

**IMPROVING STUDENTS' VOCABULARY ACHIEVEMENT  
BY USING WORD MAPPING AT THE SEVENTH GRADE  
STUDENTS OF MTS GUPPI NATAR**

**Undergraduate Thesis**

**By:**

**Divara Aulia Haning Tyas  
2063042001**



**ENGLISH EDUCATION STUDY PROGRAM  
DEPARTMENT OF LANGUAGE AND ARTS EDUCATION  
FACULTY OF TEACHER TRAINING AND EDUCATION  
UNIVERSITY OF LAMPUNG  
2024**

## **ABSTRACT**

### **IMPROVING STUDENTS' VOCABULARY ACHIEVEMENT BY USING WORD MAPPING AT THE SEVENTH GRADE STUDENTS OF MTS GUPPI NATAR**

**By**

**Divara Aulia Haning Tyas**

This research aimed to find out whether there was a statistically significant improvement of students' vocabulary achievement after the implementation of word mapping strategy at the seventh grade students and to find out students' responses after they were taught by word mapping strategy. This research was quantitative research using one group pre-test and post-test design. The sample of this research was 32 students of class VII B of MTs Guppi Natar in academic year of 2023/2024. The instrument used for collecting the data was reading test and questionnaire. In order to analyze the result, paired sample t-test was used.

The result show that the increase of the students' mean score in the pre-test was 49.69 and the students' mean score in the post-test was 80.50, there was a statistically significant improvement of students' vocabulary achievement with the significant level ( $0.00 < 0.05$ ) and the t-value (17.541) were higher than t-table (2.042). The results of students' responses showed that they agreed (3.70) that this strategy helped them realize learning from teacher and work independently. Furthermore, students believed that this strategy provided opportunities for independent learning and was an effective way to practice vocabulary. Overall, students were very satisfied with the implementation of this strategy and considered it a valuable learning experience. Therefore, it can be concluded that word mapping strategy can be used to improve students' vocabulary achievement.

***Keywords: vocabulary achievement, word mapping, teaching vocabulary***

**IMPROVING STUDENTS' VOCABULARY ACHIEVEMENT  
BY USING WORD MAPPING AT THE SEVENTH GRADE  
STUDENTS OF MTS GUPPI NATAR**

**By:**

**DIVARA AULIA HANING TYAS**

**Undergraduate Thesis**

**Submitted in a Partial Fulfillment of  
The requirement for S-1 Degree**

**In**

**Language and Arts Education Department of  
Teacher Training and Education**



**ENGLISH EDUCATION STUDY PROGRAM  
DEPARTMENT OF LANGUAGE AND ARTS EDUCATION  
FACULTY OF TEACHER TRAINING AND EDUCATION  
UNIVERSITY OF LAMPUNG  
2024**

**Research Title** : **IMPROVING STUDENTS' VOCABULARY ACHIEVEMENT BY USING WORD MAPPING AT THE SEVENTH GRADE OF MTS GUPPI NATAR**

**Students' Name** : **Divara Aulia Haning Tyas**

**Students' Number** : **2063042001**

**Study Program** : **English Education**

**Department** : **Language and Arts Education**

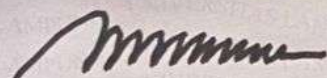
**Faculty** : **Teacher Training and Education**

**APPROVED BY**

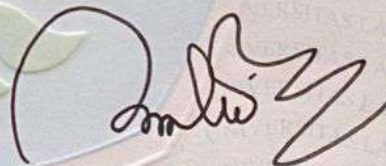
Advisor Committee

**Advisor**

**Co-Advisor**



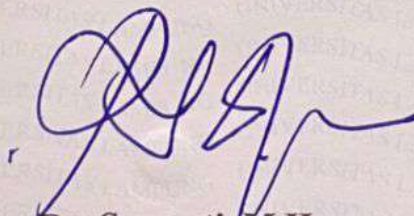
**Dr. Muhammad Sukirlan, M.A**  
NIP 19641212 199003 1 003



**Lilis Sholihah, S.Pd., M.Pd.**  
NIP 19860505 201903 2 002

**The Chairperson of**

**The Department of Language and Arts Education**



**Dr. Sumarti, M.Hum.**  
NIP 19700318 199403 2 002





**ADMITTED BY**

**1. Examination Committee**

Chief Examiner

: **Dr. Muhamad Sukiraan, M.A.**



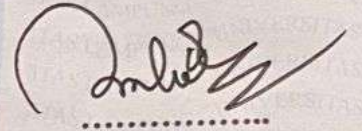
Examiner

: **Dr. Budi Kadaryanto, S.Pd., M.A.**



Secretary

: **Lilis Sholihah, S.Pd., M.Pd.**



**2. The Dean of Teacher Training and Education Faculty**



**Prof. Dr. Sunyono, M.Si**  
NIP 19651230 199111 1 001

**Graduated on: July 22<sup>nd</sup>, 2024**





## LEMBAR PERNYATAAN

Yang bertanda tangan di bawah ini, saya:

Nama : Divara Aulia Haning Tyas  
NPM : 2063042001  
Program Studi : Pendidikan Bahasa Inggris  
Jurusan : Pendidikan Bahasa dan Seni  
Fakultas : Keguruan dan Ilmu Pendidikan  
Judul : Improving Students' Vocabulary Achievement by Using Word  
Mapping at the Seventh Grade Students' of MTs Guppi Natar

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

Bandarlampung, 22 Juli 2024

Yang membuat pernyataan,



Divara Aulia Haning Tyas

NPM 2063042001

## **CURRICULUM VITAE**

Divara Aulia Haning Tyas, the fourth child of Giri Darmadi and Suhayati. She was born in Bandar Lampung, October, 7st 2001. She has four siblings; two brothers and two sisters named Atmahesa Bayu Hartadi, Bara Yudha Wibiardi, Chika Bella Gratia, and Elreisha Diah Muharra.

Her educational journey began at TK ABA Tangkit Batu, Natar, South Lampung (2006-2007), MIM Tangkit Batu, Natar, South Lampung (2007-2013), SMP Yadika Natar, South Lampung (2013-2016). After that, the author continued her high school at PPTQ Syamsul Falah Natar, South Lampung, and graduated in 2019. In 2020, the author began a new academic journey by being accepted at the University of Lampung through Simanila "*Jalur Prestasi*" in the English Education study program.

During her studies, the author actively took part in competitions and also took part in organizations, having won first place in the MHQ 20 Juz competition at the 53rd Dies Natalis FKIP, and third place in the MHQ 10 Juz competition at the 54th Dies Natalis FKIP. The author was part of the finance division at SEEDS for the 2021 period and also served as head of the religion division at SEEDS for the 2022 period.

## **DEDICATION**

This script is dedicated to:

My beloved family; my parents and my siblings

My honorable lectures in English Education study program

My almamater, University of Lampung



## **MOTTO**

“Allah does not require of any soul more than what it can afford”.

(*QS. Al-Baqarah* : 286)

“So, surely with hardship comes ease.”

(*QS. Asy-Syarh* : 5)

## ACKNOWLEDGEMENTS

*Alhamdulillahirobbil'alamin*, praise to Allah *Subhanahu Wa Ta'ala* for all the blessings, strengths, and health, so that the writer could finally accomplish this undergraduate thesis entitled "Improving Students' Vocabulary Achievement by Using Word Mapping at The Seventh Grade of MTs Guppi Natar". Sholawat and salam also sent for our prophet Muhammad SAW., his family, and all his followers. May Allah grant them peace and countless blessings. This script is submitted to fulfill as one of the requirements for the researcher to get a Bachelors' Degree from the English Education Study Program, Faculty of Teacher Training and Education, University of Lampung.

Many people who are kind helped and supported the researcher during the writing process and until this script was finished. Consequently, the researcher would like to express her sincerest appreciation to:

1. Dr. Muhammad Sukirlan, M.A., as the first advisor, for his invaluable guidance, support, and encouragement throughout the entire process of writing this script. His expertise, insightful feedback, and unwavering dedication have been instrumental in shaping this research.
2. Lilis Sholihah, S.Pd., M.Pd., as the second advisor who provided valuable feedback, suggestions, and evaluations. The researcher genuine gratitude for her patience and kindness in guiding the completion of this script.
3. Dr. Budi Kadaryanto, S.Pd., M.A., as the examiner, who provided precious insight and suggestions for the researcher during the seminar. His insight has significantly contributed to the refinement of this research. The researcher is truly grateful for all the evaluations given.
4. Fajar Riyantika, S.Pd., M.A., as the academic advisor, for his continuous support and guidance throughout the researcher's academic journey.
5. Dr. Feni Manifatullah, M.Hum., as the Head of the English Education Study Program, for her attention and contribution.
6. The lectures and administrative staff of the English Department for theoretical-practical knowledge, administrative assistance, and logical support.

7. The principal of MTs Guppi Natar for granting permission and providing resources for conducting the research.
8. To my beloved parents, *Emak* and *Bapak*, the bigger supporter for the researcher during the writing process. They did not have the opportunity to experience education until college, but they were able to educate the researcher, motivate, provide prayer and support so that the writer was able to complete her studies until she graduated.
9. To my siblings, *Mas Bayu*, *Mas Bara*, *Mbak Tia*, and Echa. Your unwavering love, encouragement, and sacrifices have been the cornerstone of my academic endeavors.
10. To my dormitory mates “*calon bidadari surga*” Alfi, Anggita, Dian, Fafa, Nofy, Nurul, Ratu, Rega, Rizka, Umi, and Usva. The friendship has made my college experience richer and more fulfilling. The researcher hopes our friendship can reach the *Jannah* of Allah *Subhanahu Wa Ta’ala*.
11. To my dearest best friends, Apta, Alifya, Inung, Hanung, and Deria, who have stood by me through every triumph and challenge.
12. My beloved friends in English Education 2020 and all the participant that cannot mention one by one who generously contributed their time and insight to this study. Without their cooperation, this study would not have been possible. Thank you for the prayers and sincere support that you all give me.

Finally, the author realizes that this study still needs improvement. Therefore, in order to support better research outcomes, the author invites comments, suggestions, and insightful feedback. The author hopes that this work will be useful in practically advancing educational development and will be a helpful reference for readers and inquiries researchers.

Bandarlampung, July 22<sup>nd</sup> 2024

The Researcher

Divara Aulia Haning Tyas

NPM 2063042001



## TABLE OF CONTENT

<b>ABSTRACT .....</b>	<b>i</b>
<b>COVER .....</b>	<b>ii</b>
<b>APPROVAL .....</b>	<b>iii</b>
<b>ADMISSION .....</b>	<b>iv</b>
<b>SURAT PENYATAAN .....</b>	<b>v</b>
<b>CURRICULUM VITAE .....</b>	<b>vi</b>
<b>DEDICATION .....</b>	<b>vii</b>
<b>MOTTO .....</b>	<b>viii</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>ix</b>
<b>TABLE OF CONTENT .....</b>	<b>x</b>
<b>LIST OF TABLES .....</b>	<b>xi</b>
<b>LIST OF APPENDICES .....</b>	<b>xii</b>
<b>BAB I INTODUCTION .....</b>	<b>1</b>
1.1. Background of The Problem .....	1
1.2. Research Question .....	4
1.3. Objective of The Research .....	4
1.4. Uses of The Research .....	4
1.5. Scope of The Research .....	5
1.6. Definition of Terms .....	5
<b>BAB II LITERATURE REVIEW .....</b>	<b>6</b>
2.1. Review of Previous Research .....	6
2.2. Concept of Vocabulary .....	7
2.2.1. Types of Vocabulary .....	9
2.3. The Importance of Vocabulary .....	10
2.4. Vocabulary Achievement .....	11
2.5. Descriptive Text .....	12
2.6. Word Mapping Strategy .....	14
2.7. Teaching of Vocabulary by Using Word Mapping .....	16
2.8. Advantages and Disadvantages of Using Word Mapping Strategy .....	18
2.8.1. Advantages of Using Word Mapping Strategy .....	18
2.8.2. Disadvantages of Using Word Mapping Strategy .....	18
2.9. Procedure of Teaching Vocabulary by Using Word Mapping Strategy .....	19
2.10. Theoretical Assumption .....	20
2.11. Hypothesis .....	21
<b>BAB III METHOD .....</b>	<b>22</b>
3.1. Research Design .....	22
3.2. Variables .....	22

3.3.	Population and Sample .....	23
3.4.	Data Collecting Strategy .....	23
3.5.	Research Instrument .....	24
3.6.	Research Procedure .....	25
3.7.	Validity and Reliability .....	26
	3.7.1. Validity of The Test .....	26
	3.7.2. Reliability of The Test .....	27
3.8	Levels of Difficulty .....	29
3.9	Discrimination Power .....	30
3.10	Scoring System .....	31
3.11	Questionnaire .....	31
3.12	Data Analysis .....	32
3.13	Normality Test .....	33
3.14	Hypotheses Testing .....	34
<b>BAB IV</b>	<b>RESULT AND DISCUSSION .....</b>	<b>35</b>
4.1	Result of The Research .....	35
	4.1.1. The Result of Pre - Test .....	36
	4.1.2. The Result of Post - Test .....	38
	4.1.3. Improvement of Students Vocabulary Through Word Mapping Strategy .....	40
	4.1.4. Improvement of The Pre-Test and Post-Test .....	40
	4.1.5. The Result of Hypothesis Testing .....	41
	4.1.6. The Students' Responses of The Implementation of Word Mapping Strategy .....	43
4.2	Discussion of The Findings .....	44
	4.2.1. Students' Vocabulary Achievement by Using Word Mapping Strategy .....	44
	4.2.2. The Students' Responses of Word Mapping Strategy .....	47
<b>BAB V</b>	<b>CONCLUSION AND SUGGESTION .....</b>	<b>49</b>
5.1	Conclusion .....	49
5.2	Suggestion .....	50
<b>REFERENCES</b>	<b>.....</b>	<b>52</b>
<b>APPENDICES</b>	<b>.....</b>	<b>55</b>

## LIST OF TABLES

Table 3.1 Reliability Statistics of The Try-Out.....	28
Table 3.2 Reliability Statistics of The Questionnaire .....	32
Table 3.3 Normality of The Test .....	33
Table 4.1 The Specification Result of The Pre – Test .....	36
Table 4.2 The Pre – Test Score .....	37
Table 4.3 Distribution Frequencies of The Pre – Test .....	37
Table 4.4 The Specification Result of The Post – Test .....	38
Table 4.5 The Post – Test Score .....	39
Table 4.6 Distribution Frequencies of The Post – Test .....	39
Table 4.7 Vocabulary Aspect of each Test .....	40
Table 4.8 Improvement from The Pre -Test and Post – Test .....	41
Table 4.9 T – Test .....	41
Table 4.10 Paired Sample Test .....	42
Table 4.11 Result of the Questionnaire .....	43



## LIST OF APPENDICES

Appendix 1 Surat Izin Penelitian .....	56
Appendix 2 Surat Balasan Penelitian .....	57
Appendix 3 Modul Ajar .....	58
Appendix 4 Try – Out .....	65
Appendix 5 Pre – Test.....	71
Appendix 6 Post -Test.....	75
Appendix 7 Questionnaire .....	79
Appendix 8 Try – Out All Items .....	81
Appendix 9 Upper Group of The Try Out Test .....	82
Appendix 10 Lower Group of The Try Out Test .....	83
Appendix 11 Level of Difficulty and Discrimination Power .....	84
Appendix 12 Reliability of Try – Out Test .....	85
Appendix 13 Reliability Computation of the Data Collecting Instrument .....	86
Appendix 14 Result of Students Score of The Pre-Test .....	87
Appendix 15 Distribution Frequencies of The Pre-Test .....	88
Appendix 16 Result of Vocabulary Analysis in The Pre-Test.....	89
Appendix 17 Result of Students Score of The Post-Test .....	90
Appendix 18 Distribution Frequencies of The-Post.....	91
Appendix 19 Result of Vocabulary Analysis in The Post-Test .....	92
Appendix 20 Result of The Questionnaire .....	93
Appendix 21 Validity of The Questionnaire .....	95
Appendix 22 Reliability Score of The Questionnaire .....	96
Appendix 23 Students’ Score of The Pre-Test and Post-Test .....	97
Appendix 24 T-Test Analysis .....	98
Appendix 25 Students Works .....	99
Appendix 26 Documentations .....	112

## **I. INTRODUCTION**

This chapter presents a several main points to discuss the main ideas of the research. It includes of some points to provide prior information for the research. The researcher describes the background and the reason in selecting the topic. It is divided into several parts including background of the problem, research questions, the objectives of the research, uses of the research, scope of the research, and definition of terms.

### **1.1 Background of The Problem**

Vocabulary is the first step to help someone learn about English. Vocabulary refers to the collection of words that can be recognized and utilized and is a fundamental language feature that must be mastered before acquiring English language skills. Furthermore, vocabulary has become one of the components that contribute to the mastering of the four language skills: listening, speaking, reading, and writing. Schmitt (2002) argues that vocabulary plays a vital role in teaching and learning the second language as lexical knowledge is fundamental to communicative effectively. Supporting students in developing their vocabulary learning is an effective approach for assisting them in acquiring language abilities.

The structure of the Merdeka curriculum is described in the description of the implementation of the independent curriculum as intra-curricular activities, projects to raise the profile of Pancasila students, and extracurriculars. The endeavor to raise the profile of Pancasila students is carried out by training students to investigate real-world challenges in their surroundings and collaborate to solve them.

Minimum Completeness Criteria (KKM) in the form of numeric values are no longer used to assess the completeness of learning outcomes in the Merdeka curriculum. Formative assessments in learning are used to determine whether or not learning objectives have been met. The achievement of learning objectives can be used to

identify learning outcomes. Teachers are given the authority to set the criteria for completing learning objectives based on the competency features of the learning objectives and learning activities. Furthermore, students might progress to the next class based on their completion of learning objectives. The teachers must foster awareness of the importance of English as a foreign language to be the main tool in learning. It means that vocabulary plays an important role in learning English. We cannot communicate with others in a language if we do not have sufficient vocabulary in that language. In using a language, students who are rich in vocabulary will have the potential to do well in expression skills such as expressing ideas in the mind. This means that in relation to learning English as a foreign language, vocabulary is one of the language components that has the most important role in relation to mastering the four skills of English. Without neglecting other language components, the researcher assumes that vocabulary is the most important factor in the teaching-learning process of English as a foreign language. In relation to this, teachers are expected to have an effective way to make students interested in learning English vocabulary so that the learning objectives can be carried out well. In other words, there must be an appropriate way to help students learn vocabulary.

Based on the data in the field, it is found that students' vocabulary achievement is still lacking, especially for Junior High School students. Thus, the basic learners will meet difficulties in learning English. These difficulties are usually because of the inconsistency of word class or word category in English (Wiwiek, 2018). They do not know the context of words, they cannot recognize the meaning of each word, they are unable to complete good writing assignments, and they have difficulties to state some sentences in English. This problem makes it difficult for them to remember and even more difficult to recollect some new words. Since vocabulary is one of the important components for students, teachers need to use appropriate strategies to improve students' vocabulary in order to increase their vocabulary achievement.

Based on the problems mentioned previously, the researcher offered a strategy to solve students' problem, especially in vocabulary achievement. There were many kinds of teaching strategies, the researcher was interested to employ word mapping in vocabulary achievement. According Grave (2008) word mapping is a



good strategy to be applied as an effective strategy to teach vocabulary because this strategy allows students to think about the relationships between words and expands conceptual knowledge about words. Swanson and Howerton (2007) add using word mapping give students an opportunity to think of a word in a variety of ways. From that statements the researcher assumes that word mapping activities that were based on graphic often give a useful way to students to have valuable practices, either when they were in the classroom activities. In the end, it can be considered that the word mapping strategy can improve students' vocabulary achievement.

Discussing about word mapping, many researcher studies and research that have investigated the improvement of students' vocabulary achievement by using word mapping. One of them was conducted by Humaira (2015) has done research to investigate about the Effectiveness of Using Word Mapping Technique in Teaching Students Vocabulary at The First Grade Students of SMAN 8 Mataram in Academic Year 2014/2015. This study used quasi experimental non-equivalent research design. The data analysis showed the mean score of experimental groups is higher than the mean score of control group. The deviation of the two mean scores was also significant. It shows, that the use of word mapping technique is effective in teaching vocabulary.

Another research was conducted by Karendra (2017). The study describes the application of word mapping strategy to improve students' vocabulary mastery at the first grade of SMAN 1 Rumbia, Lampung Tengah, academic year 2016/2017. It stated that there was an increase in students' vocabulary achievement. The students were more courageous to show their abilities in class. Some students are more courageous to ask the teacher when experiencing difficulties. The students answered questions, and gave their opinions during the teaching and learning process in class. In summary, it can be said that the word mapping strategy was considered as a good strategy to improve the students' vocabulary mastery in relation to reading recount text.

Another research was conducted by Wahyuni (2012) whose aim was to see the effectiveness of using word mapping strategy in teaching vocabulary at the

seventh grade of SMP N 1 Plupuh. She stated that word mapping could be effective in teaching vocabulary and it could motivate students in vocabulary because they feel enthusiastic when learning to use this method. The students were braver to show their ability and were braver asking the teacher when they had difficulties in the class. This proves that word mapping strategy are very effective and fun to use in teaching and learning.

## **1.2 Research Questions**

Based on the preceding background, the researcher's questions were formulated as follows:

1. Is there any significant improvement of students' vocabulary achievement after they were taught by using word mapping strategy?
2. What are the students' responses after being taught by word mapping strategy?

## **1.3 Objectives of The Research**

According to the problems mentioned above, this research attempted to:

1. To determine whether word mapping strategies can improve students' vocabulary achievement after they were taught by using word mapping strategy.
2. To find out the students' responses after they were taught by using word mapping strategies.

## **1.4 Uses of The Research**

After conducting this research, the results were expected to be useful for:

1. Theoretically

The results of this research were expected to contribute to the development of vocabulary teaching theory, especially vocabulary teaching using word mapping strategies.

2. Practically

This research can serve as information for English teachers who want to implement word mapping as a vocabulary teaching strategy.

## **1.5 Scope of The Research**

This study aimed to investigate the effectiveness of the word mapping strategy in enhancing vocabulary achievement and students' response among seventh-grade students at Junior High School. The sample consisted of 32 students from Class VIIB at MTs Guppi Natar. To assess the impact of the word mapping strategy on vocabulary achievement, pre-test and post-test scores were analyzed using statistical methods. The findings of this study will determine whether the implementation of the word mapping strategy resulted in significant improvements in students' vocabulary acquisition and, subsequently, their reading comprehension skills.

## **1.6 Definition of terms**

There are several definitions of terms that must be considered as follows:

### **1. Vocabulary**

According to Hornby (2006: 1645), vocabulary is all the words known or used by a person and is all the words in a particular language. According to Hatch and Brown (1995: 1) vocabulary is a list or collection of words for a particular language or a list or collection of words that may be used by individual speakers of a language.

### **2. Word Mapping**

Word mapping is a visual organizer that promotes vocabulary development. By using graphic organizers, students consider terms or concepts in multiple ways. The majority of word map organizers require students to create definitions, synonyms, antonyms, and pictures for a given vocabulary word or concept.

### **3. Achievement**

Achievement is the competence of a person in relation to a domain of knowledge (Algarabel, 2001).

This is the end of this chapter. This chapter concerns several descriptions of the research. It includes background of the study, research questions, the objectives of the research, uses of the research, scope of the research, and definition of terms.

## **II. LITERATURE REVIEW**

This chapter concerns with several theories which support the research: review of previous research, the theory about vocabulary, vocabulary achievement, the importance vocabulary in reading, teaching vocabulary found in reading text by using word mapping strategy, word mapping, advantages and disadvantages of word mapping strategy, procedures, theoretical assumption, and hypothesis.

### **2.1. Review of Previous Research**

Several research studies have been involved in teaching of vocabulary. First, by Humaira (2015) whose aim of the research to investigate about the Effectiveness of Using Word Mapping Technique in Teaching Students Vocabulary at The First Grade Students of SMAN 8 Mataram in Academic Year 2014/2015. There were 79 students as sample. This study used quasi experimental non-equivalent research design. The data analysis showed the mean score of experimental groups is higher than the mean score of control group. The deviation of the two mean scores was also significant. It shows, that the use of word mapping technique is effective in teaching vocabulary.

Second, Karendra (2013) whose aim of the research to The Implementation of Word Mapping Strategy to Increase Student's Vocabulary Mastery at The First Grade Students of SMA N 1 Rumbia Lampung Tengah. This was quantitative research whose aim was to find out whether there was a statistically significant improvement in the students' vocabulary mastery after they were taught a word mapping strategy. The subjects of this research were 32 students of class X IPS 3. The vocabulary test in the form of multiple choice was administrated as the instrument of this research. The result showed that there was a statistically significant improvement of the student's vocabulary achievement with the significant level  $< 0.05$ . The students are braver to show their ability in the class.

Some students were braver, asking the teacher when they had difficulties. The students answered the questions, and gave their opinion during the teaching learning process in the class. It can be seen from the assessment result. It could be inferred that teaching activity through word mapping strategy facilitates the students to develop the vocabulary and to understand the text easily.

Third, Wahyuni (2012) whose aim of the research was to see the effectiveness of using word mapping strategy in teaching vocabulary. She found that word mapping can be effective in teaching vocabulary and it can motivate students in vocabulary because it was an interesting activity in which the students had to read the text. The students had to use their critical thinking and develop the text by their own predictions.

In contrast to previous studies, the current study uses a dual research methodology and focuses on the word-mapping responses from the students. The results point to a statistically significant relationship between improved vocabulary achievement and word mapping use. As a result, the researcher set out to find out how well word mapping worked as a teaching method to encourage vocabulary achievement.

## **2.2. Concept of Vocabulary**

Language is a complex system of signs, symbols, and expressions that convey meaning and facilitate communication. Learning the vocabulary has always been a skill taught and evaluated in other language skills such as reading, writing, listening, and speaking (Schmitt, 2000). Vocabulary is a crucial element of language, serving as a repository of concepts and ideas that can be articulated and conveyed through linguistic expression. According to linguists such as Thornbury (2002), the absence of vocabulary renders language communication impossible. Vocabulary refers to the entire range of words employed in a specific language variety, encompassing all individual words that speakers may use. Hatch and Brown (1995) further stipulate that vocabulary consists of a set of individual words that are integral to language use. Cameron (2001) emphasizes the importance of vocabulary in foreign language discourse, noting that it is a fundamental aspect of language instruction, particularly at the primary level. The

implication is that vocabulary plays a pivotal role in giving language meaning and becomes a central focus of foreign language instruction at the primary level.

If the students want to communication with one another, they will require vocabulary to express themselves clearly. Everyone should be able to communicate using a variety of terms. If students just know a few words, they must learn more. They can learn new words for the rest of their lives. Many concepts will emerge from their minds if they learn many words, especially in foreign language conversation. It is supported by Setiyadi, et al (2007:2-3) the learners learn new words as they need and they need them the more they learn them. It means that when the learners use many words, they are mostly convenient to think of words as freestanding items of language that have meaning.

Furthermore, Napa (1991) emphasizes the significance of vocabulary as a fundamental component of language, noting that no language exists without words. This implies that the expansion of one's vocabulary directly correlates with the development of cognitive abilities, allowing individuals to express themselves more effectively. Low vocabulary knowledge poses severe problems to its learners, which consequently impedes the learning of English language (Alqahtani, 2015). Words serve as a medium for exchanging thoughts and ideas, and in English, vocabulary encompasses all parts of speech used to construct sentences.

As a result, the importance of vocabulary in learning English for comprehension cannot be underestimated. Therefore, English should be introduced earlier because the younger the learner, the more capable she or he is at creating the language. A vocabulary is defined as the totality of words known and utilized by an individual or group. A vocabulary often expands and evolves with age and acts as an important and essential instrument for communication and knowledge acquisition. According to the description above, vocabulary is all the words in a language that are familiar and used by people to communicate with one another. It must be well grasped by young learners in order to support English proficiency.



### 2.2.1. Types of Vocabulary

There are some types of vocabulary, as Fries (1974:45) classifies English vocabulary or words into four types, content words, function words, substitute words, and distributed words:

#### 1. Content words

Content words are useful in analyzing vocabulary. Based on word classification by Fries (1974:45), content words refer to the names of entities or things, which can be subcategorized into four primary categories: nouns, verbs, adjectives, and adverbs.

##### a. Nouns

Nouns, which indicate concrete or abstract entities, are an essential part of language. They can be described by their grammatical function, but because grammatical categories vary throughout languages, these descriptions are frequently language-specific. Moreover, nouns can be distinguished by subjective perception; the terms "book," "bag," and "pencil" are examples of this.

##### b. Verbs

Verbs are a critical element of language, conveying tense, aspect, mood, and voice. They can also exhibit agreement with the person, gender, and/or number of their subjects or objects. Verbs have distinct tenses, including present, past, and future, which indicate the timing of an action. For instance, the sentence "Nabila eats fried rice" illustrates the use of verbs in a specific tense.

##### c. Adjectives

Adjectives are descriptive words that modify nouns or noun phrases, providing additional information about the object or entity referred to. Adjectives are characterized by their ability to describe qualities or characteristics of individuals or things. An example of an adjective is found in the sentence "The bag is pretty and heavy".

#### d. Adverbs

Adverbs are words that modify verbs, adjectives, or other adverbs, providing information about the manner, place, time, frequency, certainty, or other circumstances of an action. Adverbs can be exemplified by words such as "slowly", "now", "soon", and "yesterday". They provide additional context to the meaning conveyed by verbs or verb phrases.

#### 2. Function words

Function words are linguistic elements that serve to establish relationships between grammatical structures and convey meaning. This category encompasses determiners, which include conjunctions (and, but, or, because and after), auxiliary verbs (are, be, have and do), article (a, an, the).

#### 3. Substitute Words

Substitutional words are a type of vocabulary that represents specific entities or actions, substituting for entire classes of words. These words include pronouns, such as "anybody", "anyone", etc.

#### 4. Distributed words

Distributive words are linguistic items that exhibit varied usage patterns dependent on grammatical context. Examples of this category include words such as "some", "any", "other", etc. These words are often used in conjunction with content words, which are essential components of English language teaching vocabulary and are frequently employed in reading activities.

### **2.3. The Importance of Vocabulary**

One of the elements of language that should be studied and taught is vocabulary. It could hardly be refuted that mastering the language would be difficult without memorizing a certain number of vocabularies. One step in learning a language is to know the words, comprehend their meaning, and employ them in phrases. English, vocabulary plays important role in the four English language skills, like what Schmithd and Mc Carthy (1997; 6) say that vocabulary has an importance

role in language skills. In listening ability, vocabulary gives easier for the learners to comprehend what the other person speaks. In speaking and writing, vocabulary gives easier for the learners to expand their ideas. In reading, vocabulary gives easiness for the learners comprehend the text. Especially for reading skills as the topic in this research.

Willis (2008) states that by reading, someone can find information he/she needs with the specific information. Reading helps the reader to get what they want to know about the information. In addition, Richards and Renandya (2010) believing that vocabulary plays crucial part in one's foreign language learning and language proficiency that can affect how well learners listen, speak, read, and write. In common addition, many students still get difficulty to identify the main idea, specific information, inferences and the word meaning of the text because of the low vocabulary achievement. In reading activity, students are expected to be able, at least, get the point of what the text is actually talking about answering the questions following the text. That is why vocabulary achievement is very important to be mastered in order to support reading skill.

#### **2.4. Vocabulary Achievement**

This research aims to investigate the significance of vocabulary achievement in mastering English as a foreign language at the elementary, intermediate, and advanced levels. As a fundamental component of the four language skills - listening, speaking, reading, and writing - vocabulary is essential for effective language proficiency. Because academic achievement is defined by different indicators of educational success, it can be measured in different ways (Steinmayr, 2014). The vocabulary achievement is crucial, as it enables students to comprehend and communicate effectively, with a larger vocabulary repertoire leading to improved language performance. Conversely, limited vocabulary can hinder students' ability to master reading and other skills, making it essential to focus on vocabulary achievement as a key aspect of language learning. This study will explore the relationship between vocabulary achievement and language proficiency, examining the extent to which students' ability to understand and utilize vocabulary impacts their overall language skills.

The selection of vocabulary to be taught to students is a crucial aspect of language instruction. In order to facilitate effective learning, teachers must carefully consider which words to introduce to students. A common approach is to draw upon existing sources, such as the word lists provided in textbooks and language teaching objectives outlined by national educational authorities. These sources provide implicit and explicit guidelines for determining the optimal amount of vocabulary to introduce per lesson or unit.

The concept of vocabulary has been extensively explored in linguistics, with researchers defining it as a list or set of words used in a particular language or the collection of words employed by an individual speaker (Hatch and Brown, 1995). Additionally, Stahl (2005) posits that vocabulary encompasses the knowledge of words and their meanings, encompassing not only definitions but also the contextual relationships between words. This study acknowledges the importance of vocabulary development in language learning, emphasizing the need for teachers to provide supportive scaffolding to facilitate student growth. In this context, the teacher's role is crucial in modifying instructional approaches and providing constructive feedback to promote student learning. Research has demonstrated that the adoption of effective methods and procedures can enhance students' vocabulary acquisition, leading to improved reading comprehension and language proficiency (Hiebert and Kamil, 2005). Building on this foundation, this study proposes that vocabulary achievement is a critical component of successful English language learning, particularly in relation to reading comprehension and text analysis. The study hypothesizes that vocabulary achievement is essential for students to successfully discover and utilize vocabulary in reading texts, ultimately influencing their language proficiency.

## **2.5 Descriptive Text**

Description or descriptive etymologically is derived from the word describe. Describe means to draw, to illustrate or to picture an object, place, or person in order to have a visual appearance of the object described. Descriptive text is a text which says what a person or thing is like.

According to Mukarto as cited in Kusdiant, descriptive text is a kind of text to describe something, someone or place. Descriptive text has two main parts, they are identified and described. The structure of a text is called the generic structure. Descriptive text is like describing white house, animals, fruits, etc.

From Mukarto's statement, we can conclude that descriptive text is a text to describe something, someone or place and descriptive text has two main parts such as identification and description that's called generic structure. Descriptive text has a function to describe something in detail in order to enable the readers to see, hear, feel and touch it directly and involve themselves in the event. The context of this kind of text is the description of particular things, animal, person, or others, for instance: our pets or person we know well. A good descriptive text includes many vivid sensory details that paint a picture and appeals to all of the reader's senses of sight, hearing, touch, smell and taste when appropriate. Descriptive text may also paint pictures of the feeling the person, place or thing invokes in the writer.

There are generic structures of descriptive text as, follows:

1. Identification

In this generic structure introduced to the subject of description.

2. Description

In this part give details of the characteristic features of the subject. Such as: qualities, characteristics, describing the phenomenon in parts, qualities, or/and characteristic, size, physical appearance, ability, habit, daily life, etc.

There are language features of descriptive text, as follows:

1. Focus on specific participants (my English teacher, Olivia's dog, my favorite place).
2. Use of Simple Present Tense. Use of Past Tense if extinct.
3. Verb of being and having „Relational Processes“ (my mother is really beautiful, she has long black hair).
4. Use descriptive adjectives (strong legs, white fangs).

5. Use of detailed noun phrases to give information about the subject (a very beautiful scenery, a sweet young lady, very thick fur).
6. Use of action verb „material processes“ (it eats grass, it runs fast)
7. Use of adverbial to give additional information about behavior (fast, three house).
8. Use of figurative language (you are beautiful like a flower).

## **2.6 Word Mapping Strategy**

Word mapping is a pedagogically effective strategy for teaching vocabulary, as it encourages students to engage in critical thinking about word relationships (Graves, 2008). This approach fosters a deeper understanding of word meanings by expanding students' conceptual vocabulary, thereby promoting a more comprehensive grasp of linguistic concepts. Alternative terms for word mapping strategies include word clusters, semantic mapping, and concept mapping.

The versatility of word mapping enables instructors to adapt the method to suit the needs of students at various grade levels, learning objectives, and vocabulary training styles. For instance, students may be encouraged to investigate the etymology, synonyms, and antonyms of certain words, while for others, they may be tasked with identifying exemplars and non-exemplars. Research has demonstrated the efficacy of word mapping in vocabulary instruction, as exemplified by the study conducted by Sinatra, Gemake, and Berg (1984), which utilized word mapping with junior-grade students who were struggling readers. The strategy is characterized by the use of a visual organizer that promotes vocabulary development, typically featuring the vocabulary word at the center or top of the organizer.

Word mapping, word association, and collocation are pedagogical strategies that can be employed to explore the mind's vocabulary organization. Researchers have identified various types of associations, although they may use different terminology to describe the same phenomena. Word mapping is a visual organizer that promotes vocabulary development, typically featuring a vocabulary word at its center or top.



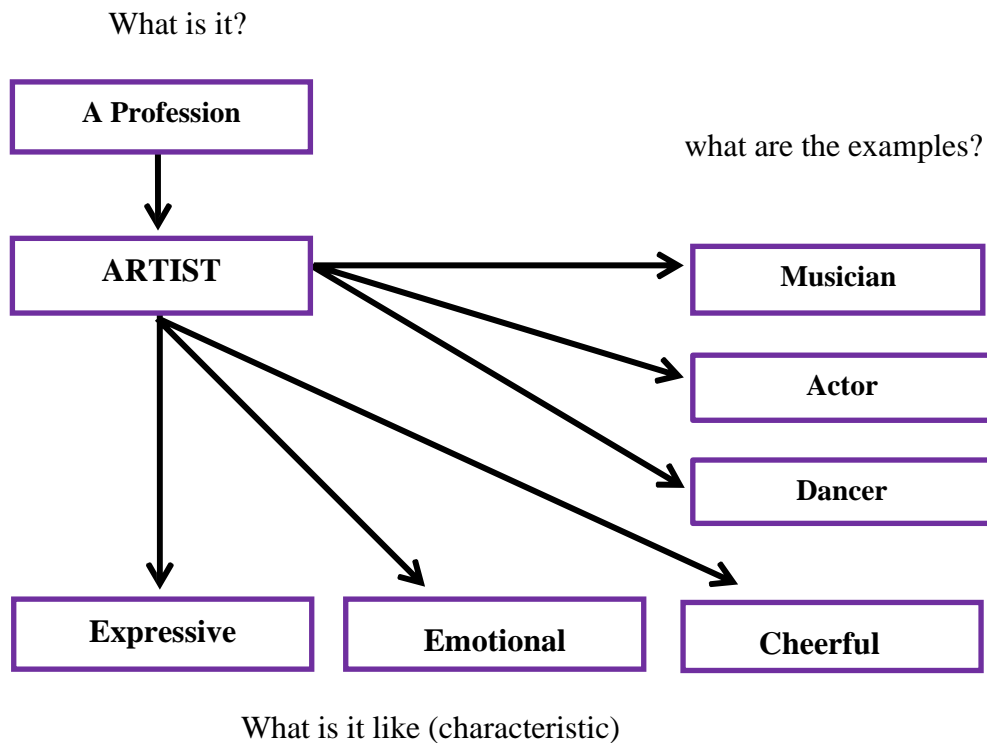
Collocation refers to the relationship between words that are likely to occur together due to their natural associations. However, it is not necessary for these words to be adjacent to each other. Instead, words that frequently co-occur with or near a target word are considered "collocates," and the resulting sequences or sets of words are referred to as collocations (Reppen & Simpson, 2002).

The use of word mapping strategy has been found to be an effective means of improving vocabulary acquisition. By starting with vocabulary keywords and encouraging students to branch out from these words, teachers can facilitate students' development of broader concepts and definitions, as well as synonyms and antonyms.

According to Swanson and Howerton (2007), using word maps provides students with an opportunity to think about a word in various ways. Based on this, the researcher assumes that word mapping activities that incorporate graphics can offer a valuable and engaging way for students to practice their vocabulary skills, both in classroom and outdoor activities. Furthermore, the researcher concludes that word mapping can aid students in discovering new vocabulary that can be applied in writing and speaking tasks. Additionally, word mapping offers a range of learning situations for students, particularly in English language learning, with a focus on vocabulary achievement.

Schwartz and Raphael (1985) designed the word mapping in teaching vocabulary, the procedures are as follows: (a) show students an overhead of the vocabulary-mapping organizer. Point out that in order to develop a meaningful definition, the map needs to contain three relationships: "what is it?", "what is it like?", and, "what are some examples?"; (b) to model this strategy, the teacher begins by identifying a familiar word that can be easily mapped. (Examples: teacher, doctor, artist); (c) teacher writes the word on map; (d) ask "What is it?"; (e) ask "what is it like?" Record students' responses on map; (f) ask "what are some examples?" Record students' responses on map; (g) explain to students that the definition now includes properties, categories, and examples.

Figure 1 (Example of Word Mapping Strategy)



The researchers propose an alternative way in improving vocabulary that is by using word mapping technique. Since it is useful for helping students in increasing of word, it can help students think about new terms or concepts in several ways by asking the following questions; what is it? what is it like? and what are the examples?

Following observed the word mapping organize, the researcher determined that the phases progressed from basic to intricate, with students being guided by the questions to provide additional details in select instances, ultimately classifying the words according to their respective categories. The students profited from being able to retain the words longer in their memory and from knowing them in a more contextualized sense.

## 2.7. Teaching vocabulary by using word mapping

Teaching vocabulary is a critical process in language instruction that involves not only conveying the meaning of words but also enabling students to use them in

context. This can be achieved through the use of various media and instructional strategies.

As highlighted by Thornbury (2002), there are several ways to present vocabulary material to students, they are:

1. Translation

The easiest to where improve the meaning of difficult words.

2. Explanation

The ways where the teacher has revealed the words to the students and explain them.

3. Synonym

The teacher gives words which have the same type and the same general meaning.

4. Antonym

The teacher gives words which have different meaning.

5. Showing the real object

The teacher shows pictures and explains them about what happen in the pictures or things that are in the pictures.

In addition, the researcher assumed that for teaching vocabulary to the students, the teacher should be able to use appropriate strategy. By using it, the students will be more motivated and interested in learning vocabulary in relation to reading skill. The students could easier to understand a text and obtained the information more deeply.

In addition to these methods, researchers have emphasized the importance of using appropriate strategies to teach vocabulary. Word mapping, a strategy that involves creating a visual organizer to promote vocabulary development, has been identified as a particularly effective approach (Richard and Renandya, 1986). This strategy enables students to develop broader concepts, definitions, and relationships between words, thereby enhancing their vocabulary knowledge.

In the context of reading comprehension, vocabulary is a critical component of language proficiency (Richards and Renandya, 2002). The study of reading skills involves three stages: pre-reading, while-reading, and post-reading. In this research, the word mapping strategy was employed in the pre-reading stage to help students develop vocabulary related to a descriptive text topic.

The objective of this research was to apply a method that can be used in teaching vocabulary in an easy and enjoyable manner. The use of word mapping strategy was found to increase students' vocabulary learning and engagement, as it enables them to become more active learners. The study aimed to address the problem of vocabulary learning faced by students and provide evidence that word mapping strategy can improve students' achievement in vocabulary

## **2.8. Advantages and Disadvantages of using word mapping strategy**

### **2.8.1 Advantages of using word mapping strategy**

According to Graves (2006: 96) there are the advantages and disadvantages of using word mapping strategy:

1. Readily adaptable strategy for all levels of student and all content areas.
2. May be used for individuals, small groups or the whole class.
3. Can be created easily and spontaneously on paper, white/black board or on Overhead projector.
4. Students can relate vocabulary words to their own background or experience.
5. Involves students in thinking, reading and writing.
6. Engages the students as active learners.

### **2.8.2 Disadvantages of using word mapping strategy**

This strategy may not be appropriate for students with:

1. Low incidence disabilities (such as visual impairments) students for whom the impact of their disability renders this strategy.
2. Inefficient (such as intellectual disability).

## **2.9.Procedure of Teaching Vocabulary by using Word Mapping Strategy**

According to Wagstaff (1999: 106), below are the steps to use word mapping strategy in teaching vocabulary:

1. Make words very accessible by putting them where every student can see them, writing them in big, black letters, and using a variety of background colors so that the most often confused words (there, their; what, when) are different colors.
2. Choose only the words that really want the students to learn.
3. Use the word mapping daily to practice words incorporating a variety of activities such as: chunking, spelling, word recognition, displaying categories, alphabetical order, or word guessing games.
4. Provide enough practice so that words are read and spelled automatically and make sure that word mapping are always spelled correctly.

The idea of word, two category examples, and other instances make up the word mapping framework. The teacher should provide an example for this highly involved procedure first. Word mapping involves writing the concept word on the board, explaining the process and asking students to come up with as many words as they can about it; writing the list on the board or overhead and asking students to copy it; and finally, having students organize the words into groups. Based on the theory above, the researcher modifies the procedures of teaching vocabulary by using word mapping are as follows:

1. First of all, the researcher divides the students into some group consisting of 5 persons in order to make them cooperate with others. The researcher gives the text to the students and students read the text and understand the text (read the text and read carefully).
2. Next, the researcher informs the students that the vocabulary should cover four aspects: verbs, adjective, nouns, and adverbs. The researcher shows a word mapping organizer on a board in front of the class consisting of vocabulary related to the topic.

3. The students get explanation about how to make word mapping. The researcher slowly begins to enter the main goal of today's teaching activity that is vocabulary teaching by using word mapping strategy. The researcher gives five words related to the topic to the students. The researcher asks the students to make word mapping organizer of these five words. The organizer follows four aspects of vocabulary. Researcher gives spare time to the students to internalize the word mapping organizer shown to them.
4. After that, the students should complete the task and the teacher collects the students' task. Some students are asked to read their answer in front of the class as a representative of their group. Researcher together with the students gives corrections to every incorrect answer made by the students.
5. The researcher gives feedback to the students. After the students finished doing this activity, the researcher clarifies some mistakes and reinforce the students' understanding about word mapping strategy through descriptive text and the students should understand about it.

#### **2.10. Theoretical Assumption**

In the context of vocabulary instruction, it is often assumed that teaching individual words is the primary approach. However, researchers have also explored alternative strategies, such as games, songs, mind mapping, and word mapping (Hiebert & Kamil, 2005). This research focuses on the utilization of word mapping strategy to teach vocabulary, which integrates reading skills.

The researcher believes that providing word mapping strategies can facilitate students' understanding and implementation of words by relating them to a broader context. This approach enables students to utilize these terms more effectively and confidently in various communication contexts, thereby enhancing their overall comprehension and language proficiency.

The main focus of this research is to investigate the improvement of students' vocabulary achievement in reading texts following instruction utilizing the word mapping strategy. The strategy will be applied to students at the Junior High School level. The study aims to explore the effectiveness of word mapping in



improving students' vocabulary acquisition and language proficiency, particularly in reading comprehension.

### **2.11. Hypothesis**

Referring to the background of problem above and the theoretical assumption above that have been assumed, the researcher formulates the hypothesis as follows:

1. H0: There is no statistically significant improvement on student's vocabulary achievement after students were taught using word mapping strategy.
2. H1: There is statistically significant improvement on student's vocabulary achievement after students were taught using word mapping strategy

The researcher used Repeated Measure T-test to determine whether the hypothesis is accepted or rejected. The criteria for the hypothesis are:

- a. H0 is rejected if the significant (p) value is less than the significant level (0.05) and t-value is more than t-table.
- b. H0 is accepted if the significant (p) value is more than the significant level (0.05) and t-value is more than t-table.

Those are all the discussion in this chapter that focuses on the literature review, which includes the concept of vocabulary, the importance of vocabulary, vocabulary achievement, descriptive text, teaching of vocabulary by using word mapping, word mapping strategy, advantages and disadvantages of using word mapping strategy, procedure of teaching vocabulary by using word mapping strategy, theoretical assumption, and hypothesis.

### III. METHOD

This chapter outlines the methodology employed in the present study, including the research design, data collection procedures, and data analysis techniques. The chapter also provides an overview of the research procedure, including the validity and reliability of the test instruments used, the treatment administered to the students, and the methods used to test the hypotheses.

#### 3.1. Research Design

The aim objectives of this research are to find out the improvement of word mapping on junior high school students' vocabulary achievement and to find out students' responses of using word mapping strategies. Employing a quantitative approach, this research adopts a one-group pre-test post-test design, where the following formula was applied:

$$T1 \ X \ T2$$

T1 : pre-test

T2 : post-test

X : treatment (teaching vocabulary by using word mapping)

*(Setiyadi, 2018)*

The researcher gives a treatment of teaching vocabulary by using word mapping strategy. The treatments of the sample class are given for two meetings. The pre-test is administered before the treatment of teaching vocabulary in order to see the students' basic achievement of vocabulary. Then, the post-test is administered to analyze the improvement of students' vocabulary.

#### 3.2. Variables

This research consisted of the following variables:

1. The student's vocabulary achievement of as dependent variable (Y)

It is categorized as dependent variable because student's vocabulary achievement is based on the activity output. The achievement of students can be measured to determine whether or not there is an effect of the independent variable.

2. Word Mapping strategy as independent variable (X)

It is categorized as independent variable because Word Mapping strategy is the variable that can influence the dependent variable to determine the effect between phenomenon and the object which is observed.

### **3.3. Population and Sample**

The population of this study was students of seventh grade at MTs Guppi Natar. There are four classes of the seventh grade in this school (A, B, C, and D). In this research, the researcher selected the Quasi-experimental One-Group Pretest-Posttest Design, namely class VII B of MTs Guppi Natar as the sample. The researcher focuses on teaching vocabulary by using word mapping strategy. The class has 32 students consisting of 19 females and 13 males in the class. This research was conducted in five meetings.

### **3.4. Data Collecting Strategy**

In collecting the data, the researcher used test that are vocabulary test and questionnaire. The vocabulary test is used to measure students' vocabulary achievement. There are 30 questions to be administered in the pre-test and post-test with 4 options: a, b, c, d. In observation, the researcher makes observation sheet students with 4 options: 1, 2, 3, 4. To be clear, it could be seen in the following sub:

1. Pre-test

The pre-test are 30 items in multiple choices with four options (A, B, C, and D). The time allocation was 40 minutes. The pre-test was conducted to determine the student's vocabulary achievement before they were taught using word mapping strategy. Meanwhile, before administering the pre-test, the researcher explains the material that will be tested. The result of the pre-test was compared with the post-test result to assess their achievement.

## 2. Post-test

A post-test consists of 30 items in multiple choice with four options. The time allocation was 40 minutes. It is conducted to assess the student's vocabulary achievement after receiving the treatment. The questions or the items in the post-test are the same as the pre-test. However, the researcher changes the question numbering.

## 3. Giving Questionnaire

A questionnaire was a research instrument consisting of a series of questions and other prompts used to gather information from respondents. The questionnaire was given to the students after completing the post-test to assess their responses towards word mapping strategy.

In this research, the researcher teaches English using the word mapping strategy and acts as an active participant observer. As a researcher, the teacher observes the students' activities during the teaching-learning process. It is important not only to understand their feelings about English learning but also to gain insights into their perceptions of their teacher. The observation sheet for students includes 5 options: 1, 2, 3, 4, and 5.

### 3.5. Research Instrument

An instrument is a testing device used to measure a specific phenomenon, such as a paper-and-pencil test, a questionnaire, a research tool, or a set of observation guidelines. In this research, the researcher utilizes a reading test and questionnaire.

#### 1. Reading Test

The researcher employs a reading test that a cloze test format multiple-choice to collect data. Using the cloze test method facilitates easier answer selection for students, thereby minimizing difficulties. The test comprises 30 items.

#### 2. Questionnaire

The researcher administers a questionnaire as an instrument for data collection. The questionnaire consists of 10 questions.

### 3.6. Research Procedure

To ensure the best procedures and maintain a smooth process, the study follows several steps as outlined below:

1. Determine the problem

This research originated from several problems that occurred in the teaching-learning process, teaching and learning English as a foreign language. Some students have difficulty in understanding and producing English words due to their lack of vocabulary.

2. Determine research instruments

Multiple-choice tests are used for both the pre-test and post-test. The test questions cover various topics, such as classroom items, and focus on vocabulary.

3. Administer the Try-out Test

The try-out test is a multiple-choice test consisting of 45 items. Each item has four alternative answers (A, B, C, D), with one correct answer and the rest as distractors. The try-out test is conducted within a 40-minute timeframe. Its purpose is to evaluate the test's quality as a research instrument, including aspects such as validity, reliability, level of difficulty, and discrimination power.

4. Administer the Pre-test

The pre-test was conducted to assess the students' vocabulary achievement before teaching them using the word mapping strategy. It consists of a multiple-choice test with 30 items. Each item has four alternatives (A, B, C, D), with one correct answer and distractors. The pre-test is conducted over a duration of 40 minutes.

5. Conduct the Treatment

After administering the pre-test, the researcher conducts the treatment in three sessions, with each session lasting 2 x 40 minutes.

6. Administer the Post-test

A post-test is conducted to evaluate the students' vocabulary achievement after teaching them using the word mapping strategy. The post-test consists

of a multiple-choice test with 30 items. Each item has four alternatives (A, B, C, D), with one correct answer and distractors. The post-test is conducted within a 40-minute timeframe.

#### 7. Giving Questionnaire

The researcher is observing the teaching-learning process of vocabulary instruction using word mapping, which includes collecting the students' responses. The questionnaire is administered to the students after completing the post-test to gather their feedback and responses regarding the word mapping strategy.

### 3.7. Validity and Reliability

The researcher is going to evaluate the instrument's validity and reliability to determine its applicability for this study. The following is an explanation of these tests:

#### 3.7.1. Validity of the Test

Validity refers to the degree to which a test measures what it intends to measure, directly aligning with the test's purpose. The test can be valid or effective if the test measures the object under test and meets the standard (Hatch & Farhady, 1982, p. 250). A test can be considered valid if it accurately assesses the intended qualities. Different types of validity exist depending on the test's purpose. In this research, content validity and construct validity are employed.

##### 1. Content Validity

Content validity involves being aware of all the indicators of the test items and analyzing whether the instrument meets certain criteria. Several indicators are used to establish good content validity:

- a) The test is aligned with the educational goals stated in the Merdeka English curriculum and syllabus for seventh-grade students in Junior High School.
- b) The test covers the material taught in the classroom.



## 2. Construct Validity

Construct validity is concerned with whether the test truly corresponds to the theory of vocabulary. It assesses whether the test accurately reflects the theory of vocabulary achievement. In relation to this research, the test items should encompass four types of words, including verbs, adjectives, nouns, and adverbs.

### 3.7.2. Reliability of the Test

Reliability refers to the extent of consistency in test scores and provides an indication of the accuracy of the test's scores. According to Hatch and Farhady (1982:243), test reliability can be defined as the degree to which a test produces consistent results when administered under similar conditions. In this research, the researcher measures the coefficient reliability between the first half and second half of the test items using the Pearson Product Moment formula as follows:

$$r_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}}$$

Notes:

- $r_{xy}$  : coefficient of reliability between odd and even numbers item
- $x$  : odd number
- $y$  : even number
- $\sum x^2$  : total score of odd number items
- $\sum y^2$  : total score of even number items
- $\sum xy$  : total score of odd and even number
- $\sum xy$  : total score of odd and even number
- $\sum xy$  : total score of odd and even number

After getting the reliability of half test the researcher used Spearman Brown to determine the reliability of the whole test, as follows:

$$r_k = \frac{2r_{xy}}{1 + r_{xy}}$$

Notes:

- $r_k$  : the reliability of the whole tests
- $r_{xy}$  : the reliability of half tests

The criteria of reliability can be seen as follows:

- 0.90-1.00 : high
- 0.50-0.89 : moderate
- 0.0-0.49 : low

(Arikunto, 2006:180)

From the result of analysis, the researcher prepared 45 items as the try-out test in form of multiple choices. The students were given 40 minutes to finish the try out test. The reliability test reached 0.50. the result showed that the reliability of this test was 0.98 (see appendix 13) based on the criteria of reliability, this test had high reliability (range 0.90-1.00). it means that this instrument would produce consistent when it was administered under the similar condition to same participant in different time (Hatch and Farhady, 1982;244). The result of the try-out test can be seen in the table below:

**Table 3.1 Reliability Statistics of The Try-Out Test**

Cronbach's Alpha	Part 1	Value	1.000
		N of Items	1 <sup>a</sup>
	Part 2	Value	1.000
		N of Items	1 <sup>b</sup>
	Total N of Items		2
Correlation Between Forms			.721
Spearman-Brown Coefficient	Equal Length		.838
	Unequal Length		.838
Guttman Split-Half Coefficient			.796

a. The items are: X

b. The items are: Y

The researcher administered the Try-Out Test on Tuesday, January 30<sup>th</sup> 2024, in class VII C of MTs Guppi Natar. The students were given 45 numbers of multiple choices tests. Each item has four alternative answers (A, B, C, D), with one correct answer and the rest as distractors. The try-out test is conducted within a 40-minute timeframe. The Try-Out Test was administered before the pre-test, this activity aimed to evaluate the quality

of test as a research instrument, including aspects such as validity, reliability, level of difficulty, and discrimination power of each test item.

### 3.8. Levels of Difficulty

Test items are divided into two categories based on their level of difficulty: difficult and easy. The tasks shouldn't be excessively simple or complex for the students. This research used the following formula to determine the test items' level of difficulty:

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

Notes :

LD : level of difficulty

R : the number of students who answer correctly

N : the total number of students following the test

The criteria are:

<0.30 : difficult

0.30-0.70 : average

>0.70 : easy

(Shohamy, 1985:7)

In addition to the development of the instrument, this research also analyzed the level of difficulty and discrimination power of the instrument. The data analysis revealed that 38 items met the criteria for average difficulty, with a value range of 0.30 to 0.70. In contrast, 8 items were deemed to be too difficult and were subsequently dropped. As a result, the revised instrument consisted of 30 items, which were used for both the pre-test and post-test (see Appendix 11). The vocabulary used in the instrument was at a level of approximately 2.000 words, which is suitable for junior high school students. According to Nation (1990), high-frequency vocabulary or general service vocabulary refers to words that appear frequently in various types of texts and account for approximately 87% of all words in a text. This suggests that the vocabulary used in the instrument is relevant and applicable to the target population.

The findings of this study indicate that the revised instrument consists of 30 items that meet the criteria for average difficulty. The analysis also reveals that the

vocabulary used in the instrument is suitable for junior high school students and aligns with the concept of high-frequency vocabulary or general service vocabulary.

### 3.9. Discrimination Power

The discrimination power of the test refers to the extent to which the test items are able to differentiate between high- and low-achieving students. To determine the discrimination power of the test, this research employed the following formula:

$$DP = \frac{U - L}{\frac{1}{2} N}$$

Notes:

DP : Discrimination Power

U : The total of correct answer of the higher group

L : The total of correct answer of the lower group

N : Total number of students

The criteria are:

DP : 0.00–0.19 (Poor)

DP : 0.20–0.39 (Satisfactory)

DP : 0.40–0.69 (Good)

DP : 0.70–1.00 (Excellent)

DP : - (Negative) Bad items (should be dropped)

The criteria are:

1. If the value is positive discrimination – a large number or more knowledgeable students than poor students get the item correct. If the value is zero, it means that there is no discrimination.
2. If the value is negative, it means that more low students than high level students get the item correct.
3. In general, the higher, the discrimination index, the better. In the classroom situation, most items should be higher than 0.20 indexes.

*(Shohamy, 1985:79)*

The discrimination power measure was utilized in this study to examine the test items' capabilities to identify between the abilities of students. Two items had scores below 0.20, according to the research, which indicated they were unclear and lacked the capacity to differentiate between students“ who performed well and those who did not. Additionally, the study showed that 8 items were categorized

as satisfactory for being scored between 0.20 and 0.39. On the other hand, 13 goods that had a score between 0.40 and 0.69 were considered things that are beneficial. On the basis of this classification, most test items were useful in identifying differences between students' skill levels. 10 items that had a score of less than 0.21 were eliminated since it was determined from the study that they were of low quality. The instrument for the pre-test and post-test was composed of the 30 remaining items, which included acceptable and good enough items (see Appendix 11). Through this process of improvement, the test equipment was made more reliable and capable of evaluating student performance precisely.

### 3.10. Scoring System

The correct answer is divided by the total number of items timed by 100 as the scoring method in this study. Following Arikunto's (1997:212) formula, the students' results from the pre- and post-tests are scored:

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

Notes :

- S : score of the test
- R : number of right answer
- N : total number of items on a test

The data was analyzed using a manual approach, with the assistance of SPSS 23.0 software to establish the reliability of the questionnaire. This process allowed for a thorough examination of the questionnaire's internal consistency and validity.

### 3.11. Questionnaire

The aim of the questionnaire was to find out what the students regarding the word mapping strategy.

#### 1. Reliability of The Questionnaire

Reliability is a fundamental concept in research, referring to the consistency of measurement over time and across different research subjects. In this research, the reliability of the questionnaire was assessed using a Likert scale, with a scoring range of 1 to 5. The questionnaire consisted of 10 questions, which were designed to measure the variables of interest. To

evaluate the internal consistency of the questionnaire, Cronbach Alpha Coefficient was employed. This coefficient is widely used in social science research to measure the reliability of scales, and it ranges from 0 to 1. A higher alpha value indicates a more reliable questionnaire (Setiyadi, 2018). The reliability of the questionnaire was classified into the following categories:

- a. Between 0.800 to 1.00 = Very high reliability
- b. Between 0.600 to 0.800 = High reliability
- c. Between 0.400 to 0.600 = Moderate reliability
- d. Between 0.200 to 0.400 = Low reliability
- e. Between 0.00 to 0.200 = Very low reliability

The reliability of the questionnaire was identified as high reliability based on the result of Cronbach's Alpha which the point is 0.736. it means that the questionnaire is good to be used.

**Table 3.2 Reliability Statistics of The Questionnaire**

Cronbach's Alpha	N of Items
.736	10

### 3.12. Data Analysis

After collecting data by using tests, the researcher analyzed the data in form of score to know whether there was an improvement of the students' vocabulary by using word mapping strategy Statistical Program for Social Science (SPSS) version 23.0. The results of the test were in the forms of score or interval data. The researcher analyzed the students' vocabulary achievement by doing those activities:

1. Scoring pre-test and post-test,
2. Tabulating the score in students' vocabulary test results using word mapping

3. Then, summarizing the finding from the tabulated result of the pre-test and post-test.
4. Next, the writer evaluated the teaching-learning process. Then the researcher will reflected by seeing the result of the questionnaire, teacher's comment, and a task scored of vocabulary achievement.

The researcher used statistical computerization i.e. word mapping strategy of Statistical Program for Social Science (SPSS) version 23.0 to test whether there is an increase or not.

### 3.13. Normality of the Test

According to Sujianto (2009), normality test is a test to measure whether our data have normal distribution or not. If the residuals are not normally distributed, then the dependent variable or at least one explanatory variable may have the wrong functional form, or important variables may be missing, etc. Correcting one or more of these systematic errors may produce residuals that are normally distributed (Khatun, 2021). To analyze the data, the reseacrher used the formula of one-sample Kolmogorov-Smirnov in SPSS 23.0 with decision making in the Kolmogorov-Smirnov normality test as follows:

1. If the significance value (sig) is higher that 0.05, the research data are normally distributed.
2. Conversely, if the significance value (sig) is lower than 0.05, the research data are not normally distributed.

The result of normality test in this research can be seen as follows:

**Table 3.3 Normality of the Test**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		32
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	3.83878144
Most Extreme Differences	Absolute	.114
	Positive	.086
	Negative	-.114

Test Statistic	.114
Asymp. Sig. (2-tailed)	.200 <sup>c,d</sup>

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

Based on table 3.3 it was known that the lower bound of the true significance value of 0.200 was higher than 0.05. Therefore, in accordance with the basis for decision making in Kolmogorov-Smirnov normality test, it can be concluded that the data were normally distributed.

### 3.14. Hypotheses Testing

After collecting the data, the researcher analyzed them in order to find out whether using of word mapping could improve students' achievement in vocabulary. Hypothesis testing is intended to see whether the hypothesis that is proposed in this research is accepted or not, to test the hypothesis, word mapping is conducted at the significance level of 0.05 in which the hypothesis is approved if  $\text{sig} < \alpha$ . It means that the probability of error in the hypothesis was only about 5%. The hypothesis can be seen as follows:

H1 : There is statistically significant improvement on students' vocabulary after they were taught using word mapping.

The criteria H1 is accepted if alpha level is lower than 0.05 ( $\alpha < 0.05$ ).

H1 : there's an influence

If  $\alpha < 0.05$  H1 is accepted

This is the end of this chapter. This chapter concerns research method of the research. It includes research design, variables, population and sample, data collecting strategy, research instrument, research procedure, validity and reliability, levels of difficulty, discrimination power, scoring system, questionnaire, data analysis, normality of the test, and hypotheses testing.



## **V. CONCLUSION AND SUGGESTION**

This chapter presents the results and the researcher's suggestions for other researchers and English teachers who want to use the word mapping strategy to teach vocabulary.

### **5.1 Conclusion**

This research aimed to find out whether the implementation of word mapping strategy can improve students' vocabulary achievement significantly and students' responses after being taught by word mapping strategy. Having conducted the research at the seventh grade of MTs Guppi Natar and analyzing the data, the researcher concluded that there was a significant improvement on the students' vocabulary achievement and students' responses after they were taught through word mapping strategy, the researcher concluded as follow:

1. Word mapping was considered suitable to be used in teaching vocabulary because it makes the students to comprehend the text. Word mapping were able to improve students' vocabulary achievement, especially in content word. It was found that verb was the most improved word, followed by adjective, and the least word improved was noun and adverb.
2. In this research, students give positive responses of the implementation the word mapping strategy. Word mapping strategy was considered good to be used to improve students vocabulary achievement since it helped the students to develop the words and comprehend the text easier. It can be seen from the mean of the questionnaire, that is 3.70 which means that word mapping is effective strategy of teaching because it has fulfilled all of the criteria of effective strategy of teaching.
3. The word mapping strategy is effective in improving students' vocabulary, especially on verbs and adjectives. This shows that students understand

and remember verbs and adjectives more easily when using the word mapping strategy in a descriptive context (describing people).

## 5.2 Suggestion

Referred to conclusion above, the researcher suggest some points for English teachers, students, readers, and further research as follows:

1. Referring the findings, the researcher suggest English teachers to use word mapping strategy as an effective in teaching vocabulary. Before applying the word mapping, teacher should be able to select the appropriate text which could be combined word mapping strategy. Then, word mapping as medium to improve vocabulary achievement is recommended as an alternative way for English teacher, especially for junior high school teacher to attract the students' interest and motivation in learning English. Teachers are also suggested to construct word mapping organizer for more specific purposes. Teacher should master the strategy completely, especially on vocabulary aspect since some words are really suited for junior high school.
2. In order to increase students' vocabulary achievement in noun, and adverb, the teacher is suggested to strengthen students' memory about noun, and adverbs and also give more exercise to the students dealing with the noun, and adverbs. This can be done by providing more exercises and examples that focus on noun and adverb usage. For instance, the teacher can provide text with more noun, and adverbs to make the students' easy to memorize the vocabulary of noun, and adverbs.
3. In order to minimize the students' problems in learning vocabulary through word mapping, the teacher should pay attention to the students and provide feedback at the end of class to reduce the students' difficulties in learning vocabulary through word mapping strategy.
4. It is suggested for further researcher try to improve this strategy on different level of students. The results of this research can be used a reference for another researcher who wants to conduct a research about teaching vocabulary. Further researchers with similar strategy could give

more attention to the lowest improvement of vocabulary aspect in this research. To vary the word mapping, the researcher can use several media in order to trigger the students to use the word mapping organizer for developing vocabulary.

This is the end of this chapter. This chapter has presented the conclusions and suggestions of this study. The conclusion were then followed by suggestions for teachers, students, readers, and further researchers.

## REFERENCES

- Alqahtani, M. (2015). *The Importance of Vocabulary in Language Learning and How to Be Taught*. International Journal of Teaching and Education, 3(3), 21-34.
- Afzal, N. (2019). *A Study on Vocabulary-Learning Problems Encountered by BA English Majors at the University Level of Education*. Arab World English Journal.
- Arikunto, S. (2006). *Prosedur Penelitian Suatu Pendekatan Praktik*. Edisi Revisi VI. Jakarta: PT Rineka Cipta.
- Brown, S. (2010). *Likert Scale Examples*. Available at <http://beinspired.no/wpcontent/uploads/2019/04/likertscaleexamplesforsurveys.pdf>
- Cameron, L. (2001). *Teaching Languages to Young Learners*. New York: Cambridge University Press.
- Algarabel, (2001), pp. 43-46. *The definition of achievement and the construction of tests for its measurement: A review of the main trends Psicológica*. Universitat de València, Spain.
- Fries, C. (1985). *Teaching and Learning as a Foreign Language*. New York: The University of Michigan Press.
- Grave. (2008). *Word Mapping Strategy*. <http://definitionwordmapping/Englishteaching.html>. Retrieved on October 18<sup>th</sup> 2018.
- Hatch, E., and Brown, C. (1995). Definition of Vocabulary. [http://definitionofvocabulary\\_eifhty8hundred.htm](http://definitionofvocabulary_eifhty8hundred.htm). Retrieved on August 6<sup>th</sup>, 2016.
- Humaira. (2015) *The Effectiveness of Using Word Mapping Technique to Increase Student Vocabulary*. University of Muhammadiyah Mataram.
- Hornby, A.S. (2000). *Oxford Advanced Learner's Dictionary*. UK: Oxford University Press.
- Kamil, Hiebert, Elfrieda, H. (2005). *Teaching and Learning Vocabulary (Bringing Research to Practice)*. New Jersey, NY: Lawrence Erlbaum Associates.

- Karendra, R., Nurweni, A., & Suka, R.G. (2017). *The Implementation of Word Mapping Strategy to Increase Students' Vocabulary Mastery at the First Grade Students of SMA N 1 Rumbia Lampung Tengah*. <https://media.neliti.com/media/publications/194585-EN-the-implementation-of-word-mapping-strat.pdf>.
- Khatun, N. (2021). *Applications of Normality Test in Statistical Analysis*. *Open Journal of Statistics*, 11(01), 113. DOI: <https://doi.org/10.4236/ojs.2021.111006>
- Napa, P. A. (1991). *Vocabulary Development Skills*. Yogyakarta: Kasinius Wilkins.
- Nuttall, C. (1985). *Teaching Reading Skills in a Foreign Language*. 114-115. London: British Library Cataloguing in Publication Data.
- Qomariyah, S., & Nafisah, B.Z. (2020). *Word Mapping in Students' Vocabulary Mastery*.
- Rosalina, M.P., Zur, S., & Abidin, A. (2024). *EFL Teacher's Beliefs on the Use of Word Mapping Strategy in Vocabulary Learning*. AL LUGHAWIYAAT.
- Santa, C.M; Havens, L.T. & Maycumber, E.M. (1988). *Project CRISS: Creating independence through student-owned strategies*. Iowa: Kendall Hunt.
- Schwartz, R. M., & Raphael, T. E. (1985). *Concept of definition: A key to improving students' vocabulary*. *Reading Teacher*, 39(2), 198–205.
- Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge: Cambridge University Press.
- Schmitt, N. (2008). *Instructed Second Language Vocabulary Learning*. *Language Teaching Research*, 12(3), 329-363.
- Selçuk, İ. B. (2006). *Guessing Vocabulary from Context in Reading Texts*. Available at <http://www.thesis.bilkent.edu.tr/0003126.pdf>
- Setiyadi, B., et al. (2007). *TeFL2*. Universitas Terbuka. Jakarta.
- Setiyadi, B. (2018). *Metode Penelitian untuk Pengajaran Bahasa Asing Pendekatan Kualitatif dan Kuantitatif second edition*. Yogyakarta: Graha Ilmu.
- Shohamy, E. (1985). *A Practical Handbook in Language Testing for the Second Language Teacher*. Tel Aviv: Tel Aviv University.
- Sinatra, R. C., Stahl-Gemake, J., & Berg, D. N. (1984). *Improving Reading Comprehension of Disabled Readers through Semantic Mapping*. *The Reading Teacher*, 38(1), 22–29. <http://www.jstor.org/stable/20198670>

- Sofyan S, Willis. (2008). *Konseling Individual Teori dan Praktek*. Bandung: Alfabeta.
- Steinmayr, R. M. (2014). *Academic achievement*. Oxford, UK: Oxford University Press.
- Sujianto, E. (2009). *Aplikasi Statistik dengan SPSS 16.0*. Jakarta: PT. Prestasi Pustaka
- Thornbury, Scott. (2002). *How to Teach Vocabulary*. Edinburgh Gate, England: Pearson Education Limited.
- Wagstaff, Janiel M. (1999). *Teaching Reading and Writing with Word Walls*. U.S.A: Scholastic Inc.
- Wahyuni (2012). *The Effectiveness of using Word Mapping Strategy in Teaching Vocabulary at The Seventh Grade*. Bandar Lampung: University of Lampung.
- Wiwiek, S. (2018). *The Difficulties of Learning English for the Basic English Learners*. Journal of Cultural, Literary, and Linguistic Studies, 34-41.