

**THE IMPLEMENTATION OF WORD MAPPING STRATEGY
TO INCREASE STUDENTS' VOCABULARY MASTERY
AT THE FIRST GRADE OF SMA N 1 RUMBIA
LAMPUNG TENGAH**

(A Script)

By

Rikko Karendra



**ENGLISH EDUCATION STUDY PROGRAM
TEACHER TRAINING AND EDUCATION FACULTY
UNIVERSITY OF LAMPUNG
2017**

ABSTRACT

THE IMPLEMENTATION OF WORD MAPPING STRATEGY TO INCREASE STUDENTS' VOCABULARY MASTERY AT THE FIRST GRADE OF SMA N 1 RUMBIA LAMPUNG TENGAH

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Rikko Karendra**

The aim of this study was to find out whether there was a statistically significant improvement of the students' vocabulary mastery after the students were taught through word mapping strategy.

This research was quantitative research. The subjects of this research were 32 students of class X IPS 3. The design used was one-group pretest posttest. The vocabulary test in the form of multiple choice was administrated as the instrument of this research. In this research, repeated measures t-test was used to analyze the data. The researcher conducted the research in six meetings which consisted of try-out test, pre-test, three times of treatments, and post-test.

The result showed that there was a statistically significant improvement of the students' vocabulary mastery with the significant level < 0.05 . It could be inferred that teaching activity through word mapping strategy facilitates the students to develop the vocabulary and to understand the text easily.

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A Script

Submitted in a Partial Fulfillment of

The Requirement for S-1 Degree

in

Language and Arts Education Department of

Teacher Training and Education Faculty



**ENGLISH EDUCATION STUDY PROGRAM
TEACHER TRAINING AND EDUCATION FACULTY
UNIVERSITY OF LAMPUNG
2017**

Research Title : **THE IMPLEMENTATION OF WORD MAPPING STRATEGY TO INCREASE STUDENTS' VOCABULARY MASTERY AT THE FIRST GRADE OF SMA N 1 RUMBIA LAMPUNG TENGAH**

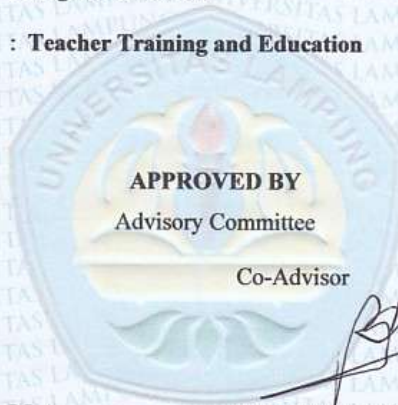
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CURRICULUM VITAE

Rikko Karendra was born in Rumbia, Central Lampung, on June 11th, 1995. He is the third child of a great couple, Muhammad Santoso and Sri Muryani.

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MOTTO

“Someone whom Allah S.W.T loves the most is someone who can give benefits to other people”.

(H.R. Thabrani)

DEDICATION

This piece of paper is dedicated to:

My beloved father and mother, Muhammad Santoso and Sri Muryani

My beloved sister and brothers, Rya Munita Sari, Ivan Billiyanto,

Pradito Indrawan, and M. Rifky Yudhistira

My Mother Siti Kusri

All my brothers and sisters in English Department

My Almamater, Lampung University

The readers

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Praise is merely to Allah S.W.T for His blessing and mercy so that the writer has a power to accomplish this script entitled “The Implementation of Word Mapping Strategy to Increase Students’ Vocabulary Mastery at The First Grade of SMA N 1 Rumbia Lampung Tengah”. This script is submitted as a compulsory fulfillment of the requirements for S1 degree of English Education Study Program at Education and Pedagogy Faculty, University of Lampung.

Gratitude and honor are addressed to all people and institutions that helped and supported the writer in accomplishing this script. Here, the writer would like to acknowledge his sincere, gratitude, and respect to the following:

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Finally, the writer realizes that this script still has some weaknesses. Therefore, critics and suggestions are needed for enhancement of this script. Hopefully, this script can give good contribution to the readers or those who want to carry out further research in the same realm.

Bandar Lampung, September 2017
The writer,

Rikko Karendra

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I. INTRODUCTION

This chapter concerns with introduction of the research that consists of the following points: Background of Problem, Formulation of the Problem, Research Questions, Objectives, Uses of the Research, Scope of the Research and Definition of Terms.

1.1. Background of Problem

Vocabulary is an essential component in foreign language learning. In addition, vocabulary is central to the learning of foreign language especially at secondary level to enrich their language. In EFL classroom, vocabulary is needed to express meaning and to convey thoughts through both receptive and productive skills. Meanwhile, according to Nation, (2001:21) the students' goal is to continue to increase their vocabulary. Helping students to develop their vocabulary learning strategies is a powerful approach to help the students acquire large vocabulary.

Furthermore, there is another importance of vocabulary according to Pora (2003:vii), who says that vocabulary mastery is a must for someone who wants to understand a text, conversation, or anything written in English. It means that vocabulary holds an important role in English language learning. We cannot communicate with others in a certain language if we do not know sufficient words

of the language. In using a language, the students who are rich in vocabulary will potentially be successful both in expression skills (speaking and writing) and receptive skills (listening and reading), but those who are poor in vocabulary will get troubles in those skills. It means that dealing with learning English as a foreign language, vocabulary is one of language components which has the most important role in relation to the mastery of the four language skills. Without ignoring other language components, it is assumed that vocabulary is the most important factor in the teaching-learning of English as a foreign language. So, teachers are expected to have such an effective way to make the students interested in learning English vocabulary so that the teaching-learning objectives can be carried out successfully. In other words, there should be an appropriate strategy to help the students in learning vocabulary.

Based on the researcher's experience in Teaching Training Program (PPL) in 2016, some students in senior high school still had difficulties in mastering vocabulary when English teaching learning process was going on. It happened because they did not have adequate number of vocabulary. For example in reading, students tend to be confused to read a text since they did not have adequate number of vocabulary to be able to understand the purpose of the text. Based on the problem the researcher found above, vocabulary mastery had been chosen as the focus in this research. Since vocabulary is one of language components which is important to be mastered by the language students, the teacher needs to use an appropriate strategy in order to increase students' vocabulary mastery in order to be successful in reading ability.

In relation to the problems above, the researcher was interested in the implementation of word mapping strategy to improve vocabulary mastery in reading skill for senior high school students. The researcher assumed that word mapping strategy was an appropriate strategy to be implemented to senior high school students to help them master English vocabulary in order to be successful in reading ability. Word mapping itself was a visual representation of a definition which functioned to encourage the students to move from simple dictionary-like statements to more complex critical thinking definitions. Using word mapping strategy as a graphic organizer hopefully would help the students think about terms or concepts in different ways.

Furthermore, it was necessary to build up students' ability to acquire the reading technique according to its purpose as main goal in reading activity. In reading activity, commonly there are three stages: pre-, while-, and post-reading stages. In pre-reading stage, it is used to activate the relevant scheme, for example, teacher can ask the students some questions which can arouse their interest before starting to read the text. While-reading stage is an interactive process that can develop students' ability in doing their tests by developing their linguistics and schematic knowledge. In the post-reading stage, it is used to enhance learning comprehension by using reading comprehension tests such as matching, cloze exercises, cut-up sentence, and comprehension questions.

Based on the three-stages of reading activity explained above, the researcher was interested to try to insert word mapping strategy in the pre-reading activity to brainstorm students' knowledge in order to help the students to understand the text and obtain more vocabulary in the main reading activity. The

researcher intended to do it by giving a topic of certain text and let the students used their imagination by looking for as many as possible words which have relationship with the topic given. Those words would function as background knowledge which later would help them in understanding the text. In this research, the focus was the vocabulary. So, the thing that would be investigated was the vocabulary as one of reading aspects. The researcher will use recount text since it is suitable with what was written in syllabus for tenth grade students.

1.2. Limitation of The Problem

To limit this research, from the five aspects of reading; main idea, specific information, reference, inference, and vocabulary, the researcher only focused on the improvement of students' vocabulary mastery after being taught through word mapping strategy. The data were analyzed to see the different result of treatments in teaching-learning vocabulary through word mapping strategy.

1.3. Formulation of The Problem

Referring to the background above, the writer formulated the research questions as follows:

1. Is there any improvement on students' vocabulary mastery after the students were taught through word mapping strategy?

1.4. Objective of the Research

Concerning with the problem above, this research was conducted in order to find out whether or not word mapping strategy was able to increase students' vocabulary mastery.

1.5. Uses of the Research

The outcomes of this study are expected to be significant theoretically and practically.

1. Theoretically, the result of this research hopefully can give contribution to the development of the theory of teaching vocabulary, especially for teaching vocabulary through word mapping strategy.
2. Practically, this study can function as information to English teachers who want to implement word mapping as a strategy for teaching vocabulary.

1.6. Scope

This research was focused on the improvement of students' vocabulary mastery after the implementation of word mapping strategy in vocabulary teaching. The participants of this research were 32 students in class X IPS 3 in SMAN 1 Rumbia. Pre-test and post-test of vocabulary were used to investigate whether there was a significant difference on the students' vocabulary achievement after the students were taught through word mapping strategy. By comparing the result of those tests, the researcher could find out whether the students' vocabulary achievement improved or not.

1.7. Definition of Terms

1. Vocabulary. Vocabulary is a component of language that contains information about the meaning and the use of words in language. It means that vocabulary is a list of all words in a language with their meaning to

represent messages. In this research, the term vocabulary refers to verb, adjective, adverb, noun, and pronoun (Fries, 1974: 32).

2. A word mapping strategy is a graphic organizer which enables students to expand the definition of words (Wardani, 2007:134). It is a graphic rendering of a word's meaning. It has the form of having the vocabulary word in the central part of the graphic organizer, and three separate sections for the three main questions about the word linked to it; What is it? What is it like? What is the example?.
3. Mastery is learning or understanding something completely and without having difficulty in using it.
4. Reading refers to knowing something which someone does not know through printed messages being read. Reading also refers to the process of deriving meaning from the text. It may be regarded as relating aspects of the world around human about what is being read to the knowledge, intentions, and expectations in readers' head (Smith, 1982:15).

II. REVIEW OF RELATED LITERATURES

This chapter deals with the basic concept of the topic discussed in this research. These concepts are useful as the source and reference toward the data which will be taken in this research.

2.1. Vocabulary

Vocabulary holds an important role in foreign language learning, especially for English language learning. According to Cameron (2001: 95), vocabulary is fundamental in foreign language discourse. Furthermore, Cameron (2001:72) also says that building up a useful vocabulary is central to the learning of foreign language at secondary level. Therefore, it is assumed that vocabulary is the basic element of a language which would make the language meaningful and automatically it became the central point in the foreign language teaching learning, especially at secondary level.

If the students want to communicate each other, they need vocabulary to express the ideas in their mind clearly. Everybody should have an adequate number of words to be able to communicate. If they only have few words, they would get difficulties to communicate and they must learn new words more. Napa (1991: 6) says that the more words we learn, the more ideas we should have, so we can

communicate those ideas more effectively. The aim of learning vocabulary is to make students master the vocabulary and to make the students able to understand the meaning of the words, and also to able to use the words. Setiyadi (2007: 23), as quoted by Widyawati (2016), says that the students learn new words as they need them in communication and the more they need them the more they learn them.

According to Napa (1991: 6) vocabulary is one of the components of language and there is no language that exists without words. As has been mentioned, vocabulary is a list of all words with their own meanings which are used in a language to represent meanings. It referred to every single word which was understood and used to convey our ideas. Therefore, vocabulary mastery must be a priority in English language learning. Without being able to master the vocabulary, the students would get difficulties to master all language skills (listening, speaking, reading, and writing). From the statements above, it was assumed that in teaching vocabulary, the teachers should focus on helping the students understand the meaning of the words. The teacher should also use an appropriate strategy to teach vocabulary. This was intended to increase their vocabulary mastery. By using appropriate strategy, it was expected that the students would be more motivated and interested in learning vocabulary, and the students could learn vocabulary in more enjoyable way.

2.1.1. Types of Vocabulary

Vocabulary can be defined as a set of lexeme including simple words, compound words, and idioms. A simple word is a single word that may or may not

have a prefix and/or suffix. For example; *pen, box, table, etc.* Compound word is two or more existing words which are simply combined. Compound word can be written as one word, two words, or as a hyphenated word, such as *policeman, fisherman, etc.* Idiom is a group of words with a meaning which is different from the individual words and often difficult to understand from the individual words. For example: *give up, look at, carry out, etc.*

In addition, Nation (1990:02) states that vocabulary is that both learners and teachers see as a very important element in language learning. It means that vocabulary holds a very important role in certain language and the students should master adequate number of vocabulary in order to perform the language well.

There are some types of vocabulary in English, as Fries (1974: 32) classifies English vocabulary into four types, as follow:

1. Content words.

They constitute the bulk of vocabulary of the language. In other words, content words represent the name of subject or things, those are:

A. Nouns

Nouns are the name of subject or things which have a part of speech inflected for case signifying a concrete or abstract entity. Nouns also change form to show number and possession (*boy, boy's, boys, boys*). According to Frank (1972: 6), noun can be classified into five types:

- 1) Concrete noun is a noun that names anything (or anyone) that can be perceived through physical sense. Concrete noun (*flower, girl*), abstract noun (*beauty, justice*), Countable noun (*chairs, tables*).

- 2) Abstract noun is usually the name of a quality, state, or action. *Quality*, for examples: *goodness, honesty, etc.* State, for instances: *poverty, childhood, etc.* Action, such as: *laughter, treatment, etc.*
- 3) Proper noun is the name of some particular person, place, or thing. A proper noun always begins with a capital letter, for examples: *Mr. John Smith, Paris, Dutchman, Thanksgiving Day, etc.*
- 4) Countable noun (count noun) is noun with both a singular and a plural form, and it names anything (or anyone) that can count. Uncountable noun is a noun which does not have a plural form and which refers to something that could not usually. An uncountable noun always takes a singular verb in a sentence. The examples of uncountable noun are *sugar, sand, etc.*
- 5) Collective noun is the name of a group of person, things, or animals taken together and spoken of as one whole. The examples of collective noun are *committee, class, crew, etc.*

B. Verbs

Verbs are action done by those things which have a part of speech without case inflection, but inflected for tense, person and number, signifying an activity or process performed or undergone. Verbs typically have four or five forms (*walk, walks, walked, walking, etc.*

Furthermore, Frank (1972: 47) mentions that verbs can be classified into five types, they are:

- Finite and non-finite verb.

A finite verb (sometimes called main verbs) is a verb that has a subject; this means that it can be the main verb in a sentence. It shows tense (past/present, etc) or number (singular/plural).

- A non-finite verb has no subject, tense or number. The only nonfinite verb forms are the infinitive (indicated by to), the gerund or the participle. For example: *I travelled to Germany to improve my German.*

- Auxiliary verb

A sentence or phrase can have two interlocked verbs. The main verb gives the primary action, whilst the auxiliary verb adds subtle detail. Common auxiliary verbs include the verbs *to be*, *to have*, *todo*. Auxiliary verbs, which are sometimes called helping verbs, act as helpers to other verbs. They appear in front of action verbs and linking verbs. For examples: *The Girl Scouts are meeting after school today.*

- Reflexive verbs

A reflexive verb is a verb whose agent performs an action that is directed at it. It characteristically takes a reflexive pronoun as its object. For example: *He perjured himself, he shaved*

- Transitive verbs and intransitive verbs

A transitive verb acts on an object and hence connects the subject of a sentence with its object, and hence requires both to exist. For example: *I hit the nail.* (Transitive). An intransitive verb does not act on an object and hence acts on its own (you cannot 'sleep' something). It can connect the subject with the object, but needs a preposition to do so. For example: *I was asleep.* (Intransitive)

➤ Linking Verbs

Linking verbs do not express action. Instead, they connect the subject of the verb to additional information about the subject. For example: Keilais a shopaholic. The predicating or linking verbs (*be, seem, look*) forexample: *They want to be a nurse.*

C. Adjectives

Adjective is used to modify nouns and pronouns. Most short adjective has three forms to show degree (*pretty, prettier, and prettiest*). For example: *Dona is a pretty girl.*

Frank (1972: 109) categorizes the types of adjectives into three determiners article (*the, a, an*), such as: 1)*He buys a gold ring for hismother.* 2)*He gave me an expensive bracelet.* The followings are the types of adjectives:

- Demonstrative is an adjective that points out which item, object, person or concept. Demonstrative adjectives always come before the nouns they refer to. For examples *this, that.*
- Possessive adjective is a part of speech that modifies a noun by attributing possession (or other sense of belonging) to someone or something. For examples *my, your, the girl's.*
- Numeral adjective is the adjective that describes the amount of something, for examples *four, twenty, fourth, twentieth.*
- Adjective of indefinite quantity is the adjective that describe indefined amount of something for examples *some, few, etc.*
- Proper adjective is an adjective that takes an initial capital letter, for examples *a French dish, a Catholic church, etc.*

- Participial adjective (*an interesting book, a bored student*) for example:
He gives me an interesting book.
- Compound adjective is an adjective that comprises more than one word for examples: *a good-looking girl, absent-minded, a wall-to-wall carpet, etc.*

D. Adverbs

How the action is done, that is: adverb has a part of speech without inflection, in modification of or in addition to a verb. Adverb also does not change form, but has characteristic forms of its own. It is used to modify anything but nouns and pronouns.

Frank (1972: 148) summarizes the category of adverbs into five, adverbs of manner (*slowly, silently*), adverbs of place (*inside, there*), adverbs of time (*yesterday, tomorrow*), adverbs of frequency (*sometimes, often*) and adverbs of degree (*completely, very*), e.g.: 1) *She walks slowly*, 2) *He put the present inside the box*, 3) *We will visit an orphanage tomorrow*, 4) *We sometimes go swimming*.

D. Pronouns

The pronouns are *I, he, she, it, we, you, they*, and *who* with their compounds. Pronoun has a part of speech substitutable for a noun and marked for person. It is also used as substantives, and they might be considered sub-class of noun, but their inflections are quite different, and their use does not exactly parallel those of nouns.

2. Function Words

Function words are those words which are used as a means of expressing relation of grammar structure, such as conjunction (*and, but, because*) article (*a, an, the*), auxiliaries (*do, does, did*).

3. Substitute Words

Substitute words those which represent the individual things or specific action as substitutes for whole form classes of words, that is identifies *anybody, anyone, etc.*

4. Distributed Words

Distributed words those are distributed in use according to grammatical matter as the presence or absence of a negative, such as: *some, any, other, etc.*

From the types of English vocabulary, the content words are taken as the materials in English teaching vocabulary since it is appropriate with the texts in the reading activity. Moreover, content word is the basic knowledge that every foreign language learner should master.

2.2. Teaching Vocabulary

One of the very important parts of learning a new language is mastering vocabulary of the language we want to learn. Teaching and learning vocabulary was important because when we taught a certain language it was the same as we taught vocabulary at the same time.

Klippel (1984:5) says that learning a foreign language is not just a matter of memorizing a different set of names things around us, it also an

educational experience. In short, we learn vocabulary to know the meaning of words. We do not only memorize or write the words but we also need to know the function of the words. Richards and Renandya (2002:255) say vocabulary is a core component of language proficiency and provides much of the basis for how well students speak, listen, read, and write. Without an extensive vocabulary and strategy for acquiring new vocabulary, students often achieve less than their potential and maybe discouraged from making use of language learning opportunities around them such as listening to the radio and native speakers, using the language in different contexts, reading, or watching television.

In addition, learner involvement increases understanding and memory; thus, when the students use their experience and background knowledge to define words, they learn better. The words serve as labels for concepts and students associate the words to larger vocabulary and experiences. Nation (1990:18) states that there are three things that the teacher should know when he/she teaches vocabulary, the teacher teaches the form of the words, the meaning of the words, and the use of the words. That's all that the students should know when they learn vocabulary.

There are five possible ways which can be applied in teaching-learning vocabulary, namely:

1. Learning vocabulary through creativity

By this activity, teacher may let the students to decide what they want to learn by themselves. The teacher can choose any model which can enable

the students to be creative in producing vocabulary, such as games, drama, pictures, etc.

2. Learning vocabulary through context clues

The teacher may use the context clues in any word recognition by figuring out the meaning of the words based on context. The teacher can give such kind of guidance to the students to find the meaning of some vocabulary by using clues which are put in a kind of bubble diagram models.

3. Learning vocabulary through guessing

By this activity, the teacher can encourage the students to participate in the learning activity. This activity trains the students to be active and cooperative. The teacher can give any sample of words or sentences.

4. Learning vocabulary through definition

The teacher guides the students to learn the meaning of the words into correct sentences. For instance: 'keeper' is... 'someone who keeps', etc.

5. Learning vocabulary through derivation

In this activity, the teacher can give verbs, nouns, adjectives, and adverbs, to the students and then the teacher may ask the students to make derivation of the words.

From the explanation above, it was assumed that for teaching vocabulary to the students, the teacher should be able to use an appropriate strategy. By using appropriate strategy, the students would be more motivated and interested in learning vocabulary in relation to reading skill. It was also expected that by using a good strategy, the students could be easier to understand a text and obtain the information more deeply.

2.3. Vocabulary Mastery

Mastering vocabulary means having ability in understanding the meaning and the ways of using them in context. Teaching vocabulary is a process to make the students understand the meaning of word in different language and use it in appropriate context by using some kinds of media. When the teacher teaches vocabulary he or she should make the students understand not only the meaning of vocabulary itself, but also how to use it in appropriate sentences.

According to Hatch and Brown (1995: 1), the term vocabulary refers to a list or set of words for particular language or a list of words that individual speaker of language uses. On the other hand, Swannel (1994: 656) defines mastery as comprehensive knowledge or use of a subject or instrument. It means that mastery refers to learning or understanding something completely without having any difficulty in using it. From these definitions, it comes to the conclusion that vocabulary mastery means the competency to understand and apply the words of certain language without any difficulty.

Furthermore, Nation (2001: 102) states that the aspect of word knowledge involves having a clear idea of the underlying meaning of words. Vocabulary mastery itself has some aspects; meaning, pronunciation, grammar, collocation, word formation, idiom, connotation, and register. In this research, the researcher is going to focus on knowing word meaning. The researcher assumes that by knowing the meaning of English vocabulary, students will automatically be able to use the vocabulary in relation to reading comprehension. It can be inferred that vocabulary mastery is a must for the students if they want to be successful in

English language learning. In relation to this research, it is assumed that vocabulary mastery was a necessity for the students to be successful in reading skill.

2.4. Reading as One of Four Major Skills in English Proficiency

As had been explained in the chapter 1, reading skill had been chosen as a medium for carrying out the vocabulary learning inside it. Reading was considered as the best way for obtaining the information. Besides obtaining the information, the other roles of the reading are to understand and interpret the information. On the other hand, vocabulary mastery follows the reading activity because there will be no reading activity without vocabulary mastery. That is why vocabulary mastery holds a strong role in relation to four English language mastery especially for, in this research, reading skill.

Furthermore, there are five reading aspects (Nuttal: 1985) which help the students comprehend the English text well, i.e. main idea, specific information, reference, inference, and vocabulary. These aspects are explained as follows:

1).Main Idea

Main idea is called the topic sentence. It tells what the paragraph is talking about. In some paragraphs, the main idea is not explicitly stated in a sentence but it is left to the readers to infer it.

2).Specific Information

Specific information or supporting sentence develops the topic sentence by giving definitions, examples, facts, incidents, comparison, analogy, cause and effect statistics and quotation.

3).References

References are words or phrase used either before or after the reference in the reading material. They are used to avoid unnecessary repetition of words or phrases. So, such words are used as a signal for the reader to find the meaning elsewhere in the text.

4).Inference

Inference is an educational guess or prediction about something unknown based on available facts and information. It is a logical connection that the reader draws between his observations or known and what he does not know.

5).Vocabulary

Vocabulary is the stock of words used by people or even a person. Concerning these statements, indeed, vocabulary is fundamental for everyone who wants to speak or to produce utterances for reading.

These are five aspects of reading to help the students understand a text. From the explanation above, the researcher chose vocabulary as the focus of this research. The researcher tried to teach the students about how to obtain and develop the vocabulary which will function as background knowledge from the reading text given.

2.5. The Importance of Vocabulary Mastery in Reading

As one of the most important aspects of learning a foreign language, vocabulary plays an important role in relation to the mastery of four English language skills; listening, speaking, reading, and writing, especially for reading skill 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. Additionally, by reading we learn something new which we do not know before, we may learn about the meaning of culture, practice and forms of culture. In addition, Ratnawati (2006) says that with the mastery of vocabulary and reading comprehension, learners will be able to catch messages of certain text that they read. They will also be able to understand scientific books written in English to get information and advancement because reading comprehension is a bridge to understanding scientific books written in English. To have a good ability in reading comprehension, the students have to master vocabulary very well.

In common condition, reading a book, an article, or a passage in English is not an easy work to do for some students. 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 mastery. In reading activity, students are expected to be able to, at least, get the point of what the text is actually talking about and, after that, answer the questions following the text. That is why vocabulary mastery is very important to be mastered in order to support reading activity.

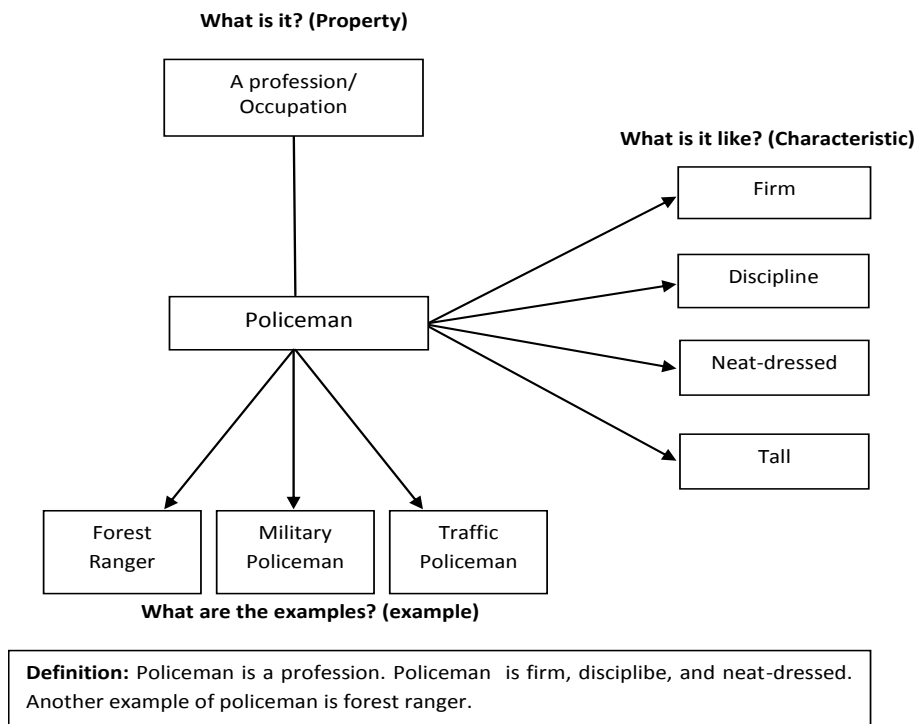
2.6. Word Mapping Strategy

A word map is a visual organizer that helps students engage with and think about new terms or concepts in several ways. It is a graphic rendering of a word's meaning. Typically, it has the form of having the main word in the central position of the graphic organizer, and three separate sections for the three

helping questions about the word linked to it. It is derived from mind mapping concept (Buzan, 1994:59) it defines mind map as an expression of Radiant Thinking and is therefore a natural function of the human mind. It is a powerful graphic strategy which provides a universal key to unlocking the potential of human brain. This provides space for the teacher to help the learners to improve the mastery of vocabulary.

Word mapping is a strategy for representing knowledge in graphs. By this statements, it can be inferred that Word Mapping strategy is one activity to increase students' vocabulary understanding. Using word mapping gives the students an opportunity to think of words in variety of ways. From the statements, the researcher assumes that word mapping activities which are based on graphics often give a useful way to students to have valuable practices, either when they are in the classroom activities or outdoor activities.

Based on description above, the researcher assumes that word mapping strategy can help the students to find many new vocabularies by developing the main word. Word mapping also gives the different situation for students in learning English, especially vocabulary. The following is the example of the word mapping pattern:



Picture 1. The example of word mapping organizer

By seeing the steps of word mapping, the researcher assumes that the steps start from simple to complex in which students are directed by the questions in general to be more detail, and it ends by categorizing the word into their classification. This benefits the students to know the words more contextually and enables them to remain longer in their memory.

2.7. Teaching Vocabulary in Reading through Word Mapping Strategy

Richard and Renandya (1986) states that one of the interesting strategy that teacher can use in teaching vocabulary is word mapping. This strategy incorporates a variety of other memory strategies, they are grouping, associating or elaborating, and this strategy is also valuable for improving memory and comprehension of new words, even enrich their vocabulary. In word mapping activity, there is no single “right answer” because the students are supposed to

develop the target word given by the teacher and they have to find some new words which have relationship with the main word.

In relation to reading skill, there are some aspects of reading; main idea, specific information, reference, inference, and vocabulary. The focus of this research was the vocabulary referring to Richards and Renandya (2002:255) who say that vocabulary is a core component of language proficiency and provides much of the basis for how well students speak, listen, read, and write.

In reading activity itself there were pre-reading, while-reading, and post-reading stage. The researcher tried to use word mapping strategy in pre-reading stage. The role of word mapping strategy here was as a strategy that would help the students to develop the vocabulary based on the topic of recount text given. These vocabularies later would function as background knowledge which could help the students to understand the recount text. In other words, the researcher tried to build the students' readiness by providing such kind of schemata before they read the entire recount text. Besides, by using of word mapping strategy, students would obtain many vocabularies. Furthermore, it could build students' positive cooperation during the learning activity in group works.

By considering the positive impacts above, the researcher hoped that word mapping strategy could answer the students' problem in learning English vocabulary and also could prove this study that word mapping strategy can increase students' vocabulary mastery in reading skill.

2.8. Procedure of Teaching Vocabulary Through Word Mapping Strategy

In this research, the researcher applied word mapping strategy to improve students vocabulary mastery in reading skill. In this activity, the researcher draws a procedure to teach vocabulary by using word mapping strategy as follows:

1. First of all, the researcher selected the topics of recount text which were familiar for the students in order that they could easily use word map organizer later.
2. As an introduction, the researcher asked the students about what experience they got in holiday or in their past time which referred to the recount text that would be taught. This activity was intended to activate their background knowledge about what they were going to learn.
3. The researcher told to the students that their experiences happened in the past could be categorized as recount texts. The researcher chose one topic of recount text and asked the students such a question below:

Researcher: What do you think when you read a text entitled “Visiting Bali”?

Students: Kuta Beach, wave, beautiful scenery, tourists, surfing, etc.

4. After that, the researcher told the students that they were going to use word mapping strategy to help them develop the vocabulary from the topic of recount text.
5. Next, the researcher divided the students into some groups consisted of 5 students. The researcher gave an example about the way to use word map organizer.

6. After giving the example, the researcher gave a topic entitled “Visiting Bali” to the students and let them work with their group to look for and develop as many as possible words which had a relationship with the topic given.
7. The researcher asked the representation of each group to communicate the result of their work in front of the class in order to build their confidence.
8. After the students finished doing this activity, the researcher gave questions related to the topic being discussed.

2.9. Advantages and Disadvantages of Using Word Mapping Strategy

As other strategies have, word mapping strategy also has several advantages and disadvantages as follows:

The advantages are:

1. The students study the material with full attention.
2. By using word mapping strategy, the teacher will be able to help the students develop the existing English vocabulary in their mind.
3. By learning through word mapping strategy, the students will be able to identify, organize, and understand the vocabulary by themselves.
4. It is easy for the students to concentrate on individual words and understand the meaning and the function of the word.
5. Word mapping strategy provides a chance of maintaining a high-level of the students' interest and motivation in the learning process.
6. The students show their ability to think and interpret something.

7. The students will be able to connect the new words to what they already knew before.

On the other hand, there are also several disadvantages of word mapping, they are:

1. Each person tends to have different perception about the meaning or word itself.
2. It potentially takes long time since the students need more time to think.
3. The students may find difficulties in expressing the stimulus word or linking since their vocabulary is still limited.
4. Not all of the students are able to think fast and express the words that have connection from the main word.

2.10. Theoretical Assumption

According to Hiebert and Kamil (2005:28) teaching individual words is what commonly comes to mind when we talk about vocabulary instruction. There are many kinds of teaching strategy, such as: story telling, games, song, mind map, word mapping, etc. Among those alternative strategies, the researcher is interested to utilize word mapping strategy to teach vocabulary which is integrated in reading skill.

Based on the background of problem explained above, the theoretical review of the strategy and the examples, the researcher would like to formulate problem in this research to be “Is there any improvement on students’ vocabulary mastery after being taught by using word mapping strategy?”. In this research, the researcher will focus on the improvement of students’ vocabulary mastery after

they are taught by using word mapping strategy. The strategy will be applied to the students of senior high schoollevel.

2.11. Hypothesis

Referring to the background of problem explained above and the theoretical assumption which has been assumed; therefore, the researcher formulated a hypothesis as follow:

1. There is astatistically significant improvement on students' vocabulary mastery after the students were taught through word mapping strategy.

III. METHODS

This chapter describes the design of the research, how to collect the data in the research, and how to analyze the data. This chapter also describes research procedure, schedule of the research, validity and reliability of the test instrument, data treatment, and hypothesis testing.

3.1. Research Design

This research was a quantitative study which making used pretest-posttest design. There was one class as the subject of the research which had been chosen randomly. The class was an experimental class where the treatments were given and students' vocabulary improvement was analyzed. The research design was as follows:

$T_1 X T_2$

T_1 : Pre-test.

X : Treatments (teaching vocabulary through word mapping strategy).

T_2 : Post-test.

(Setiyadi, 2006: 135).

The subject was given a treatment of teaching vocabulary through word mapping strategy. The treatments for experimental class were given for three meetings. The pre-test was administered before the treatment of teaching

vocabulary in order to see the students' basic mastery of vocabulary. Then, the post-test was administered to analyze the improvement of students' vocabulary mastery.

3.2. Population and Sample

The population was the tenth grade students of SMA N 1 Rumbia Lampung Tengah. Totally, there were 256 students of the first grade which are divided into 8 classes. Each class consists of 32 students. In this research, the researcher chose the experimental class randomly that was X IPS 3.

3.3. Data Collecting Strategy

In collecting the data, the researcher used test that was vocabulary test. The vocabulary test was used to measure students' vocabulary achievement. There were 40 questions for try-out test. From the try-out test, the researcher took 30 questions to be administered in the pre-test and the post-test with 4 options: a, b, c and d. To be clear, it can be seen in the following sub chapter:

3.3.1. Pre-test and Post-test

The items of both pre-test and post-test were 30 items in form of multiple choices with four choices of answer (A, B, C, and D). The pre-test was given in the experimental class in the first meeting before the treatment in order to see the students' basic mastery of vocabulary. The post-test was given in the experimental class after the three times treatments of teaching vocabulary through word mapping strategy. The result of the post-test was compared with the result of the pre-test and the improvement of students' vocabulary mastery were analyzed.

3.4. Research Procedure

In conducting the research, the researcher employed these following steps:

3.4.1. Conducting the Try-out Test

The try-out test was conducted on February 15th 2017 as the first step in beginning this research. It was purposed to determine the quality of the test as instrument of the research, it covers validity, reliability, level of difficulty, and discrimination power. The number of the test items were 40 items which contained four options (A, B, C, and D). The time allocation was 90 minutes. This test was administered to the students in order to make sure that the test had good quality, not only good reliability and good validity.

3.4.2. Administering the Pre-test

The pre-test was administered in experimental class in the first meeting before the treatment of teaching vocabulary through word mapping was implemented. It was intended to see the students' basic mastery of vocabulary. The pre-test was administered in form of multiple choices. The number of the test items were 30 items which contain four options of answer (A, B, C, and D), in which one of them was the correct answer and the rests were distracters. The materials were given based on recent curriculum of senior high school.

3.4.3. Conducting the Treatment

After giving the pre-test, the treatment of teaching vocabulary through word mapping was implemented in experimental class. In conducting the

treatment, the researcher designed the procedure of word mapping strategy as follows:

1. Firstly, teacher divided the students into five groups.
2. Then, teacher prepared 5 words for each meeting. To began the lesson, heshowedthe students an overhead of the vocabulary-mapping organizer. The word mapping organizer consisted of five aspects of vocabulary; verbs, adjectives, adverbs, nouns, and pronouns.
3. To model this strategy, the teacher began by identifying a familiartopic that could be easily mapped. It could be noun or noun phrase. For examples: *Visiting Borobudur Temple, Holiday in Kuta Beach*, etc.
4. Next, the teacher wrote the word on map. For example, *Visiting Borobudur Temple*.
5. Teacher askedthe students about what words which had relationships with the topic above. The words mentioned should be categorized in the five aspects of vocabulary above.
6. Then,the teacher recorded the students' responses on map. For example, *Visiting Borobudur Temple* → *studying, crowded, heritage, tourists, they, totally*, etc.
7. Next session was continued by preparing a pieceof paper which containedcertain topic. The teacher directed the students to work in group to look for as many as possible words which have relationship with the given topic, of course by using word mapping organizer.
8. After having the word map, the representation of each group reported the result of their work on the whiteboard.

9. At the end, the teacher discussed the word mapping together with the students and gave correction to the errors they made.

3.4.4. Administering the Post-test

The post-test was administered in the experimental class after the treatment of teaching vocabulary. The researcher made the vocabulary test in 30 items in form of multiple choices which were basically the same with the items in pre-test but the items number were rearranged. The result of the post-test was compared with the result of the pre-test to analyze the improvement of students' vocabulary mastery.

3.5. Schedule of the Research

The data of research were taken in four steps which consisted of:

1. First step : The try-out test was conducted in another class out of the experimental class in order to see the quality of the test as the instrument of the research.
2. Second step : The pre-test was administered in the experimental class to see the students' basic vocabulary mastery.
3. Third step : The treatment of teaching vocabulary through Word Mapping strategy was implemented in experimental class. It took three meetings. The monitoring was also done to observe the teaching-learning process during the treatment of teaching vocabulary through word mapping strategy.

4. Fourth step : The post-test was given in the experimental class to analyze the improvement of the students' vocabulary mastery from the comparison of the pre-test and post-test results.

3.6. Validity and Reliability

To make sure whether the instruments were eligible to be used in this research, the researcher tested the validity and reliability of the instruments. They were described as follows:

3.6.1. Validity

A test was considered a valid test when it measured the object to be measured and suitable with the criteria validity and empirical or criterion-related validity. To measure whether the test had good validity, the instrument of this research was organized based on content and construct validity.

1) Content Validity

Content validity was awareness of all the indicators of the test items and analyze whether the instrument, in this case consisting of vocabulary test, had represented the material that would be measured. These were several indicators to prove whether or not the test had good content validity: 1) It was adopted from educational goal stated on 2013 English Curriculum and Syllabus for tenth grade students of senior high school. 2) It represented the material taught in the class.

2) Construct Validity

Construct validity concerned with whether the test was actually correspond to the theory of vocabulary. To know whether the test was a true

reflection of the theory of vocabulary being used, the test items should really tested the students in terms of vocabulary mastery. Related to this research, the test items should be questioning five aspects of vocabulary such as verbs, adjectives, adverbs, nouns, and pronouns. The table specification of try-out test could be seen as follows:

Table 3.1. Specification of the test instrument

No.	Vocabulary Aspects	Number	Percentage	Items Number
1.	Verbs	8	20%	1, 2, 11, 12, 21, 22, 31, 32
2.	Adjectives	8	20%	3, 4, 13, 14, 23, 24, 33, 34
3.	Adverbs	8	20%	5, 6, 15, 16, 25, 26, 35, 36
4.	Nouns	8	20%	7, 8, 17, 18, 27, 28, 37, 38
5.	Pronouns	8	20%	9, 10, 19, 20, 29, 30, 39, 40
Amount		40	100%	

The validity of the test was analyzed by using Microsoft Excel program, with criteria; if *t-value* is higher than *t-table*, it means that the data were valid. From the calculation of the *t-value* of each vocabulary test items, there were 11 invalid items that should be dropped. (See Appendix 11). Therefore, the researcher decided to drop the invalid items.

3.6.2. Reliability of the Test

Reliability was a measurement of accuracy, consistency, dependability or fairness of scores resulted from the administration of particular examination.

Reliability of the test was determined by using the odd and event groups in order to estimate the reliability of the test. To measure coefficient of the reliability the first-half and second-half group, the researcher used the following formula:

$$r_1 = \frac{\sum XY}{\sqrt{[\sum x^2 \sum y^2]}}$$

Notes:

r_1 : The coefficient of reliability between first half and second half group

X : The total numbers of second half group

Y : Total numbers of second half group

X^2 : The square of X

Y^2 : The square of Y

To find out the reliability of the whole test, the researcher employed “Spearment Brown’s Prophecy Formula”. The formula can be seen as follows:

$$rk = \frac{2r_1}{1 + r_1}$$

Notes:

rk : The reliability of the test

ri : The reliability of half test

A test which had a good reliability produced consistent result when it was administered under similar condition to the same participant and in different time.

The criteria of reliability were explained as follows:

0.90-1.00 : High

0.50-0.89 : Moderate

0.00-0.49 : Low

From the result of analysis, the researcher prepared 40 items as the try-out test in form of multiple choices. The students were given 90 minutes to finish the try-out test. The reliability was analyzed using Spearman Brown's Prophecy formula. The test was categorized reliable if the reliability test reached 0.50. The result showed that the reliability of this test was 0.97 (See Appendix 10). Based on the criteria of reliability, this test had high reliability (range 0.90-1.00). It meant that this instrument would produce consistent result when it was administered under the similar condition to the same participant in different time (Hatch and Farhady, 1982:244).

3.7. Level of Difficulty

To find out level of difficulty of the test, the researcher used the following formula:

$$LD = \frac{U+L}{N}$$

Notes:

LD : Level of difficulty.

U : The proportion of upper group students who answer correctly.

L : The proportion of lower group students who answer correctly.

N : Total number of students.

The criteria of Level of Difficulty are as follows:

<0.30 : Difficult

0.30 – 0.70 : Average

0.70 : Easy

(Shohamy, 1985: 79)

The level of difficulty and discrimination power of this instrument were analyzed as well. After analyzing the data, the researcher obtained 33 items were good with the criteria 0.30 – 0.70 (average), and 7 items were bad and should be dropped. So that, the researcher took 30 items as the instrument for the pre-test and the post-test (See Appendix 8). Referring to the result of the analysis, this test fulfilled the criteria of the Level of Difficulty. The vocabulary used in each test item was categorized as High-Frequency Vocabulary (2,000-word level) in which it was suitable for senior high school students. Nation (1990:19) states that High-Frequency Vocabulary or General Service Vocabulary refers to the vocabularies which occur frequently in all kinds of texts and it covers about 87% of the running words in a text.

3.8. Discrimination Power

Discrimination power referred to the extent to which the items were able to differentiate between high and low level students on the test. A good item according to this criterion was one that good students got good score and got bad score. To see the discrimination index, the researcher used the following formula:

$$DP = \frac{U-L}{\frac{1}{2}N} \quad (\text{Shohamy, 1985: 81})$$

Notes:

DP : Discrimination Power.

U : the proportion of upper group students who answer correctly.

L : the proportion of lower group students who answer correctly.

N : total number of students.

The criteria of discrimination power can be seen as follows:

1. If the value is positive, it has a discrimination because large number of more knowledgeable students than poor students get the items correct. If the value is zero, it means no discrimination.
2. If the value is negative, it has a negative discrimination because more low-level students than high level students get the items correct.
3. In general, the higher discrimination index, the better discrimination will be. In the classroom situation most items should be higher than 0.20 indexes (Shohamy, 1985: 82).

Discrimination power was used to know whether the test items were able to differentiate students' ability. From the result of analysis, there were 10 items less than 0.20 (<0.20). It indicated that the items were poor and could not differentiate the upper and lower students well. Furthermore, it was found that 23 items scored 0.20 – 0.40 which were categorized as satisfied items and 7 items scored 0.41 – 0.70 that were categorized as good items. So, 10 items less than 0.21 were omitted and 30 items (satisfied items and good items) were used in this research as the instrument for the pre-test and the post-test (See Appendix 8).

3.9. Scoring System

In scoring the students result of the test, Arikunto's formula was used. The highest possible score is 100. The scores of the pre-test and post-test was calculated by using following formula:

$$P = (100) \frac{F}{N}$$

P : The score of the test.

F : The total of the right answers.

N : The total items.

(Hatch and Farhady, 1982:46).

3.10. Data Analysis

Analysis meant categorizing, ordering, manipulating, or summarizing of data obtained in order to answer the research questions. The purpose of analysis was to reduce the data to be interpretable so that the relation of the research problem could be studied. Data in this research were analyzed quantitatively. To analyze the data, the researcher used Statistical Package for Social Science (SPSS) program. The data obtained from the test were compared before and after the treatments. The steps were described as follows.

1. The score of vocabulary achievement from pre-test and post-test in the experimental class were analyzed to find the mean score.
2. The score of vocabulary achievement from pre-test and post-test in the control class were analyzed to find out the mean score.
3. The score of vocabulary achievement from pre-test and post-test were compared by using *t-test* to know the differences before and after the treatment given.

3.11. Hypothesis Testing

The hypothesis was statistically tested by using Statistical Package for Social Science (SPSS) program, in which the significance is determined by $p < 0.05$. Therefore, the hypothesis could be cited as follows:

H_0 : There is no significant difference between vocabulary achievement before and after being taught by using word mapping strategy.

H_1 : There is significant difference between vocabulary achievement before and after being taught by using word mapping strategy.

V. CONCLUSIONS AND SUGGESTIONS

In this chapter, the researcher presents conclusion and suggestions. The suggestions are proposed for teachers and for other researchers who are going to conduct the closely-related research.

5.1. Conclusion

Referring to the results of the data analysis, the researcher concluded that there was significant improvement on students' vocabulary mastery in relation to reading recount text after being taught through word mapping strategy. It could be seen from the result of the hypothesis testing which showed that significance level was $p < 0.05$ ($p = .000$). The students' mean score in the pre-test was 64.00 increased to 89.09 in the post-test, so the gain was 25.0937. It proved that word mapping strategy was considered good to be used to improve students' vocabulary mastery. Different with conventional ways, word mapping strategy helped the students to find the information of the text easier by helping the students to obtain such kind of background knowledge before they began to read the real text. Apart from this positive finding, there was also obstacle in the implementation of word mapping strategy. The students felt difficult to develop vocabulary from the text which its topic is unfamiliar for them. It happened because they did not have sufficient background knowledge about what was discussed in the text.

5.2 Suggestions

Based on the conclusions above, the researcher proposes some suggestions which are described as follows:

1. For English teachers

Referring to the findings, the researcher suggests to English teachers to implement word mapping strategy in teaching vocabulary. Before implementing the word mapping, teachers should be able to select the appropriate text which would be combined with the word mapping strategy. For example, the teacher should choose familiar topic in order that the students would had enough background knowledge concerning with what they were going to do.

Teachers are also suggested to construct word mapping organizer for more specific purposes. For example, teachers can make word maps of certain word based on its function, definition, or based on its synonym or antonym so that the result of word mapping will be well organized.

2. For future research

It is suggested for future researchers to try to implement this strategy on different levels of students, for example in elementary school students, junior high school students, or even university students. The researchers are also suggested to use other kinds of text or other English skill such as writing, speaking, etc. 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. For example, in this research the researcher used recount texts as the media.

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