approach, or the dictionary). In this study, the researcher compared the effectiveness of semantic mapping and that of the word lists. This means that after learning with the traditional method, the post test score of the control group was different from the pre-test. However, it should be noted that the increased scores of the control group was fewer than the experimental group. In conclusion, multiple t-tests were performed to determine the differences of the average scores between the experimental group and the control group. It could be concluded that after learning with the semantic mapping, there were increased scores for vocabulary comprehension.

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<sup>11</sup> Thaledon, “The Use of Semantic Mapping to Improve Vocabulary Comprehension.”, *HRD Journal*, Vol 11, No 1, 2020, 8-21.



3. **Somayeh Nilforoushan , Faculty of Foreign Languages, Islamic Azad University, Central Tehran Branch, Tehran, Iran, Vol. 5, No. 10; 2012. The research is entitled “The Effect of Teaching Vocabulary through Semantic Mapping on EFL Learners’ Awareness of the Affective Dimensions of Deep Vocabulary Knowledge”.**<sup>12</sup>

This study focused on the effect of teaching vocabulary through semantic mapping on the awareness of two affective dimensions, evaluation and potency dimensions of deep vocabulary knowledge as well as the general vocabulary knowledge of EFL students. Sixty intermediate EFL female adult learners participated in this study; they were chosen among 90 students through Preliminary English test and a general vocabulary knowledge test. The design of this research is experimental there were two groups, one group as an experimental one and one as a control group. The treatment was teaching vocabularies through semantic mapping to experimental group. At the end of the term, both groups participated in post test. T-test was used for comparing the experimental and control groups. They were thus randomly divided into two group, experimental and control, each consisting of 30 students. As for the treatment, modifiers describing peoples’ characteristics were taught in the text and through semantic mapping, whereas these words were taught by usual vocabulary instruction in control group. At the end, students took a vocabulary achievement test and a test of awareness of evaluation and potency dimensions of deep vocabulary knowledge. A

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<sup>12</sup> Somayeh Nilforoushan, “The Effect of Teaching Vocabulary through Semantic Mapping on EFL Learners’ Awareness of the Affective Dimensions of Deep Vocabulary Knowledge,” *English Language Teaching* 5, no. 10 (2012): 164–72, <https://doi.org/10.5539/elt.v5n10p164>. Published by Canadian Center of Science and Education, Vol. 5, No. 10; (2012) 1916-4750

t-test was run to analyze the data from the vocabulary achievement test. Results showed that teaching collocations has great influence on the students' general vocabulary knowledge. To see if the independent variable had significant effects on awareness of evaluation and potency dimensions of deep vocabulary knowledge, a MANOVA was run revealing that teaching vocabularies through semantic mapping significantly improved learners' awareness of the two dimensions.

4. **Yagoub Zahedi, Motaza Abdi. *ELSEIVER-Procedia social and behavioral sciences*, (2012) (h. 2273-2280). The research is entitled “The Semantic mapping strategy on EFL learners' vocabulary learning” The present study was designed to investigate the effect of one memory strategy on vocabulary recall of Iranian EGP learners.**<sup>13</sup>

The research was conducted with 40 college students in Miandoab Azad University at a lower-intermediate level. The design of the study was quasi-experimental, including one experimental group and one control group. The participant's vocabulary learning performance in both experimental and control groups was collected and measured based on the established criteria. The impact of one memory strategy instruction on vocabulary learning was determined through comparing the participant's performance in the pre-test and post-test. The findings of the present study also argue that there is a close association between vocabulary learning. Deep processing, cognitive engagement, and better retention. Furthermore, this study supports the claim of the depth of processing hypothesis in that the

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<sup>13</sup> Yagoub Zahedi and Mortaza Abdi, “The Effect of Semantic Mapping Strategy on EFL Learners' Vocabulary Learning,” *Procedia - Social and Behavioral Sciences* 69, no. Icepsy (2012): 2273–80

more deeply you process information, the better it is retained. In other words, the deeper the level of processing on an item, the more likely it is remembered.

There are similarities and differences between the four previous studies above and the researcher's study. In the similarity aspect, the significant similarity is the teaching method used, semantic mapping, as an independent variable, but This research can be said to be different because there are still quite a lot of students who don't know what semantic mapping is and how to apply it. Indeed, in previous studies, Numerous researchers have explored semantic mapping, primarily emphasizing areas such as speaking, reading, and writing rather than concentrating solely on vocabulary memorization. As noted in prior studies, semantic mapping is not widely practiced among school students. Junior high school know and use these strategies to memorize vocabulary in a foreign language. Therefore, this research was conducted to analyze how effective the semantic mapping strategy is for memorizing vocabulary at MTsN 1 Kota Serang.

