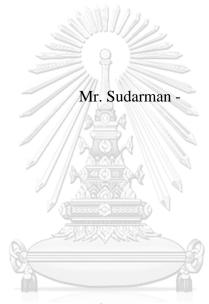
# EFFECTS OF DIRECT VOCABULARY AND VOCABULARY LEARNING STRATEGIES INSTRUCTION ON INDONESIAN PROSPECTIVE ENGLISH TEACHERS' VOCABULARY SIZE



## จุหาลงกรณ์มหาวิทยาลัย

บทคัดย่อและแฟ้มข้อมูลฉบับเต็มของวิทยานิพนธ์ตั้งแต่ปีการศึกษา 2554 ที่ให้บริการในคลังปัญญาจุฬาฯ (CUIR) เป็นแฟ้มข้อมูลของนิสิตเจ้าของวิทยานิพนธ์ ที่ส่งผ่านทางบัณฑิตวิทยาลัย

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Education Program in Teaching English as a Foreign Language Department of Curriculum and Instruction Faculty of Education Chulalongkorn University Academic Year 2017 Copyright of Chulalongkorn University

# ผลการสอนกำศัพท์โดยตรงและกลยุทธ์การเรียนรู้กำศัพท์ที่มีต่อขนาดของวงศัพท์ของนักศึกษาครู สอนภาษาอังกฤษชาวอินโดนีเซีย



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาครุศาสตรมหาบัณฑิต สาขาวิชาการสอนภาษาอังกฤษเป็นภาษาต่างประเทศ ภาควิชาหลักสูตรและการสอน คณะครุศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ปีการศึกษา 2560 ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

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ซูดาร์มาน - : ผลการสอนคำศัพท์โดยตรงและกลยุทธ์การเรียนรู้กำศัพท์ที่มีต่อขนาดของ วงศัพท์ของนักศึกษาครูสอนภาษาอังกฤษชาวอินโดนีเซีย (EFFECTS OF DIRECT VOCABULARY AND VOCABULARY LEARNING STRATEGIES INSTRUCTION ON INDONESIAN PROSPECTIVE ENGLISH TEACHERS' VOCABULARY SIZE) อ.ที่ปรึกษาวิทยานิพนธ์หลัก: สุมาลี ชิโนกุล , 147 หน้า.

การวิจัยในครั้งนี้มีวัตถุประสงค์เพื่อ 1) ศึกษาผลการสอนคำศัพท์โดยตรงและกลยุทธ์การ เรียนรู้คำศัพท์ที่มีต่อขนาดของวงศัพท์ของนักศึกษาครูสอนภาษาอังกฤษชาวอินโดนีเซีย และ 2) ศึกษาความกิดเห็นของนักศึกษาครูต่อวิธีการสอนคำศัพท์โดยตรงและกลยุทธ์การเรียนรู้กำศัพท์ การวิจัยนี้ใช้รูปแบบการวิจัยเชิงทดลองเบื้องค้น แบบศึกษากลุ่มเดียว วัดก่อน – หลังการทดลอง เครื่องมือที่ใช้ ได้แก่ แบบวัดระดับคำศัพท์ และการสัมภาษณ์แบบกึ่งโครงสร้าง กลุ่มตัวอย่างที่ใช้ ในการศึกษาครั้งนี้ ได้แก่ นิสิตระดับปริญญาตรี ชั้นปีที่ 1 วิชาเอกการศึกษาภาษาอังกฤษ จาก มหาวิทยาลัย Kutai Kartanegara ประเทศอินโดนีเซีย จำนวน 33 คน ประจำปีการศึกษา 2017/2018

ผลการศึกษาพบว่าคะแนนเฉลี่ยก่อนและหลังเรียนแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ ระดับ 0.05 โดยชี้ให้เห็นว่าการสอนคำศัพท์โดยตรงและกลยุทธ์การเรียนรู้กำศัพท์ช่วยพัฒนาขนาด วงศัพท์ของผู้เรียน นอกจากนี้ผลการสัมภาษณ์พบว่าวิธีการสอนดังกล่าวส่งผลดีต่อการเรียนรู้ กำศัพท์ของผู้เรียนในด้านแรงจูงใจในการเรียน การพัฒนาคำศัพท์ และการพัฒนาการใช้กลยุทธ์การ เรียนรู้กำศัพท์ ผลการศึกษายังพบว่าผู้เรียนนำกลยุทธ์ข้างต้นไปใช้ในการเรียนกำศัพท์ที่บ้าน และ ผู้เรียนส่วนมากชอบใช้กลยุทธ์ในการจำ

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ลายมือชื่อนิสิต
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# # 5883451127 : MAJOR TEACHING ENGLISH AS A FOREIGN LANGUAGE KEYWORDS: DIRECT VOCABULARY INSTRUCTION / VOCABULARY LEARNING STRATEGIES INSTRUCTION / VOCABULARY SIZE / PROSPECTIVE ENGLISH TEACHERS / MARZANO'S SIX-STEP STRATEGY

SUDARMAN -: EFFECTS OF DIRECT VOCABULARY AND VOCABULARY LEARNING STRATEGIES INSTRUCTION ON INDONESIAN PROSPECTIVE ENGLISH TEACHERS' VOCABULARY SIZE. ADVISOR: ASSOC. PROF. SUMALEE CHINOKUL, Ph.D., 147 pp.

The objectives of the study were: 1) to explore the effects of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size, and 2) to investigate the students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction. The study was one-group pretest-posttest, pre-experimental design. The instruments employed in this study were the Vocabulary Levels Test (VLT) and a semi-structured interview. The samples were the 33 first-year students majoring in English education at University of Kutai Kartanegara, Indonesia for the Academic Year 2017/2018.

The findings of the study showed that there was a significant difference between the students' mean scores in the pretest and the posttest at the significant level of 0.05. The results indicated that the implementation of direct vocabulary and vocabulary learning strategies improved the students' vocabulary size. The results of the interview reported that the implementation of the treatment had positive effects on the students' vocabulary learning in terms of learning motivation, vocabulary improvement, and improvement in using the vocabulary learning strategies. The finding also reported that the students applied the strategies to learn vocabulary at home and most of them preferred to use memory strategies.

Department: Curriculum and Instruction Field of Study: Teaching English as a Foreign Language Student's Signature \_\_\_\_\_\_Advisor's Signature \_\_\_\_\_

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## CHAPTER 1 INTRODUCTION

## **1.1** Background Knowledge

The growing importance of English as one of international languages as well as a *lingua franca* has affected educational curriculum of all countries in the world. In specific case of Indonesia, the growing importance of English can be seen from the increasing number of schools, from kindergarten to university level, using English as a medium of instruction (Dardjowidjojo, 2002). In addition, English is officially taught as a foreign language in junior high schools for 3 years and in senior high schools for 3 years. Despite not being a compulsory subject, English is still taught in primary schools as the local content subject (Sikki, Rahman, Hamra, & Noni, 2013). Although it has been taught for more than 6 years, Indonesian students' proficiency in English remains very low (Kirkpatrick, 2012). The English Proficiency Index (EPI) managed by English First (EF) shows that the English proficiency of Indonesia in 2017 was on the low level. Indonesia ranked 10<sup>th</sup> out of 20 countries in Asia and 39<sup>th</sup> out of 80 in the world.

The low English proficiency seems to be the main issues in Indonesia, starting from the school levels to the tertiary levels. Even, the Indonesian prospective English teachers have a low English proficiency (Saukah, 2016). If this issue keeps persisting for years, the future of English in Indonesia may still be the same for years. It is a bit shocking because as English teachers to be, they are supposed to be proficient, both in general English and classroom English (Richards, 2017). According to Renandya (2018), a professional English teacher should have at least three conditions to be able to teach through English effectively namely sufficient content knowledge, pedagogical content knowledge, and sufficient proficiency in English. Although the proficiency does not automatically guarantee an effective teaching, research has shown that highly proficient language teachers seem to be more capable at using the language to perform the classroom tasks and providing proper language supports to their students. Therefore, the efforts in developing English proficiency should be firstly started with a good preparation for the prospective English teachers, especially in Indonesia.

The low English proficiency of Indonesian students may be caused by some factors like the lack of vocabulary knowledge (Ivone, 2005). The lack of vocabulary knowledge may be part of the consequences of how vocabulary is handled in instructional process. According to Hananto (2013), in Indonesia vocabulary is still neglected in the field of language teaching and learning. As the consequence, some studies have revealed that Indonesian students possesses very low vocabulary size (e.g. Kurniawan, 2017; Kweldju, 1997; Nurhemida, 2007; Nurweni & Read, 1999; Quinn, 1968). Regarding the facts, Kweldju (2005) argues that vocabulary is the single source of problem for Indonesian students in learning English and suggests that the solution for the issues lies in a good handling of vocabulary.

## **1.2** Statement of the Problem

Vocabulary has an important role for learners in acquiring a language (Cameron, 2001). According to Schmitt (2000), vocabulary is central to both communicative competence and the acquisition of a second language. Schmitt's statement is in accordance with Alqahtani (2015) who states that vocabulary is often considered as a critical tool for second language learners because lacking of vocabulary causes unsuccessful communication in second of foreign language. In addition, Nation (2001) argues that learning vocabulary in English as a second or foreign language has a vital role for language skills.

Nation (2006) emphasizes the importance of having sufficient vocabulary size in performing a second or foreign language and estimates that in order to perform the language effectively without using any comprehension tools, we need to have 6,000 to 7,000 word-family vocabulary for spoken texts and around 8,000 to 9,000 word-family vocabulary for written texts. Moreover, Adolphs and Schmitt (2003) estimate the need of having the most frequent 2,000 to 3,000 word families in order to participate in basic everyday oral communication. The scholars imply that language learners need to have sufficient vocabulary size in order to perform the language effectively. The lack of vocabulary size may result in the failure in using the language.

As being mentioned before, one of the Indonesian students' problems in acquiring English is the lack of vocabulary size. A study by Kweldju (1997) found that prospective English teachers only had 2,800 word families. The number was still below

the estimation proposed by the vocabulary scholars. The finding of the study was not really different from finding of the recent study conducted by Kurniawan (2017). The finding of the study revealed that the prospective English teachers in Indonesia only had about 1,400 word families. The results of the studies are far from satisfaction since they are expected to be English teachers in the future. Other than that, as university students, they are required to be able to read English academic texts related to their field of study (Nurweni & Read, 1999). Because of the insufficient vocabulary size, the students probably find difficulties in performing the language as well as dealing with their daily tasks. Therefore, it is necessary to find out the solution of improving the students' vocabulary size. In this case, English teachers have important roles in helping students develop their vocabulary size in order to perform the language effectively (W. E. Nagy, Herman, McKeown, & Curtis, 1987)

However, before deciding what strategies that teachers should apply in their vocabulary instruction, the teachers need to have some knowledge about their students including the students' vocabulary mastery level. The vocabulary scholars suggest that it is necessary to know the students' present vocabulary level in order to determine the level of vocabulary that they should focus on (e.g. Nation, 2008). The use of diagnostic tools such as vocabulary levels test (VLT) may help the teachers for that purpose. Nation (2008) suggests that teachers should firstly focus on the high frequency words-2,000 word families, and secondly on the academic words- 570 word families. These words are very important for learners who are using English for academic study like university students, particularly in English education department (Nation, 2006, 2008).

Once the teachers have determined what words that the students should focus on, they should then decide what strategies or approaches that are effective for the students. According to Nation and Meara (2002), direct vocabulary instruction is one approach that can be used by teachers to help students develop their vocabulary size and is considered to be more effective approach. One of teaching strategies adopting direct vocabulary approach is the one introduced by R. J. Marzano (2004a) called Sixstep Strategy or Six-Step Process (R. J. Marzano, 2009). Marzano's six-step strategy is a vocabulary teaching strategy consisting of six teaching steps: 1) providing descriptions, explanations or examples of the new terms, 2) asking students to restate the descriptions, explanations, or examples on their own words, 3) asking students to construct pictorial representation of the terms, 4) engaging students to activities that help them add to their knowledge of the terms in their vocabulary notebooks, 5) periodically asking students to discuss the terms one another, and 6) involving students in games that enable them to play with the terms.

Marzano's six-step strategy starts with providing descriptions, explanations, or examples of the terms to students (Step1). The information from teachers will help students establish their initial understanding of unknown words. Teachers provide information of the words by representing the words with related pictures, pronouncing the words, guessing the word meanings by using its contexts, and using the words in sentences. Once teachers think that the information is sufficient for students' initial understanding, he or she asks the students to restate his descriptions and examples by their own (Step 2). Teachers should emphasize students to paraphrase, not to duplicate, his or hers and require them to write them down on their vocabulary notebooks. Next, teachers ask students to draw a picture, a symbol, or a graphic that represent the target words (Step 3). The picture does not need to look authentic as long as students can relate the picture with the words. Students have to record their pictures on their vocabulary notebooks. Once they finish with the pictures, teachers engage students in activity to help them understand the target words more deeply (Step 4). Teachers have to make sure that students record their work on their notebooks. Next, teachers put students in pairs or groups and ask them to discuss and compare their vocabulary notebook entries (Step 5). Teachers ask students to compare their vocabulary entries such as description of the terms with their mates, explain their pictorial representation of the words, comparing their sentences using the target words, and let them add up or revise their notebooks. The last step, teachers involve students to play with the target words in games such as Charades and Pictionary. Charades requires students to use physical action in representing the words as a clue to guess the meaning, whereas Pictionary requires students to draw pictures representing the words as a clue to guess the meaning.

The Marzano's six-step strategy has been implemented in direct vocabulary instruction at schools and most of the results shows that the strategy is effective in improving the students' vocabulary size (R. J. Marzano, 2004a). Unfortunately, there are only few studies that are published. The first study was done by Sanders (2008).

His study was to investigate the effect of Marzano's six-step strategy on vocabulary comprehension and retention of students in an urban, low income, high minority high school. The result found that the use of the strategy had a positive impact on vocabulary comprehension and retention. Another study was conducted by Suing (2012). The study aimed to investigate the effects of Marzano's six-step strategy on vocabulary knowledge, fluency, and sentence complexity of the fourth grade students. The result showed that the strategy significantly correlated with students' vocabulary knowledge. The more recent study was conducted by Purcell (2015). Her study aimed to enhance deaf students' academic vocabulary by using Marzano's six-step strategy. The study found that the strategy effectively improved 65 % of the students' academic vocabulary after 12 months. Although the previous studies have shown that the strategies had positive effects on students' vocabulary development, teachers need to keep in mind that that no strategy is foolproof and proven, so they have to conduct this strategy on their study to see how it works on their own setting and context (R. J. Marzano, 2009). Therefore, the researcher of the present study would try to implement this strategy to the new setting and context which is university students, especially for those majoring in English education or the prospective English teachers.

Although the findings of the previous studies have reported that Marzano's sixstep strategy has been effective to improve the students' vocabulary size, it seems impossible for teachers to help the students learn all the vocabulary in the classroom since they only spend limited time at schools (Sökmen, 1997). According to Beck, McKeown, and Kucan (2013), teachers can only teach explicitly around 400 words a year in the classroom. Therefore, it is necessary for teachers to help students deal with the vocabulary by introducing a number of vocabulary learning strategies (Hulstijn, 1993; Şener, 2015; Sökmen, 1997). On the other hand, introducing a number of vocabulary learning strategies helps students take control of their learning which makes them be more responsible for their own studies (Nation, 2001). In this case, the vocabulary learning strategies not only help improve students' vocabulary size but also promote autonomous learning for the students. Therefore, regardless of teaching new words, the teachers should also teach students how to do particular vocabulary learning strategies through demonstration and guidance.

Teaching vocabulary learning strategies to students not only help them cope with unknown words, but also promote autonomous learning to them. According to Nation (2001), introducing some vocabulary learning strategies to students helps them take control on their own learning and makes them become more responsible on their study. Thus, vocabulary learning strategies instruction is another segment of vocabulary instruction that English teachers should take into account. Among the vocabulary learning strategies taxonomies proposed by some vocabulary scholars, one that is mostly referred in many studies is the taxonomies proposed by Schmitt (1997) (Nirattisai & Chiramanee, 2014). Schmitt classified vocabulary learning strategies in two categories based on how the vocabulary is met and learnt, which are discovery strategies and consolidation strategies. Discovery strategies are strategies used to determine the word meaning when met for the first time, whereas consolidation strategies are strategies used to consolidate the word meaning when met again. There are two ways to determine the word meaning; with the help of other people or finding it on your own. The former is known as social strategies, and the latter is known as determination strategies. Once the word meaning is known, it should be consolidated by applying a number of consolidation strategies such as social strategies, memory strategies, cognitive strategies, and metacognitive strategies. Basically, the purpose of the discovery strategies is to provide the initial understanding about the word meaning, and the purpose of the consolidation strategies is to store the information in the longterm memory.

Based on the above explanation, there are two main roles of English teachers in vocabulary instruction: to develop students' vocabulary size, especially through direct vocabulary instruction, and to introduce variety of vocabulary learning strategies through vocabulary learning strategies instruction. In this case, the researcher tried to integrate the direct vocabulary instruction using Marzano's six-step strategy and vocabulary learning strategies instruction in the vocabulary class. The researcher relied on Schmitt's taxonomies in determining the vocabulary learning strategies to integrate into Marzano's concept because the strategies have something in common. The purpose of the initial steps in Marzano's six-step strategy (Step 1) and Schmitt's vocabulary learning strategies taxonomies (Discovery Strategies) is similar, which is to build the initial understanding of the word meanings. Therefore, the discovery strategies such as

determination strategies and social strategies can be integrated into the Step 1 of Marzano's six-step strategy. In addition, the other steps in Marzano's six-step strategy aim to anchor the information about the word meaning into the long-term memory, and it is in line with the consolidation strategies in Schmitt's taxonomies. As a result, the social strategies, memory strategies, and cognitive strategies are potential to be integrated into the Step 2, Step 3, Step 4, Step 5 and Step 6 of Marzano's strategy. Metacognitive strategies are not in the list because this strategy cannot be taught. Since the purpose of vocabulary learning strategies instruction is to introduce and promote autonomous learning, the researcher just picked the strategies that could only be used by the students to learn new words on their own at home.

The integration of direct vocabulary instruction using Marzano's six-step strategy and vocabulary learning strategies instruction on this study was a new teaching model that was different from the previous studies conducted by Sanders (2008), Suing (2012), and Purcell (2015). So, in the this study, the researcher tried to explore the effect of direct vocabulary and vocabulary learning strategies instruction, using Marzano's six-step strategy, on prospective English teachers' vocabulary size in Indonesia as well as to investigate the students' opinions towards the implementation of the treatment on their vocabulary class.

### **1.3** Research Questions

In general, this study aimed to answer the following research questions:

- 1. To what extent does direct vocabulary and vocabulary learning strategies instruction enhance Indonesian prospective English teachers' vocabulary size after learning?
- 2. What are students' opinions towards the treatment of the direct vocabulary and vocabulary learning strategies instruction?

## 1.4 Objectives

The objectives of the study were as follows:

1. To explore the effects of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size.

2. To investigate the students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction.

## 1.5 Statement of Hypothesis

In order to answer the research question 1, the researcher proposed the hypotheses as follows:

- 1. The null hypothesis (H<sub>o</sub>) is that there is no significant effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size.
- 2. The alternative hypothesis (H<sub>a</sub>) is that there is a significant effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size.

## **1.6 Definitions of Terms**

- The direct vocabulary instruction refers to the use of vocabulary instructional strategy that is proposed by R. J. Marzano (2004a, 2004b), called six-step strategy, which consists of six concepts of teaching steps as follows:
  - 1.1 *Step 1*: Teacher provided information of the words by providing a pictorial representation of the words, pronouncing the words, using dictionary to get information about the words, and using the words in sentences.
  - 1.2 Step 2: Teacher asked students to restate the information of the words by paraphrasing his explanation as well as use the words in their own sentences. Students should record this task on their vocabulary notebooks.
  - 1.3 *Step 3*: Teacher asked students to draw a picture, pictograph, or symbolic representation of the target words on their vocabulary notebooks.
  - 1.4 Step 4: Teacher asked students to identify synonyms and antonyms of the target words and asked them record it on their vocabulary notebooks (week 3). Teacher asked students to make semantic mapping of the target words and asked them to record it on their vocabulary notebooks (week 5 & 7). Teacher asked students to analyze the word parts of the target words and asked them to record it on their vocabulary notebooks (week 9).

- 1.5 *Step 5*: Teacher put students in pairs and asked them to discuss and compare their vocabulary notebook entries to their partner. Then, teacher asked students to add up or revise their vocabulary notebook entries.
- 1.6 *Step 6*: Teacher involved students in playing Charades in week 3 and 7 and Pictionary in week 5 and 9.
- 2. The vocabulary learning strategies instruction refers to the teaching and training Schmitts' vocabulary learning strategies (1997) that were integrated into direct vocabulary instruction using Marzano's six-step strategy. The Schmitt's vocabulary learning strategies integrated in the instruction were as follows:
  - 2.1 Step 1: Teacher explained and guided students how to use dictionary to learn new words (Determination Strategy). And, teacher explained the importance of doing verbal repetition and asked students to do it with the target words (Cognitive Strategy).
  - 2.2 Step 2: Teacher explained and guided students how to paraphrase word meaning (Memory Strategy) and asked them to make their own sentences by using the words (Memory Strategy).
  - 2.3 Step 3: Teacher explained the importance of representing words with pictures, graphs, or symbols and guided them how to image a word meaning (Memory Strategy).
  - 2.4 Step 4: In Week 3, teacher explained the benefit of knowing word synonyms and antonyms and guided them to do the task (Memory Strategy). In Week 5 and 7, teacher explained the benefit of semantic mapping and guided them to do the task (Memory Strategy). In Week 9, teacher explained the benefit of analyzing word part in determining the word meaning and guided students to do the task (Determination Strategy).
  - 2.5 Step 5: Teacher explained the benefit of discussions in learning vocabulary and guided students to do the task by using their vocabulary notebook entries (Social Strategies).
  - 2.6 Step 6: Teacher explained the importance of games in learning words and guided students to play with the word through pictorial representation and physical action (Memory Strategy).

- 3. The vocabulary size refers to the total number of word families known by students measured by their scores in Vocabulary Levels Test (VLT). A word family may consist of a few members such as study, studies, studied, and studying. Those words are considered as a family because they share the same stem and part of speech. It was measured by administering Schmitt's Vocabulary Levels Test (2001) in pre-test and post-test.
- 4. The Students' opinions refers to the students' thoughts and feeling towards the treatment of direct vocabulary and vocabulary learning strategies instruction. Their opinions were measured through semi-structured interview. The data were analyzed by utilizing content analysis.
- 5. The Indonesian prospective English teachers in the present study refer to the firstyear students majoring in English Education Department, Faculty of Education, University of Kutai Kartanegara (Universitas Kutai Kartanegara) in Indonesia for Academic Year 2017/2018. They were taking undergraduate degree (4-year program).

## 1.7 Research Conceptual Framework

The pretest was conducted before the treatment by administering Vocabulary Levels Test (VLT) adopted from Schmitt et al. (2001). The pretest aimed to determine the students' vocabulary mastery level in order to set vocabulary focus of instruction as well as to know students' vocabulary size before being given the treatment. After knowing the students' vocabulary level, the words on the level were selected to be the target words for the instruction by using a reading passage. Then, the treatment of direct vocabulary and vocabulary learning strategies instruction (MEM: Memory Startegy; SOC: Social Strategy; DET: Dtermination Strategy; COG: Cognitive Strategy) were be implemented. After the treatment, the posttest were conducted by administering VLT in order to measure the students' vocabulary size after being given the treatment.

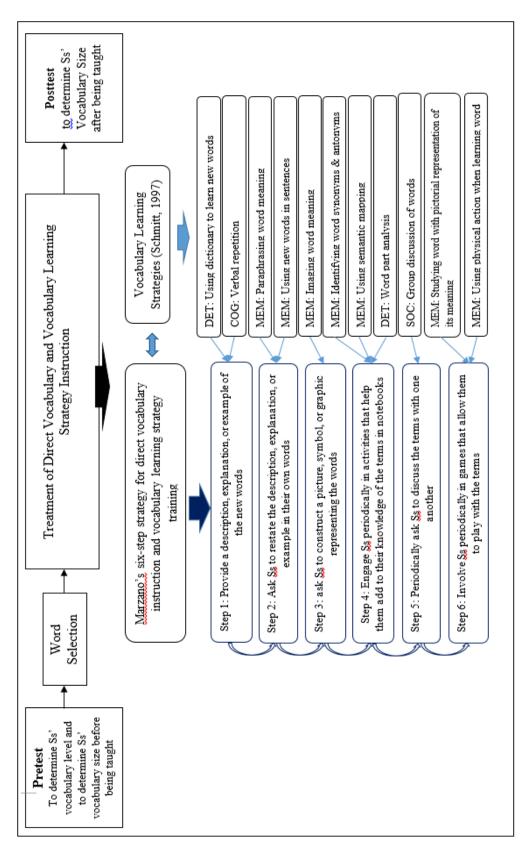


Figure 1.1The Research Conceptual Framework

#### **1.8** Scope of the Study

The scopes of the study were as follows:

- The population of the study was the prospective English teachers at Faculty of Education, University of Kutai Kartanegara in Indonesia, for academic year 2017/2018. The number of population was 140 students. The participants of the study were the first-year students who were undergoing their second semester. The number of participants was 33 students.
- 2. The variables of the study were as follows:
  - 2.1 The independent variable was the treatment of direct vocabulary and vocabulary learning strategies instruction.
  - 2.2 The dependent variables of the study were students' vocabulary size and opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction.

## **1.9** Significance of the Study

There were some expected significances from this study, both pedagogically and theoretically. Pedagogically, the present study may provide assistance for teachers and school administration on how to develop direct vocabulary and vocabulary learning strategies instruction using Marzano's six-step strategy. Secondly, this study tried to explore the effect of direct vocabulary instruction and vocabulary learning strategy training using Marzano's six-step strategy and may bring advantages on how to enhance prospective English teachers' vocabulary size. The implementation of the strategy also provided opportunities for students to learn many strategies to deal with unknown words that was potential to promote autonomous learning for students and make them not fully dependent on their teachers. It was surely beneficial for students to increase their vocabulary size since they only had little time to gain it from their classroom.

Furthermore, the present study may also provide beneficial information for teachers about how to test students' vocabulary knowledge, especially vocabulary size, in order to plan a vocabulary course or to assess the learning outcomes. As a diagnostic test, the results of Vocabulary Levels Test (VLT) will inform the students' level of

vocabulary mastery in terms of what they have achieved and what they are lack of. This information will help teachers in designing their vocabulary teaching program for students accurately. On the other hand, the use of VLT may also be beneficial for teachers to assess their vocabulary instruction by testing the students' vocabulary achievement. The results of the test may inform teachers whether the implementation of particular interventions is effective to enhance students' vocabulary size or whether students have achieved the learning goals.

For students, being more responsible on their own study is necessary. The responsibility can be reflected from the way they design, manage, and evaluate their own learning, apart from what they have got from their schools. It can be started by knowing their own vocabulary mastery levels, and selecting and applying vocabulary learning strategies that can work better for them. Therefore, they have to know various strategies in order to deal with the unknown words. The present study may not just inform students' vocabulary size as well as their level, but also may provide information of what vocabulary learning strategies that may work or not for them. So, they can make use of the strategies in order to develop their vocabulary size and help them cope with their reading comprehension ability.

On the other hand, the present study may hopefully contribute to schools, universities and department of education, in this case, the curriculum developers and the national examination test developers. A study by Aziez (2011) found that Indonesian students' vocabulary size is much lower that the number of words required in English reading texts of national examination. It suggests that the test developers did not really consider the students' vocabulary knowledge while designing the texts and might make students struggle with their comprehension about the texts. Thus, the present study will provide a new information about the recent vocabulary size possessed by Indonesian students which can be a consideration for them in designing vocabulary learning in the national curriculum and in developing the national examination test.

Theoretically, this study can be a beneficial literature for teachers or researchers that are going to conduct future researches on the area of vocabulary size, direct vocabulary and vocabulary learning strategy training. This study is also expected to be a useful literature that can help teachers and researchers develop their direct vocabulary and vocabulary learning strategies instruction framework by using Marzano's six-step strategy and Schmitt's vocabulary learning strategies taxonomies.



## CHAPTER 2 LITERATURE REVIEW

This research involves areas of study of English vocabulary, vocabulary instruction, Marzano's six-step strategy, vocabulary learning strategies, and vocabulary assessments. The study includes the theories and findings of previous related studies as follows:

## 2.1 Vocabulary

Vocabulary, one of language components, has an important role in acquiring or learning a language (Cameron, 2001) and is basic to communication (Krashen, 1989). Schmitt (2000) underlines that vocabulary is central to both communicative competence and the acquisition of a second language. Schmitt's statement is in accordance with Alqahtani (2015) who states that vocabulary is often considered as a critical tool for second language learners because the lack of vocabulary may cause unsuccessful communication in a second or foreign language.

Similarly, the important role of vocabulary is also best described by Wilkins (1972, p. 111) who states that "without grammar, very little can be conveyed, without vocabulary, nothing can be conveyed." Wilkins' statement implies that despite having a good understanding on morphology and syntax, someone will not be able to participate in the communication if they do not understand the key lexical items.

According to Nation (2001), learning vocabulary in English as a second or foreign language has a vital role for all language skills, either productive or receptive skills. The acquisition of adequate vocabulary is essential to use a language successfully because without a sufficient vocabulary, the grammar cannot be used to perform comprehensible communication (Rivers and Nunan, as cited in Alqahtani, 2015). From the two ideas above, it can be concluded that in order to perform the four language skills successfully, a number of adequate vocabulary should be gained by learners.

Some studies have revealed the importance of vocabulary in language learning like English language. One of them is a study by Walker, Greenwood, Hart, and Carta (1994). They found that early vocabulary knowledge become a strong predictor of school progress in first language (L1). Harmon, Wood, and Kiser (2009) and Linse and

Nunan (2006) also find that learners' vocabulary development has been an important aspect of their language development.

The importance of vocabulary knowledge, including vocabulary size and vocabulary knowledge, for foreign language learners is not doubtable at all. If leaners have a deep understanding of words, they can acquire the targeted language easily because the learners will know how, when, and in what context the words should be used (Aweke, 2016). Therefore, it is necessary for language teachers to build their students' vocabulary knowledge.

## 2.1.1 Types of Vocabulary

'What is a word?' is one of the most difficult question to answer in the study of vocabulary (Nation & Meara, 2002). According to Nation and Meara (2002), if we count every single word that somebody speaks or reads, then we are counting tokens. Even though the same word form occurs many times in a sentence, it will be counted each time it occurs. Tokens sometimes are very difficult to count because we firstly have to decide whether some written words like *I'm* or *We'll* should be counted as one token or two tokens. In terms of speaking, we also have to decide whether some interjection such as *um*, *er*, and *argh* should be counted as tokens or not. The questions like these can only be answered by examining the reasons of counting the words.

On the other hand, we sometimes want to measure how many words that someone knows well. In this case, we are counting the word type, not the tokens. To count the word type, we will only count one word as one type although the word occurs many times in a sentence. The problem of counting the word types is to decide how to count the capital letters. Should we count *High* and *high* as one or two types? Some identical words such as *bank* meaning the place to save money and *bank* in the river are also confusing to deal with.

When the reason of counting the words is related to vocabulary learning, we should choose a unit of counting which represents kinds of knowledge that language users approach. An evidence (W. Nagy, Anderson, Schommer, Scott, & Stallman, 1989) shows that language users tend to see closely related word forms such as *mend*, *mends*, *mending*, and *mended* belong to the same word family. Counting word family is as difficult as counting tokens and word types. The problem in terms of dealing with

word family is to decide the member of a family. A simple way to decide the member of a family is to count lemmas. A lemma is a group of words that are formed from the same stem and share the same part of speech. For instance, the word *work, works, worked,* and *working* are counted as part of the same lemma. It is because these words are formed from the same stem (work) and they are all verbs.

Some groups of words that often come together are treated as single units such as *thank you, good morning, well done,* and so on. This kind of group words is called as multi word units (MWUs). MWUs are learnt, stored, and used as a single unit rather than breaking them up into parts. A study finds that native speakers can speak fluently and appropriately because they have stored a great numbers of MWUs that they can draw on while using the language (Pawley & Syder, 1983).

The main reason of treating MWUs as a single unit is because the words constituting the unit cannot be freely switched to other words. On the contrary, they have a very strong connections that is called as 'collocation'. As a new area, it is difficult to count MWUs because there is no strong defining criteria to be accepted yet. Thus, to classify what is considered as MWUs depends on the goal of counting. If the purpose is to compute items that will require learning for comprehension, then a group of words can be classified as MWUs if the meaning of the units cannot be decided from the meaning of its parts. If the purpose of counting is to list item that can contribute to fluency and native-like turn of phrase, the MWUs will need to be frequent and grammatically clear, and there is only a small list of items like those will be within the most frequent 2000 words and phrase of English (Nation, 2001).

### 2.1.2 Vocabulary Frequencies and Levels

There are a huge number of vocabulary available in English, and therefore the focus of vocabulary learning should be set specifically. One way to set the vocabulary learning goals is to look at how many words that the native speakers of English have (Nation, 2006). A study from Goulden, Nation, and Read (1990) found that well-educated native speakers approximately know 20,000 word families. The figure assumes that native English speakers grow their vocabulary up to 1,000 a year until the age of 20. The question, as a second of foreign language learners, is 'do we need such amount of vocabulary to perform the language? Nation (2006) estimates that we need

to have the vocabulary size of 8,000 to 9,000 word families in order to read all kind of authentic written texts. In order to learn those words, it is important to set the classification of particular group of words to help determine the learning focus in vocabulary learning.

#### 2.1.2.1 Vocabulary Frequencies

Nation (2008) classifies vocabulary into four categories based on how frequently it occurs in the language (its frequency) and how widely it occurs (its range). The four categories of vocabulary are namely *high frequency words, academic words, technical words, and low frequency* words. The four levels of vocabulary will be explained more detail as follows:

a. High frequency words

When we take a text and turn it into a word list in which we put all the words consisted on the text as well as their occurrence, we will see that there is a small number of words that occurs very frequently. This kind of words is the most important words in language learning especially for vocabulary development. It is high frequency words. High frequency words are generally classifies from the 2,000 most frequent word families from General Service List (West & West, 1953) as presented in Appendix D.

High frequency words occur very frequently in all kinds of language uses. They are used frequently in formal or informal situation, written and spoken text such as newspapers, conversation, novels, and academic texts (Nation, 2008). They cover 80% of the running words in most written texts and 90% of the running words in spoken texts (Nation, 2008). Most of lists of high frequency words consist of around 2,000 word families, and they are relatively short. Besides that, 169 words from the list are function words such as conjunction (*and, or, but*), pronoun (*I, you, she, it*), number (*one, two, three*) and so on. The rests out of the function words on the list are content words such as nouns, verbs, adjectives, and adverbs. They are also very common words in which even a very young native speakers of English seems to know them (Nation, 2008). They are needed every day when we use English.

b. Low frequency words

Low frequency words are the rest of the words in a language. They consists of a big number of word families, and even the biggest compared to the other vocabulary levels, but they rarely appear in most texts. If we count every single-word items, English may have more than 100,000 word families. Even the native speakers themselves may not know all of them. Normally native English speakers have vocabulary mastery of around 20,000 words, but it actually depend on their education level and how many readings they do in their subject areas or their interests (Nation, 2013). The low frequency words may occur only 2% of the running text, or, in the other words, it is only about 1 word in every 50 running words.

c. Academic words

In English for special purposes, we can find words that are not from the list of 1,000 or 2,000 of high frequency words, but they occur and are used quite frequently in that specific area. Newspaper vocabulary, the vocabulary of very formal conversation, the vocabulary of children's books, academic writing, and other kinds of special purpose texts consist of particular lists of vocabulary that occur very frequently, but there are not from high frequency word lists (Nation, 2008).

Coxhead (2000) studied academic texts of four faculty areas which are Arts, Science, Commerce, and Law. She then looked at seven texts from different subject areas of each faculty which make all 28 texts from different subjects. By using a computer program, she found a list of words that was not from 2,000 high frequency words of English. Furthermore, she also found that the words occurred 100 times in her 3,600,000 running word academic corpus. Those words also occurred at least ten times in each faculty areas, and also occurred in the 15 out of the 28 subject areas. She then called the list as the Academic Word List (AWL) which consists of 570 word families. She also divided the list in ten groups in which nine groups consisting of 60 words and one group consisting of 30 words.

Generally the words of this list make up around 8.5% to 10% of the running words in academic texts (Nation, 2008). It means that there will be one word in every ten words coming from the AWL. Academic words do not take place very often in other kinds of language uses. It is about only less than 2% of running words in conversation taken from the AWL or only 2 words of the AWL in every 100 running words. The 570 of academic words are very important for those who are using English for academic study like in universities, vocational institutes, or in schools. In newspapers, 4% of the running words are from the AWL, so it can be concluded that this kind of reading can

be a useful bridge between academic and non-academic text. The academic word lists are presented in Appendix E.

## d. Technical words

Academic words are found in every kind of academic subject areas such as in Linguistics, Biology, Physics, etc. Instead of those words, there are words that are even more special to each subject area. These words are very familiar in particular areas like the vocabulary in Politics or the ones in Botany. These special words are very special to the subject area that people will recognize what subject area these words come from. These words are called technical words (Nation, 2008).

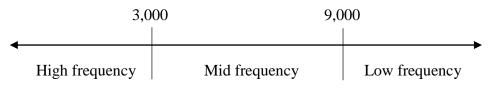
Mostly, the technical words can only be found in one specialized area. But, some words also occur in other subject areas and may have the same of different meaning. For example, the word *by-pass* and neck are technical words of medicine, but they are also used in some areas like Biology or Psychology.

In one particular area such as in Economic textbooks which is a specialized text, technical vocabulary often appear more than usual compared to another group of specialized texts from other areas (Nation, 2008). Chung and Nation (2003) found that in anatomy about 30% of the running words are included in technical words. It means that there is approximately one word in each three is technical. Some of these technical words are available in the 2,000 high frequency words yet they are used as specialized words in a specific area. While a lot of the words seem to have distinct characteristic to a particular subject area, some would come from the Academic Word List.

For everyone who is from specialized from a specific area, technical words play a vital role. Not many of statistical studies on technical vocabulary, but probably at least 20% of the running words in high number of technical texts are possibly technical words (Nation, 2008). We have inadequate idea about the technical vocabularies but the number may vary from 1,000 words to 2,000 words according to the subject area (Nation, 2013).

On the other hand, Schmitt and Schmitt (2014) claims the need to set the distinction between high frequency words and low frequency words. Regardless of academic word list and technical words, they propose a new category of vocabulary called mid frequency words as the distinction between high and low frequency words.

In addition, they also revisited the number of high frequency words from 2,000 to be 3,000 most frequent word families. They then defines mid frequency words are words ranging from the most frequent 3,000 to 9,000 word families, and low frequency words are words beyond 9,000 levels.



## 2.1.2.2 Vocabulary Levels

According to Laufer and Nation (1999), it is necessary to set the vocabulary of English in a series of levels based on the frequency of occurrence. They then suggest to list a group of 1,000 words for each level starting from the most frequent to less frequent words. One of well-known word lists is the one developed by Nation (2006). He develops a word list based on British National Corpus that makes up a fourteen word levels starting from the most frequent words to the less frequent words. The high frequency words are words from the 1<sup>st</sup> 1,000 level to the 2<sup>nd</sup> 1,000 levels (Nation, 2008) or from the 1<sup>st</sup> 1,000 level to 3<sup>rd</sup> 1,000 level. The mid frequency words are in the list between 3<sup>rd</sup> 1,000 level to 9<sup>th</sup> 1,000 level.

The development of the word list is useful in terms of vocabulary instruction and assessment. Teachers can easily set their vocabulary focus for their vocabulary instruction by picking up from the most frequent word list. For instance, a teacher firstly need to teach the 1<sup>st</sup> 1,000 level for his students, and once it has been mastered he should pick the 2<sup>nd</sup> 1,000 level for the next instruction focus. In fact, it is not necessary to really need to start the vocabulary development program from the 1<sup>st</sup> 1,000 word level. Instead, a teacher needs to set the vocabulary focus based on their students' need. Therefore, it is necessary for teachers to able to measure their students' vocabulary mastery by administering a test such as Vocabulary Levels Test (Schmitt et al., 2001). The results of the test will inform teachers about their students' present vocabulary levels such as the levels that they have mastered and the levels that they lack of. However, teachers should focus firstly on the high frequency words and secondly on the academic word lists if learners attempt to pursue their study at universities (Nation, 2008).

### 2.1.3 What vocabulary should the learners focus on?

So far we have learnt what vocabulary is as well as its kinds based on the frequency of occurrence and the range in a language such as high frequency words, mid frequency words, low frequency words, academic words and technical words. Then, another question that we may ask for is *"What should learners focus on?* In the other words, after knowing the types of vocabulary, how do we treat those word levels? This question have to be paid attention by learners or teachers before starting their vocabulary development program. If they do not pay attention on this, they perhaps learn or teaching for nothing since they do not know which words are useful for them. The principle lying behind the idea of choosing vocabulary based on needs is called cost/benefit principle (Nation, 2013).

At first, learners should focus more on the high frequency words which consist of 2,000 word families (Nation, 2013). It is reasonable because the 2,000 words appear most in any texts and situation in which the language is used. They even cover 80% of the running words in most written texts and 90% of the running words in spoken texts. It means that they will occur 8 times in every 10 words in reading and 9 times in every 10 words in spoken text. It suggests that if learners master those words they will be able to communicate in daily conversation quite well and will have no problem while reading simple books like story books. In case of teaching in classroom, teacher have to spend more time to teach this word levels.

Once learners have mastered the 2,000 high frequency words, they have to move to the other vocabulary levels. If they are about to do academic study especially in English, then they have to learn the academic words from AWL consisting of 570 word families. As being mentioned before, they cover approximately 10% coverage of the running words in academic texts. They will help students to deal with English reading materials such as textbooks and articles.

For those who are not going to do academic study in English, but they want to learn English to be able to speak, watch movies and television programs, or read novels or magazines, they thus have to learn mid frequency words. They consist of 7,000 word families taken from the 3<sup>rd</sup> 1,000 word list to the 9<sup>th</sup> 1,000 word list of British National Corpus (BNC). They are quite big in size, but they are very important and beneficial since they cover about 10% coverage of the running words. At this stage, along with mastery of the high frequency words, learner will know 9,000 word families. The number will cover 98% of the running words for most texts which means learner do not to struggle using dictionary while reading.

The other vocabulary levels are low frequency words and technical words. Essentially, learners do not have to really focus on this two levels since they are very rarely used. Besides that, they are a bit difficult to learn because of the big number in size, around 100,000 word families. But, for those who are going to do academic study in specified area such as Applied Linguistics, Botany, Architecture, and so on, it will be necessary for them to learn the technical words of their subject area.

## 2.1.4 Selection of words

After knowing what vocabulary level that the students should focus on, teachers still need to determine what words of the level that they should teach to their students. Selecting the words may be difficult and every teacher may have different way to select the words for their vocabulary instruction. Even though there have been experts that support one particular way of word selection over another, in fact, there is no evidence shows that one particular way is better than the other way of selecting words. Therefore, in many cases, the selection of words to teach the students is up to the classroom teachers (Rustand, 2016).

It is necessary to know two different kinds of knowledge that teachers want their students to gain in learning new words. The two kinds of knowledge that students can gain from learning new words are definitional knowledge and contextual knowledge.

The first kind of knowledge that students may gain in learning new words is the definitional knowledge. The definitional knowledge is the basic word meaning as individual item. The definitional knowledge refers to the word meanings often defined by the dictionary. In this case, the word contexts are not taken into account to define the meaning of the particular words.

Contextual knowledge is the students' understanding about the meaning of particular words by reading context within the words included in it. To get this knowledge, students should know the context in which the unknown words are placed. Learners, then, use the context to define the meaning of unknown words. It is difficult for learners to guess the meaning of the unknown words if they do not know the meaning of words surrounding the unknown ones. This method can be used to select the words that teachers want their students to learn.

In this method, teachers will provide a reading passage to the students. With the reading passage, teachers will ask the students to identify what words in the passage that are unknown to them. The words that the students select will be the target words of their vocabulary instruction. Once the words have been selected, teachers can start teaching the words to the students by using strategies like guessing from context strategy. But we have to keep in mind that to use this strategy, the reading passage should contain only 2% of unknown words of the total running words. It means that there should be only one unknown word of fifty running words. If the running words load more unknown words than that, students will struggle to use the context to guess the meaning of the target words (Nation, 2008).

Another method to select the words is by using the three tiered system. In this system, words are classified into three tiers (Beck & McKeown, 1985). The tier one refers to words that are simple and basic to most students. These words should not be taught in classroom because they are already known by the students. The tier two refers to words that will not be learned by the students incidentally. Therefore, this tier should be taught in the classroom. On the other hand, tier three refers to words that are specific for particular subjects. This words exist mostly in particular discipline and should be taught through direct instruction.

Selecting words from reading passage and by using three tiered system are two examples of how to select the correct words to teach the students. Nevertheless, in the present study, the researcher prefer to use the selection of words from reading passage in order to introduce and filter unknown words as well as to provide the context that is beneficial to use in the strategy applied in the present study. However, since the present study is a direct vocabulary instruction, the reading passage is not going to be used to learn the contents. It is just used to help teacher selecting the words that is known and unknown by students.

## 2.2 Vocabulary Size and Language Performance

Vocabulary knowledge classified into two dimension named breadth of vocabulary knowledge and depth of vocabulary knowledge. The former is regarded as vocabulary size which refers to the quantity of words that learners know in a particular level (Nation, 2001) or the number of words that learners have in metal lexicon (Kristanto, 2015). In addition, Milton (2013) more deeply defines vocabulary depth as one's ability to recognize words' form as a real word in a foreign language. The latter refers to the quality of knowing words. It means that learner should know more than the basic meaning of those words. The present study will just focus on the breadth of vocabulary knowledge or familiarly known as vocabulary size.

The reason underlies the decision to focus only on one of two dimensions of vocabulary knowledge, which is vocabulary breadth or size, because vocabulary depth is still less well defined (Milton, 2013). And, it causes vocabulary depth difficult to measure. Milton (2013) also argued that "A condition for developing depth in vocabulary knowledge will be to develop vocabulary breadth." He mentioned that the two dimensions of vocabulary breadth and depth are closely related. It is in line with the results of Qian (1999), Qian (2002), Akbarian (2010), and Putra, Priyono, and Arifuddin (2015). So, because the two dimensions are closely correlated and that vocabulary breath or size is easily measurable, the researcher prefers to focus only on vocabulary size on the present study.

After knowing what vocabularies learners should focus on, how they should deal with them and how they should learn them, learners should also know the capacity of words that they should have in order to perform the four skills in English. One of some ways to decide about how many words that learners of English as a second or foreign language should have in order to read texts without any external supports or comprehension tools is to find out how many words learners need in order to use the language such as reading newspapers, reading novels, watching movies, or taking part in conversation.

One important thing that we should concern on regarding with studying the size of vocabulary needed to perform the language is how large the text coverage needed to gain adequate comprehension without assisted comprehension tools such as dictionaries and translating software. In the other words, we should know how to estimate the number of unfamiliar vocabulary that can be tolerated in texts before being interfered with comprehension. The text coverage is the percentage of running words which are known by readers in a text.

A study by Hu and Nation (2000) studied about the connection between text coverage and reading comprehension for native speakers of English by using a fiction text. They found that in a text with 80% coverage, no one got sufficient comprehension. When they use a text with 90% coverage, only a small number of the subjects got adequate comprehension. With 95% coverage or only one unknown words in every 20 running words, more subjects got adequate comprehension, and with 100% coverage of the text, most of the subjects gained enough comprehension. When a regression model was employed to the data of the study, a reasonable measure was found. The calculation found that 98% text coverage would be needed to get sufficient comprehension from reading the text. It means that there must be only one out of fifty running words that is unknown by readers.

A study by Nation (2006) found that in the level of 98% text coverage, 8,000 to 9,000 word families are needed by readers in order to gain sufficient comprehension of written text without using any assisting comprehension tools, and 6,000 to 7,000 word families needed for spoken texts. It suggests that readers should master all the high frequency words consisting of 2,000 word families as well as the mid frequency words consisting of 7,000 word families. It is accordance with what Laufer and Ravenhorst-Kalovski (2010) found on her study. Based on the result of their study, they suggested two threshold, an optimal one and a minimal one. The optimal one is the knowledge of 8,000 word families for coverage of 98%, including proper nouns. The minimal one is between 4,000 and 5,000 word families for the coverage 95%, including the proper nouns.

From the explanation above, it is clearly stated that the larger the vocabulary size is, the better comprehension can be gained from reading texts. It is supported by some results of studies investigating the relationship between vocabulary size and reading comprehension. Ibrahim, Sarudin, and Muhamad (2016) tried to examine the relationship between students' reading comprehension and vocabulary size. They used the institutional English Proficiency Test (EPT) to measure reading comprehension and

Nation's Vocabulary Levels Test (VLT) to measure the number of vocabulary that students had. The result showed that there was a moderate correlation between the score in the EPT reading comprehension and Vocabulary Levels Test and relationship between the two variables are significant at p<0.01 level.

Baleghizadeh and Golbin (2010) studied the effect of vocabulary size on reading comprehension of Iranian EFL learners. 83 Iranian first-year students were employed in this study and they were sit for vocabulary test by using Vocabulary Levels Test and reading comprehension test by using TOEFL version 2004. The result showed that the relationship of the two variables are very significant. It suggested the necessity of improving learners' vocabulary size in order to cope with reading texts.

### 2.2.1 Vocabulary Size in Indonesia

There are few studies found in Indonesian context regarding with vocabulary size. Those studies revealed that Indonesian EFL learners lack of vocabulary knowledge (Hananto, 2013). The first study of vocabulary size was conducted by Quinn (1968) in a private university in Indonesia. He assessed the first year students' vocabulary knowledge by using a translation vocabulary test and found that the students only possessed less than 1,000 of the most frequent English words although those students had been studying English for six years in schools.

In 1997, Kweldju (1997) also conducted a vocabulary-size study of pre-service English teachers at 15 universities in Indonesia. She found that those students only mastered approximately 2,800 word families. The study showed that even for prospective English teachers, they still had very low vocabulary knowledge which was still below the threshold level for reading academic texts.

Two years after Kweldju's study, another study of vocabulary size was conducted by Nurweni and Read (1999). The study revealed that the number of vocabulary sizes of Indonesian undergraduate students were only 1,226. Another study which was done by Nurhemida (2007) also found the same results. She, on her unpublished thesis, found that Indonesian high school students' vocabulary size was only 1,240. It indicates that Indonesian vocabulary size was not really improved after eight years and is still far from the 4,000 – 5,000 word level as a minimal threshold (Laufer & Ravenhorst-Kalovski, 2010) and the 8,000 word level as an optimal

threshold. The results are also far from what Nation (2006) suggests in order to perform the language without assisting comprehension tools. The results are even less than the 2,000 word level of the high frequency words.

By analyzing the results of the two studies, it can be inferred that the students' must have had difficulties in performing the language especially in reading academic texts. The results are in line with what Nation (2001) said that learners whose vocabulary is below the threshold level will have difficulties in decoding the basic element of texts, and it will make it hard for them to develop any higher level of understanding of the contents.

The study results also indicate that ELT teachers have failed to provide adequate vocabulary knowledge which is very central for effective language use (Hananto, 2013). Hananto (2013) also indicates that the failure may be caused by teachers' issues. He explains that most teachers do not know how to measure their students' vocabulary knowledge, what words they should teach, and how to teach the words. This issues have been the concern of the present study.

## 2.3 Vocabulary Learning Strategies Taxonomies

According to Hamzah, Kafipour, and Abdullah (2009), vocabulary learning strategies can be possibly viewed in three distinct sides. First, vocabulary learning strategies are any actions taken by the learners in order to help them learn new words. When learners are going to study new words, they will use the strategies to reach their goal. Second, vocabulary learning strategies are related to only actions that improve the efficiency of vocabulary learning. Learners may apply particular actions but they may not work in enhancing the learning process. Third, vocabulary learning strategies are actions taken by learner consciously in order to learn new words.

There are so many techniques or strategies proposed by scholars and researchers about how to learn vocabulary effectively. Each learner may have their own preference of what strategy they feel most effective and comfortable to deal with their vocabulary development. It is necessary for learners to learn as many strategies as possible in order to know how the strategies work to them. The more the strategies they know, the more options they have in terms of dealing with vocabulary learning. So, they are free to pick the strategy that they feel the best for them to learn words. The time allocated in schools for vocabulary teaching may be not enough for students to improve a lot. Therefore, the calls for helping students dealing with learning new words by providing and training them some strategies should be the concern of language teachers, including English. It has been suggested that teaching English should not only teaching particular new words to students but also should aim to provide sufficient strategies in order to expand their vocabulary knowledge (Hulstijn, 1993). Moreover, it is suggested that it is better to spent class time to help learner develop strategies in dealing with unknown words that they meet during the listening and reading activities, rather than doing "laborious practice aimed at consolidating individual items" (Lewis, as cited in Şener, 2015, p. 19).

On the other hand, Nation (2001) emphasized the main benefit of learning strategies. He argued that the main benefit of learning strategies is that they enable learners to take control of their learning which makes them be more responsible for their own studies. Likewise, vocabulary learning strategies are important because they consist of steps for self-directed learning that is important for developing learners' lexical competence (Illés, 2012). In short, it can be concluded that teaching and introducing some strategies to learners will make them become more autonomous and responsible on their own vocabulary learning that can help them increase their lexical competence.

There have been many taxonomies concerning on vocabulary learning strategies proposed by researchers, such as Oxford (1990), Gu and Johnson (1996), Schmitt (1997), and Nation (2001). Oxford (1990) classified vocabulary learning strategies into two categories; direct and indirect strategies. Direct strategies, which are also known as learning the target language directly, consist of cognitive strategies, memory strategies, and compensation strategies. Cognitive strategies enable learners to understand and produce new languages in different words. Summarizing and reasoning deductively are the sample activities of this strategy. Memory strategies ease learner's store of information and assist learners in retrieving new information. Compensation strategies allow learners to use the language even though there are large gaps in their linguistic knowledge. One example of this strategies is guessing while reading.

In contrast, indirect strategies are the one that supports vocabulary learning without focusing directly on the target language. Indirect strategies consist of social strategies, metacognitive strategies, and affective strategies. The social strategies support learners when learning new words through the interaction with other people. Metacognitive strategies facilitate learners to take control of their cognition like coordinating their learning process by planning, monitoring and evaluating. Affective strategies enable learners to control their motivations, attitudes, and emotions. These strategies do not contribute directly to learners' vocabulary learning.

Gu and Johnson (1996) categorized second language vocabulary learning strategies into four categories namely metacognitive, cognitive, memory and activation strategies. Metacognitive strategies include selective attention and self-initiation strategies. Learners who apply selective attention are able to know which vocabulary is important for them to learn and is necessary for sufficient comprehension of a text. Learners who use self-initiation strategies will use various strategies to make the meaning of word items clear. The examples included in cognitive strategies are guessing strategies, the use of dictionaries and note-taking strategies. Learners using guessing strategies by using their background knowledge and analyzing the linguistic clues like grammatical structure in order to guess the meaning of words. Memory strategies are grouped into rehearsal and encoding strategies. Word lists and repetition are parts of rehearsal strategies, whereas association, imagery, visual, auditory, semantic, contextual encodings, and word-structure are instances of encoding strategies. The other strategy of Gu and Johnson's taxonomy of vocabulary learning strategies is activation strategies. The activation strategies include the strategies that require learners to use new words in different contexts. For examples, learners are making sentences by using the words that they have just learned.

Schmitt (1997) proposed a taxonomy of vocabulary learning strategies adapted from Oxford (1990). He classify the vocabulary learning strategies into two categories based on how the words are learned when met at the first time and when met again. The two categories are named discovery strategies and consolidation strategies. The discovery strategies deal with the strategies to learn the words when met at the first time, whereas the consolidation strategies deal with the strategies to learn the words when met again. The detail explanation of this taxonomies is explained in the next subchapter. Nation (2001) proposed vocabulary learning strategies taxonomy consisting of three general classifications namely planning, sources, and processes. The first one is planning the vocabulary learning program. On this stage, learners should know what their vocabulary learning goals are and what vocabulary should be focused on based on their goals. When learning new words, learners should select particular aspects of words that they want to focus on such as meaning, form, and use a variety of strategies in order to make the learning process become more efficient. The second strategy is sources. To cope with new vocabulary or to learn new words, learners should be able to get information about the words. The strategies that can be used are such as analyzing linguistic clues, guessing from contexts, strengthening form and meaning connections, and working out with the meaning of the words. The third strategy of Nation's vocabulary learning strategies is processes. It aims to establish the learners' vocabulary knowledge. The strategies involve ways of remembering words and make use of them. The strategies include establishing word knowledge by using noticing, retrieving, and generating strategies.

## 2.3.1 Schmitt's Vocabulary Learning Strategies Taxonomies

The vocabulary learning strategies adopted in this study is the one proposed from the taxonomy of Schmitt (1997). The present study relies on this vocabulary learning strategies taxonomy because it has been widely known and used in research (Nirattisai & Chiramanee, 2014). In Schmitt's taxonomy, the strategies are classified into two categories which are the ones that determine the meaning of new words when met for the first time and the ones that consolidate meaning when met again. The former is also known as discovery strategies and the latter is also known as consolidation strategies.

The discovery strategies include determination and social strategies and the consolidation strategies include cognitive, metacognitive, memory and social strategies. Social strategies become part of both categories since it can be applied for both purposes. According to Schmitt (1997), determination strategies can be used when learners are faced with discovering a new word's meaning without recourse to another person's experience. Consequently, learners try to find the meaning of new words by guessing from context, analyzing the linguistics clues, and reference materials.

According to Schmitt (1997), the second way to find out the meaning of unknown words are by using social strategies like asking the help of other people for the meaning.

After knowing the meaning of the words by using the two strategies, learners should practice and retain the vocabulary by using some other strategies such as social, memory, cognitive and metacognitive strategies. The instance of using social strategies is learning and using the words that have just been learned through cooperative learning or learning in a group. Memory strategies are traditionally known as Mnemonics. The strategies is to relate words with background knowledge by using a form of imagery. Cognitive strategies include repetition and the use of media such as word lists, flash cards, and vocabulary notebooks in studying the words. The last, metacognitive strategies based on Schmitt's taxonomy are the strategies that are used by learner to take control and evaluate their own learning. Testing oneself is an example of metacognitive strategies, providing positive reinforcement if progress is being made or a signal to switch strategies if it is not" (Schmitt, 1997, p. 216). The complete classifications of Schmitt's taxonomy are presented on table 2.1.

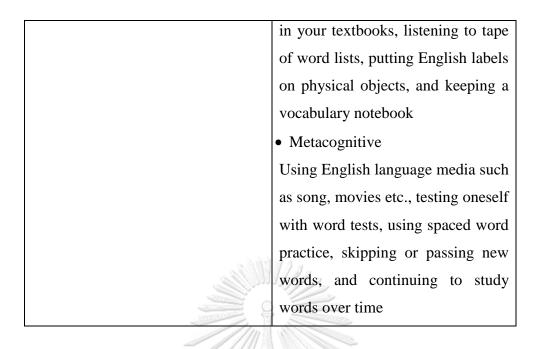
NA NA		
Vocabulary Learning Strategies		
<u>ວາແວລາວ</u> ລາໂ	011001050111100011	
Discovery	Consolidation	
Chulalongkof	IN UNIVERSITY	
• Determination	• Social	
Analyzing parts of speech, analyzing	Studying and practicing the	
affixes and roots, checking for L1	meaning in a group, teachers check	
cognates, analyzing any available	students' flash cards or word lists	
pictures or gestures, guessing from	for accuracy, and interacting with	
textual contexts, using bilingual	native speakers	
dictionary, using monolingual	• Memory	
dictionary, using word lists, and	Studying words with pictorial	
using flash cards	representation of its meaning,	
• Social	imaging words' meaning,	

Table 2.1 Summary of Schmitt's Vocabulary Learning Strategies Taxonomies

Asking for L1 translation from teachers, asking for paraphrase or synonym of new words from teachers, asking for a sentence of a new words from teachers, asking classmates for meaning, and discovering new meaning through group work activity

connecting word to personal experience, associating the words with their coordinates, connecting the words with their synonyms and antonyms, using semantic maps, using 'scales' for gradable adjectives, method, loci peg method, grouping words together to study them, grouping words together spatially on a page, using new words in sentences, grouping words together within a storyline, studying the spelling of words, studying the sounds of words, saying new words aloud when learning, imaging words' form, underlining initial letter of the words, configuration, using keyword method, remembering affixes and roots, remembering parts of speech, paraphrasing words' meaning, using cognates in study, learning the words of an idiom together, sing physical action when learning words, and using semantic feature grids • Cognitive

Using verbal repetition, using written repetition, using word lists, using flash cards, taking notes in class, using the vocabulary section



According to Shen (2003), effective vocabulary teaching strategies need to be incorporated with learners' vocabulary learning process. It suggests that the teaching process should also accommodate learners' learning process. Therefore, the vocabulary learning strategies should be taken into account in vocabulary instruction. In short, it is suggested that vocabulary learning strategies should be integrated into vocabulary teaching strategies.

## 2.4 Vocabulary Size and Vocabulary Strategies

Vocabulary size is the product of applying vocabulary teaching or learning strategies. Using an appropriate strategies may promote a success of vocabulary learning which can be seen from the vocabulary size. Nation (2001) believes that the use of vocabulary learning strategies could help learners master a big amount of vocabulary, and that the strategies were useful for learners in different language levels. In accordance with Nation, Şener (2015) also argued that in order to increase students' vocabulary size, it is necessary to assist their vocabulary development by introducing a number of strategies to them.

There have been a lot studies done in relations between vocabulary teaching and learning strategies and its impact on vocabulary size. Waldvogel (2013) studied the relationship between the different types of vocabulary learning strategies used by Spanish foreign language students at different proficiency levels and their vocabulary size. A total of 475 college students were employed in the study and the result found that there was a significant relationship between the two variables among advanced learners, but not among students in beginning and intermediate levels. The study suggested that less experience students might be less effective in managing and controlling their own vocabulary learning.

Kalajahi and Pourshahian (2012) found different result from Waldvogel's in their study. The study was to investigate the relationship between vocabulary learning strategies and vocabulary size of 125 undergraduate students majoring in English Language Teaching at Eastern Mediterranean University. The study found that most of the students used psycholinguistics strategies to deal with unknown words, and there was no relationship between psycholinguistics strategies and vocabulary size whereas the relationship between metacognitive strategies and vocabulary size was not really significant. The findings revealed that the participants did not operate certain strategies in vocabulary learning.

Sener (2015) studied about the vocabulary learning strategy preferences and vocabulary size and the relationship between the students' strategy use and their vocabulary size. The data were collected by using Vocabulary Learning Strategy Inventory and Vocabulary Levels Test. The study showed that determination strategy was used most frequently and cognitive strategy was used least frequently by the participants. Besides, the most significant relationship was found exist between cognitive strategies and vocabulary size.

There are not so many studies done in Indonesia regarding with the relationship between vocabulary size and vocabulary learning strategies. An unpublished paper committed by Kristanto (2015) was to investigate the use of vocabulary learning strategy and its relation to vocabulary size among Indonesian students. The study employed 34 students of bachelor nursing of STIKES Harapan Bangsa Purwekerto and they were given a questionnaire adapted from Schmitt's vocabulary learning strategies taxonomy. The result showed that social strategies was the most frequently used by the students and no students used metacognitive strategies. The correlation analysis found that over all there was a relationship between vocabulary learning strategy and vocabulary size score at moderate level. Munandar, Nurweni, and Mahpul (2015) conducted a study and found that social strategy had a positive correlation with students who got 60-100 range scores on vocabulary size test, while determination strategy was used mostly by students with score 40–59 in vocabulary size test. Overall, the study revealed that there was a significant correlation between students' vocabulary learning strategies and their vocabulary size. The same result was also found by Munandar (2015) through his dissertation. The different result shown on this study from the study of Munandar, Nurweni and Mahpul was that the social strategy was the most frequently used by the students and the least frequently used was metacognitive strategy.

Most of the studies mentioned above were survey studies that investigated the learning strategies used by students and their impacts on the students' vocabulary size. Only few studies investigated the impact of particular teaching strategies on the students' vocabulary size, especially using Marzano's six-step strategy. According to R. J. Marzano (2004a), the six-step strategy has been practiced at schools and most of the results shows that the strategy is effective in improving the students' vocabulary size. Unfortunately, there are only few studies that are published. The first study was done by Sanders (2008). His study was to investigate the effect of Marzano's six-step strategy on vocabulary comprehension and retention of students in an urban, low income, high minority high school. The result found that the use of the strategy had a positive impact on vocabulary comprehension and retention.

Suing (2012) conducted a study which aimed to investigate the effects of Marzano's six-step strategy on vocabulary knowledge, fluency, and sentence complexity of the fourth grade students. The result showed that the strategy significantly correlated with students' vocabulary knowledge. The more recent study was conducted by Purcell (2015). Her study aimed to enhance deaf students' academic vocabulary by using Marzano's six-step strategy. The study found that the strategy effectively improved 65 % of the students' academic vocabulary after 12 months.

The previous studies have proved that Marzano's six-step strategy effectively works on schools levels. Unfortunately, there is no empirical study investigating the effects of the strategy on vocabulary size in particular for adult learners or university students. Therefore, the one of aims of the this study is to investigate the effects of direct vocabulary instruction using Marzano's six-step strategy on Indonesian prospective English teachers' vocabulary size.

### 2.5 Vocabulary Instruction: Direct vs Indirect Approach

There are two main approaches on vocabulary instruction namely direct and indirect approaches. The indirect vocabulary instruction assumes that incidental exposure to an unknown words through reading passages provides the reader with an understanding of the words by the contexts. If the amount of reading is extensive enough, the cumulative effect of this incidental teaching may be significant. The assumption is that there are so many words that can be taught in the classroom. Furthermore, words are considered to be easily learned from their context during reading (W. E. Nagy et al., 1987). On the other hand, direct vocabulary instruction treat the unknown words in isolation without the need of providing contexts through reading. This approach requires language teachers to teach the words explicitly, deliberately, or intentionally. Thus, this approach promotes word consciousness.

According to National Reading Panel (2000), there is no best vocabulary teaching instruction, and so that teachers should teach vocabulary by using both direct and indirect approach. Direct vocabulary instruction promotes word consciousness to students and it makes them become more aware and interested in words and word meanings (Anderson & Nagy, 1993). Unfortunately, since the time allocated in classroom is limited, it seems impossible for teachers to teach all words to students in classroom context. Beck et al. (2013) estimates that teachers can teach explicitly around 400 new words a year in schools. Therefore, to help students learn more words that they need, direct approach should also be utilized.

However, the present study will just focus on implementing direct vocabulary instruction because it has been proved in some studies that compare the effectiveness of direct and indirect vocabulary teaching and learning show that direct vocabulary teaching and learning is more effective (Nation & Meara, 2002). It is not surprising because noticing and giving attention to language learning generally makes the learning more effective (Schmitt, as cited in Nation & Meara, 2002). Nation also adds that direct teaching and learning is more focused and goal-directed than indirect learning.

### 2.5.1 Effective Direct Vocabulary Instruction

R. J. Marzano (2004a) in his book entitled *Building Background Knowledge for Academic Achievement* suggests eight characteristics of effective direct vocabulary instruction. The eight characteristics are research-based and become the foundation of the creation of six-step process by Marzano that will used in the present study.

The first characteristic is that effective vocabulary instruction does not rely on definitions. The common way of introducing the meaning of particular words is by providing the definitions or asking students to look up the meaning of the words in dictionary and asking them to make sentences by using those words. Some studies suggest that using dictionary definitions to introduce the meanings of particular words are not effective in learning (Beck et al., 2013; Stahl, 1999). Beck et al. (2013) reckon that dictionary definitions are not effective instructional devices because the definitions are not described clearly due to space restrictions. They then suggest that descriptions of particular words are more understandable than definitions. They recommend that word meaning should be presented to students by using simple language.

The second characteristic is that students must represent their knowledge of words both in linguistic and nonlinguistic ways. According to the dual coding theory, information can be saved in one's permanent memory if it has both linguistic (languagebased) and nonlinguistic (imagery-based) representation (R. J. Marzano, 2004a). The theory suggests that in learning new words students should not only present their knowledge of the words in oral or written description but also need to describe the word representation through pictures, symbols, graphs etc. Stahl and Fairbanks (1986) and Powell (1980) claims that linguistic and nonlinguistic techniques are beneficial in direct vocabulary teaching and suggest that teachers should not only focus on linguistic techniques but also need to highlight nonlinguistic techniques in their vocabulary instruction.

The third characteristic is that effective vocabulary instruction involves the gradual shaping of word meanings through multiple exposure. In fact, any kinds of knowledge, including vocabulary knowledge, are useful regardless of how deep or shallow it is (R. J. Marzano, 2004a). According to Stahl (1999), it is not always necessary for someone to know a word fully in order to conceive it in context or to answer questions correctly. Although people claim that they have never seen a word,

but they are able to recognize whether the words has been put in a correct sentence. Stahl (1999, p. 16) also suggests that "…vocabulary knowledge seems to grow gradually, moving from the first meaningful exposure to a word to a full and flexible knowledge." In order to understand the words at deeper levels, teachers need to provide repeated and varied exposure of the words to students during their review their initial understandings (R. J. Marzano, 2004a). These theories highlight the importance of providing multiple exposure of targeted words in direct vocabulary instruction.

Learning is greatly enhanced during the repeated exposures if students are given many opportunities to interact with the vocabulary in variety of techniques (Beck et al., 2013; Stahl, 1999). Therefore, teachers have to provide opportunities for students to interact with the targeted words by using various ways, and it will be better if the techniques include both linguistic and nonlinguistic ways. Teachers can implement strategies in the classroom by asking the students to describe the meaning of the targeted words in written or oral and also describe the words by using picture, graphic, or symbol representations.

Another way to provide variety of interactions for students towards the targeted words is by using varies forms of identifying similarities and differences (R. J. Marzano, 2004a). In addition, R. J. Marzano, Pickering, and Pollock (2001) have identified four types of instructional activities that engage students to identify similarities and differences namely comparing, classifying, creating metaphors and creating analogies. Comparing activities involve students to identify the how two words are similar and different such as comparing creator and creation. On the other hand, classifying is the process of grouping words that share similarities into categories based on their characteristics. Creating metaphors is the process of recognizing the basic pattern connecting information which is not related at a literal level (R. J. Marzano et al., 2001). Research has indicated that metaphor activities are able to help learners understand abstract concept of information (Chen, 1999; Cole & McLeod, 1999; Gottfried, 1997; Mason, 1994, 1995). In the classroom context, teachers may do this activity by presenting metaphors and asking their students make their own. Creating analogies is the process of recognizing the connection between two sets of items or recognizing connections between connections (R. J. Marzano et al., 2001). The concept of analogies is like A to B and C to D (R. J. Marzano, 2004a). In terms of vocabulary

instruction, teachers present analogies to students and ask them explain the relationships. Research has indicated that analogical thinking may be the most complex activity that involves similarities and differences as well as requires in-depth analysis of the contents (Alexander, 1984; Sternberg, 1977).

The fourth characteristic is that teaching word parts will enhance students' understanding of terms. Teaching roots and affixes have been part of regular vocabulary instruction (R. J. Marzano, 2004a). The reason underlie this instructional activity is that knowledge of roots and affixes help students determine the meaning of unknown words. Recognizing and analyzing the roots and affixes of particular words will provide information about function of the parts that lead to the meaning of the words. It is in accordance with Adams (1994, p. 151) who points out that it is necessary "to teach [students], for example, that such words as *adduce, educe, induce, produce, reduce, and seduce* are similarly spelled because they share a common meaning element: *duce,* 'to lead'."

The fifth characteristic is that different type of words require different types of instruction. It seems logical that words with different lexical categories require different instruction. To support this, Stahl (1999, p. 20) notes that "although we tend to talk about vocabulary as separate from grammar, they are, of course, connected. *Give*, for example, is as a verb. In language, verbs function differently from nouns and modifiers (adjectives and adverbs)." He states that each verb implies a connection with one or more nouns. For example, the verb *learn* implies that the action is done by someone, and the verb *give* implies that someone is willingly transferring something to someone else.

The sixth characteristic is that students should be engage in a discussion of the new terms that they are learning. One of the benefits of discussion in classroom contexts is that it helps students encode information that they get in their own words. In addition, through discussion students can view thing from different perspectives that come from their companions, and discussion also provides opportunities for students to freely express themselves (R. J. Marzano, 2004a). In terms of vocabulary instruction, when discussing new terms, students potentially gain deeper understanding and could raise the chance that the target words will be anchored in permanent memory (Stahl & Clark,

1987). Therefore, teachers should periodically put the students in groups to discuss the new terms that they have just learned.

The seventh characteristic is that teachers should engages students to play the new terms that they have just learned. Covington (1992) has summarized some studies on game theory and its use in the classroom. On the other hand, Malone (1981) proposes at least three characteristics of games. First, they should be challenging for students. It is in line with Covington (1992, p. 60) who says that games provide tasks that "challenge the individual's present capacity, yet permit some control over the level of challenged faced." Second, games emerge curiosity. Covington (1992) explains that games provoke someone's curiosity because they provide enough complexity that makes the outcomes uncertain. Third, games involve some degree of fantasy desire.

The eighth characteristic is that vocabulary instruction should concern on terms that have a high probability of improving academic success. One of the critics of direct vocabulary instruction is that there are numerous important terms to teach and classroom context does not provide sufficient time to study them (R. J. Marzano, 2004a). To cope with this issue, Nation (2008) suggests that not all words are feasible to teach and those words should be treated differently. He also reports that first focus of vocabulary teaching and learning should be the high frequency words. If students have mastered the high frequency words, then, they should move to the academic words, called Academic Word Lists (Coxhead, 2000). These words are very useful because they are widely used in academic context, and they become compulsory to students who are going to study at universities. In addition, after mastering the academic words, the focus should be directed to vocabulary that is frequently, specifically used in particular field or subject area. These words are called technical words.

Deciding what words to teach is not an easy task to do. In classroom context, teachers should be able to test and measure their students' vocabulary knowledge in order to know their present level. At this stage, teachers need to be assisted by diagnostic tools like tests. A widely research-used diagnostic test to measure students' vocabulary is the Vocabulary Levels Test by Schmitt et al. (2001). The test was originally developed by Nation (1983) and has been widely used in many studies. The results of the test will give information about the students' vocabulary mastery based

on some levels. The information is beneficial for teacher to make decision on what words to focus on their instruction.

### 2.5.2 Marzano's Six-step Strategy

The goal of a vocabulary instruction is to assist students learn the meanings of new words in order to communicate effectively and achieve academically (W. E. Nagy et al., 1987). Thus, the effective vocabulary instruction should provide many opportunities for students to learn words, related concepts, and their meanings (Brief). Teachers need to do more than just expose many words at surface level to the students (Graves, 2016; Stahl & Nagy, 2007). They need strong instructional opportunities to help them develop deep levels of word knowledge and expand their lexical competence (R. J. Marzano, 2004a).

R. J. Marzano (2004a) proposes a strategy for vocabulary instruction that provides opportunities for students to develop deep levels of word knowledge as well as to enrich their lexicons. The strategy is developed based on the eight characteristics of effective direct vocabulary instruction. He called it *the six-step process* or *the six-step strategy*. This strategy involves six steps of vocabulary teaching as follows:

1) Step 1: provide a description, explanation, or example of the new term

On the first step, the teacher provides information about the new terms. The information should not include the definition of the new terms in order to develop the students word consciousness (R. J. Marzano, 2004a). According to R. J. Marzano (2004a), definitions are not useful instructional tools, especially in the beginning stages of learning new words. On the contrary, conversational description, explanations, and examples are very beneficial for students in the early stage of learning new words. The word descriptions, explanations, and examples from the teachers will help the students develop an initial understanding of the words. This process will help students draw a picture in mind that represent the words (Step 3).

There are some ways that the teachers can use to help students build their initial understanding of the words such as telling a story using the words, using video or computer images as a source of information about the words, using current events to link the words to something familiar, describing teachers'own mental pictures of the words, finding or creating pictures or symbols that describe the words, and providing a context of the words. Putting the target words in sentences will provide context that is useful for students to draw their initial understanding.

 Step 2: ask students to restate the description, explanation, or example in their own words

Stahl (1999, p. 14) states that "the goal of vocabulary learning is to have students store the meaning of the words in their long-term memory...". In order to store the new learning words in the long-term memory, the students have to process information actively and repeatedly. This is the work of the Step 2.

On this step, teachers ask the students to restate the meaning of the new terms by using their own words. Students should make use of the descriptions, explanations, and examples from the step 1 and draw a conclusion about what the terms probably mean. It is necessary that students do not simply duplicate the teachers' description.

It would be very useful to have the students record their descriptions, explanations, and examples in a vocabulary notebook. The notebook should have some spaces for students' description (Step 2), students' pictures representing the terms (Step 3), and spaces for additional information as a result of Step 4, 5, and 6.

3) Step 3: ask students to construct a picture, pictograph, or symbolic representation of the term

On this stage, teachers ask the students to draw a picture, symbol, or graphic representation of the terms. The students' pictures, pictographs, or symbols should be recorded into their vocabulary notebook as being mentioned before. This process pushes the students to think of the words in a different way. The students' oral or written descriptions in Step 2 are part of linguistic thinking process, while students' picture in this step are part of nonlinguistic thinking process. Therefore, the process of Step 2 and 3 will help students develop not only the linguistic representation of particular words, but also the nonlinguistic one.

In the process of drawing the word representation, students who are not used to creating pictures for ideas may find it difficult to do. Thus, teachers have to take responsibility by guiding them or providing a sample. The other way that the students can do is searching a picture representing the words on the internet and try to duplicate the picture on their notebook.

4) Step 4: engage students periodically in activities that help them add to their knowledge of the terms in their notebooks

Students are engaged in activities that are designed to help them discuss and review the terms that they have just learned in their vocabulary notebook. The purpose of this process is to provide the students multiple exposures to the terms by taking part in the activities allowing them to interact with the new terms in many ways. Some activities that can be done in this way are comparing terms, classifying terms, identifying synonyms and antonyms, creating analogies and metaphors using the terms, and analyzing word parts to deepen knowledge of the terms. During this time, teachers also should provide the students a chance to revise their description (Step 2) or their nonlinguistic representation (Step 3) on their vocabulary notebook.

5) Step 5: periodically ask students to discuss the terms with one another

According to R. J. Marzano (2004b), interaction among people in learning process will deepen the understandings of everyone involved in it, especially when learning new words. This is the main purpose of this stage. Teachers should organized the students into pairs or groups and ask them to discuss the terms in their vocabulary notebook. In order to stimulate the discussion, teachers may ask some questions for each group or pair to do such as asking them to compare their descriptions of the terms, describe their pictures to each other, share the others new information of thoughts of the terms, and identify areas of disagreement or confusion and seek clarification. Teachers also need to provide opportunities for students to examine the entries of their vocabulary notebook and make changes, deletions, and additions.

6) Step 6: involve students periodically in games that allow them to play with terms

Games are powerful instructional techniques that teachers typically underuse (R. J. Marzano, 2004a). Covington (1992, p. 160) summarizes various studies on the game theory and the effect of its use in the classroom context. He explains that games provide tasks that "challenge the individual's present capacity, yet permit some control over the level of challenge faced." He also claims that playing games will raise students' curiosity that drive students to play it again and again. L. Marzano and Christensen (1992, p. i) explains that "vocabulary learning need not be a drudgery for students. Rather, activities should be designed to create an awareness and appreciation of words and to stimulate word fluency through experiences that are meaningful and enjoyable.

The purpose of this collection of games is to help teachers and students achieve this goal."

# 2.5.3 The Integration of Marzano's Six-Step Strategy and Schmitt's Vocabulary Learning Strategies Instruction

According to Shen (2003), effective vocabulary learning strategies should be incorporated with vocabulary learning process. It implies that vocabulary teaching strategies should not be too teacher-centered. Teachers should provide opportunities for students to actively learn the words by themselves. On the other hand, Sökmen (1997, p. 25) noted that it is "not possible for students to learn all the vocabulary they need in the classroom," and therefore teachers have to assist them on how to deal with the unknown words that they need by themselves by introducing some strategies or techniques (Hulstijn, 1993; Şener, 2015). By having many strategies, learners can freely choose the ones that they think work better for them to improve their vocabulary size or knowledge, especially when they are not in the classroom.

Basically, Marzano's six-step strategy is a vocabulary teaching strategy used for direct vocabulary instruction. But, the researcher sees that the implementation of this strategy can also be integrated with vocabulary learning strategies instruction. Marzano's six-step strategy proposes a big concept of teaching words on each step that can fit variety of vocabulary learning strategies. Therefore, the implementation of the strategy does not only potentially enhance the students' vocabulary size but also provides opportunities for teachers to introduce and train some vocabulary learning strategies. So, students can use the vocabulary learning strategies to learn vocabulary on their own out of the classroom. Therefore, teachers should not only spend their classroom time to teach vocabulary but also should spend part of the time to train them using the strategies by providing clear direction and explanation and by demonstrating the students on how to perform the tasks before letting them do it by themselves.

By learning the concepts of Marzano's six-step strategy, we can see that it is quite similar to the concepts of vocabulary learning strategies taxonomies proposed by Schmitt (1997). Schmitt (1997) classifies vocabulary learning strategies into two categories; discovery strategies and consolidation strategies. Discovery strategies are strategies used when encounter the unknown words for the first time to build initial understanding, whereas consolidation strategies are strategies used to retrieve the meaning of words that have been met before. In Marzano's six-step strategy, Step 1 aims to establish students' initial understanding of unknown words when met of first time. This concept is similar to the concept of discovery strategies on Schmitt's vocabulary learning strategies. On the other hand, Step 2 to 7 of Marzano's six-step strategy aim to provide multiple exposure of the target words in order to retain the words in long-term memory. This concept is similar to the concept of consolidation strategies of Schmitt's vocabulary learning strategies.

Even though both strategies share almost the same concepts, not all vocabulary learning strategies can be taught into Marzano's teaching steps. Step 1 aims to build students' initial understanding of target words by providing descriptions, explanations or examples of the words. Teachers can start teaching the target words by showing pictures representing the target words and ask students to relate the picture to the particular target words. It aims to introduce the target words by using nonlinguistic way. Teachers then pronounce the words and asks students to repeat after. Teachers should pronounce the words many times until students can pronounce it fluently. Next, teachers should present the words by analyzing its contexts. At last, teachers provide examples of the word uses in sentences. Teachers should require students to record the word meaning and samples. In Step 1, vocabulary learning strategies instruction is used to explain and do the guessing meaning from contexts (determination strategy) and verbal repetition (cognitive strategy).

In Step 2, teachers ask students to restate his or her explanation of the word meaning on their own words. In doing so, teachers explain and guide students how to paraphrase the words meaning. Besides that, teachers also ask students to make their own sentence by using the words. Students' paraphrase and sentences should also be recorded on their vocabulary notebooks. The implementation of vocabulary learning strategies instruction is by providing explanation and guidance of doing paraphrasing (memory strategy) and making sentences using the target words.

In Step 3, teachers ask students to construct a pictorial representation of the target words and to record it on their vocabulary notebooks. Before allowing them do the task, teachers should firstly explain the benefit of constructing pictorial

representation in remembering words and guide them how to perform the task. The picture should not be authentic as long as students can relate the word meaning to the picture. In order to assist students in making their pictures, teachers let students to duplicate pictures on internet. Imaging word meaning strategy is part of memory strategy that can help students retain the words in long-term memory.

In Step 4, teachers conduct an activity that can help learners add their knowledge of the target words on their vocabulary notebooks. The aims of this activity is to deepen students' knowledge of the words. Such strategies can be connecting words to their synonyms and antonyms (memory strategy), using semantic mapping (memory strategy), and word part analysis (determination strategy). Further explanation and modelling should be done by teachers before allowing students do the task.

Step 5 of Marzano's six-step strategy requires a collective works. Teachers firstly explain the benefit of discussing target words with others, and then divide students in pairs. Teachers ask them to discuss and compare the entries of their vocabulary notebooks to their partner. At the end, teachers give opportunities for students to add up or revise the entries of their vocabulary notebooks. The group discussion of the words shows the implementation of social strategy.

In Step 6, teachers involve students to play with the target words through vocabulary games. There are variety of vocabulary games that can be used in this step, but there will be only two vocabulary games used in this study. They are Pictionary and Charades. Pictionary is a vocabulary game that requires students to guess the target words based on pictures which is drawn as clues. This activity allow students to learn and retain words by making use of pictorial representation. Charades is a vocabulary game that requires students to guess the meaning of words by using physical action as clues. One student will be in charge as a clue provider and the others will be the guesser. No oral clues are allowed in this activity. Teachers should provide clear direction of doing this activity and also modelling before allowing students perform the activities. This activity allow students to make use of memory strategy through using physical action as action when learning words.

Vocabulary notebooks are the important tools in implementing Marzao's sixstep strategy. Therefore, before doing the Step 1, teachers should explain and guide students how to prepare a vocabulary notebook for the class activity. Teachers need also to emphasize the importance of making vocabulary notebook and how to make use of it. Keeping a vocabulary notebook is a cognitive strategy. At the end of the class, the teacher can also provide a list of vocabulary and encourage students to learn it at home by their own. Students can apply the strategies that they learn from the classroom, Marzano's six-step strategy, to learn words on the list. This process will drive students to regulate their own vocabulary learning and also activate their metacognitive strategy. Table 2.2 below sums up the integration of vocabulary learning strategies instruction into direct vocabulary instruction using Marzano's six-step strategy and Schmitt's vocabulary learning strategies.



Table 2.2 Summary of the Integration of Schmitt's Vocabulary Learning Strategies Instruction into Direct Vocabulary Instruction Using Marzano's Six-Step Strategy

Γ	Direct Vocabulary Instruction	Vocabulary Learning Strategies
Using Marzano's Six-step Strategy		Instruction
		Based on Schmitt Taxonomy
Step 1	<ul><li>Teacher provides information about the target words</li><li>Teacher shows a picture</li></ul>	➤ Teacher explains the benefit of
	<ul> <li>Frederick shows a picture representing words</li> <li>Teacher pronounces words and repeated by students</li> <li>Teacher provides the meaning of words by guessing from its contexts</li> <li>Teacher provides sentences using the words</li> <li>Teacher asks students to record the information on their</li> </ul>	<ul> <li>verbal repetition and do it (Cognitive Strategy)</li> <li>Teacher explains and guides students to use dictionary to learn new words (Determination Strategy)</li> </ul>
Step 2	vocabulary notebooks         Teacher asks students to restate his         information on their own         • Teacher asks students to restate         his information of words on	<ul> <li>Teacher explains and guides students on how to paraphrase</li> </ul>
	<ul> <li>their own by paraphrasing word meanings</li> <li>Teacher asks students to make sentences by using the words</li> </ul>	<ul> <li>sentences (Memory Strategy)</li> <li>Teacher explains and guide students on how to make sentences by using the words (Memory Strategy)</li> </ul>

<b></b>	1	
	• Teacher asks students to record	
	their paraphrase on vocabulary	
	notebooks	
Step 3	Teacher asks students to construct	
	pictorial representation of words	
	• Teacher asks students to	• Teachers explains the benefit
	construct a picture representing	of imaging word meanings
	the words	and guides them how to image
	• Teacher asks students to record	word (Memory Strategy)
	the picture on their vocabulary	
	notebooks	
Step 4	Teacher conducts activity to add	
	students' knowledge of words on	
	their notebooks	> Teacher explains and guides
	• Teacher asks students to	students on connecting words
	identify synonyms and	to its synonyms and antonyms
	antonyms of words	(Memory Strategy)
	• Teacher asks students to make	> Teacher explains and guides
	semantic mapping of words	students in constructing
	จหาลงกรณ์มหาวิท	semantic mapping (Memory
	• Teacher asks students to	Strategy)
	analyze the word parts	$\succ$ Teacher explains and guide
	• Teacher asks students to record	how to analyze word parts
	their work on their vocabulary	(Determination Strategy)
	notebooks	
Step 5	Teacher asks students to discuss the	
	entries of their vocabulary	
	notebooks to their partner	
	• Teacher puts students in pairs	
	• Teacher asks students to	
	discuss and compare the entries	
	i .	

	of their vocabulary notebook	<ul><li>Teacher explain the benefit of</li></ul>
	with their partner	group discussion in learning
	• Teacher lets students to add up	words (Social Strategy)
	or revise the entries of their	
	vocabulary notebooks	
Step 6	Teacher involve students to play	
	with words in vocabulary games	
	• Teachers groups students	
	• Teacher involves students to	> Teacher explains the benefit
	play with the words through	of studying the words with
	Pictionary game	pictorial representation and
		demonstrate how to play the
	• Teacher involves students to	game (Memory Strategy)
	play with the words through	> Teacher explains the benefit
	Charades game	of using physical action when
		learning vocabulary and guide
		students how to play the game
	Service and the service of the servi	(Memory)
		1 Contraction of the second se

# 2.6 Vocabulary Assessment

Assessing vocabulary is an important process of vocabulary instruction (Coombe, 2011). Assessment is necessary to do in order to see the impact of implementing particular instruction. In terms of vocabulary, assessing students' vocabulary size is important to do in order to get information about the students' vocabulary mastery after being taught. The results of the assessment will be useful information for teachers to design the further vocabulary instructions or courses. In addition, the results also can be used to evaluate or to judge the teaching strategies or methods used by teachers, whether they work or fail to enhance students' vocabulary knowledge.

In order to assess the vocabulary knowledge effectively, Coombe (2011) suggests five assessment decisions that teachers should consider before testing the students. First, how should vocabulary be tested? How to test vocabulary is dependent

on how teachers teach it. Most teachers today prefer testing vocabulary by proving the context. Coombe (2011) suggests that in testing vocabulary, teachers should avoid testing words in isolation. Another issue is that whether to test it discretely or embedded in other skill areas. According to Read (2000), testing vocabulary discretely assesses a word as independent construct, whereas testing it by embedding it in other skill areas assesses a word as part of a larger construct. In the other words, discrete vocabulary testing assesses students' vocabulary knowledge at the word level whereas embedded vocabulary testing assesses students' performance in using the vocabulary in the four skills.

Second, the question that teachers should consider before testing their students is which kind of vocabulary should be tested? Deciding which words to test is an important decision that teacher should make. According to Nation (2001), high frequency words are so crucial, so that teachers and students should do anything to make sure that the words are learned. He also says that it is highly necessary to teach the 2,000 most frequent words, particularly for students who want to go on to academic study (Nation & Kyongho, 1995). These perspectives suggest a demand to assess both high frequency words and academic words.

Third, the format of the test is an important issue that teachers should consider before testing students' vocabulary knowledge, especially the size. The decision of the format used in the test may determine the success of our assessment (Coombe, 2011). Coombe proposes three main issues that teachers should take into account when deciding the format of the test. First, the idea of test validity should be put into consideration. The content validity is the idea that we test what we teach. Therefore, teachers need to select the test format that is familiar to students. It is a serious violation of test validity if students are tested by using format that they never met before. Second, the idea of test practicality should also be taken into account. Teachers should choose the test format that is easy to mark and the result of the test is easy to interpret. Third, the format that teachers use should have a positive washback effect on teaching and learning. This idea is supported by Nation (2001, p. 373) by saying that "answering the item should provide useful repetition of the vocabulary and perhaps even extend learners' knowledge." The fourth assessment decision that teachers should consider is the number of items of the test. It is important to understand the concept of reliability before deciding the number of items that teachers want to include in the test (Coombe, 2011). Generally, the more items on a test, the more reliable it is considered to be. Nation (2001) suggests that a test should consist of at least 30 items for reliable vocabulary test. However, the number of items sometimes depends on the format chosen.

The fifth assessment decision is the issue of the importance of context. Read (2000) argues that the role of context in vocabulary tests is an important dimension of vocabulary assessment. Some test formats are context-independent in which the words are presented in isolation. This kind of format test generally require students to choose the meaning of words without links to any linguistic context (Read & Chapelle, 2001). In context-dependent vocabulary test, students are required to analyze the context clues to understand the meaning of words.

Those are the five assessment decisions that teachers should consider before testing their students. The five decisions are beneficial for teachers to develop their test or to choose vocabulary tests that are available based on their classroom context. Some vocabulary tests are freely available on internet on in printed textbooks and have been widely used in research such as Vocabulary Levels Test (VLT) by Schmitt et al. (2001), Vocabulary Size Test (VST) by Nation and Beglar (2007) and Word Associate Test by Read (1998). The VLT is a diagnostic test which provides information about students' present level of vocabulary mastery. The information is beneficial for teachers to prepare their vocabulary instruction. The test can also be used to estimate the students' vocabulary size. This test will be used in this study because of its two roles.

# 2.7 Summary

Vocabulary has a great role in second or foreign language acquisition. The vocabulary scholars suggest that any vocabulary development program should firstly focus on teaching or learning the high frequency words because these kinds of words occur very frequently in any kinds of texts. In addition, for those who are working in academic contexts like university students it is necessary for them to switch to the academic word once they have mastered the high frequency ones.

Direct vocabulary instruction is an approach that is believed to be able to improve the vocabulary size effectively. One of direct vocabulary instruction that has been proven effective to improve the students' vocabulary size is Marzano's six-step strategy. However, it seems impossible to teach all the words to the students in the classroom since they spend a very limited time at schools. Therefore, the vocabulary scholars suggest English teachers to also teach them how to learn the words by introducing a number of vocabulary learning strategies. In this study, the researcher integrated Marzano's six-step strategy with Schmitt's vocabulary learning strategies instruction to see how it affected the students' vocabulary size.



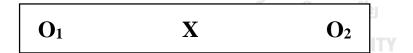
# CHAPTER 3 RESEARCH METHODOLOGY

This study was aimed to investigate the effect of direct vocabulary instruction using Marzano's six-step strategy and Schmitt's vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size. Furthermore, this study was also intended to study the students' opinions towards the implementation of the strategies. The chapter starts with the description of the research design and population and participants of this study. Then, the research instruments, research procedures, data collection procedures, and data analysis are also discussed.

## 3.1 Research Design

This study was one-group pretest-posttest, pre-experimental design. This study explored the effect of direct vocabulary and vocabulary learning strategies instruction on vocabulary size of Indonesian prospective English teachers as well as investigated the students' opinions towards the implementation of the treatment. The research design aimed to collect the data both quantitatively and qualitatively.

Figure 3.1 One-Group Pretest-Posttest Design



- O<sub>1</sub> means the pretest of the study
- X means the treatment of the study, direct vocabulary instruction and vocabulary learning strategies instruction
- O2 means the posttest of the study

The quantitative data were obtained by comparing the students' scores of Vocabulary Learning Strategies (VLT) in pretest and posttest. The students' scores in pretest indicated their vocabulary size before being given the treatment, and their scores in posttest indicated their vocabulary size after the treatment. On the other hand, the qualitative data were obtained from semi-structured interviews that were conducted after the treatment. The purpose of the semi-structured interview was to gain information about the students' opinions towards the implementation of the treatment during the experiment.

## **3.2** Population and Participants

The population of the study was the university students who were majoring in English Education at Faculty of Education, University of Kutai Kartanegara, Indonesia, for Academic Year 2017/2018. The students were attending English teacher training program for 4 years. They were chosen because they used to be exposed to English as their main subject besides their position as English teachers to be. The total number of the population was 140 students. The students included those from the first year, second year, third year, and fourth year. Each level consisted of one class only.

The participants of this study were chosen by using random sampling technique. The samples were determined through a draw. The researcher marked the paper lots with the four classes available for the draw. The class of the first-year students was randomly selected in the draw to be the samples of this study. The number of students in the class was 37, but only 33 students were available to participate in this study.

In the semi-structured interviews, 6 students were chosen from the participants for the data collection. The six students represented low vocabulary size level (LVS), mid vocabulary size level (MVS), and high vocabulary size level (HVS). The three levels consisted of 2 students for each. The students' classification was based on their vocabulary size on posttest. Two students with the highest scores on posttest were selected to represent the HVS level. Two other students who had the closest scores with the mean scores were selected to represent the MVS level, and two other students with the lowest scores in posttest were determined to represent the HVS level.

### 3.3 Instruments

The instruments used in this study were split into two categories namely an instructional tool and data collection tools. The two categories are explained in details as follows:

### **3.3.1 Instructional tool**

The instructional tool used in this study were lesson plans. The lesson plans were used during the treatment. The construct of the lesson plans is explained as follow: *3.3.1.1 The construct of the lesson plans* 

The lessons plans were developed by the researcher based on the guidelines and format from Brown and Lee (2015) as it is quite similar to the format that is mostly used in Indonesia. The procedures of the lesson plans were based on direct vocabulary instruction using Marzano's six-step strategy. Since the goal of the teaching was not only to help students develop their vocabulary but also to introduce and train them vocabulary learning strategies, the researcher also provided training or demonstration on how to perform vocabulary learning strategies on each step of the instruction. The vocabulary learning strategies integrated in Marzano's six-step strategy were based on the vocabulary learning strategies taxonomies introduced by Schmitt (1997).

The first step of developing the lesson plans was to determine the vocabulary levels that the students should focus on during the instruction. In order to determine the vocabulary levels, the researcher administered a diagnostic test, as well as the pretest of this study, by using vocabulary levels test (VLT). The results of the test, as shown in Chapter 4, revealed that the students had low scores on the five levels. It implied that they did not mastered all the vocabulary levels, therefore they should firstly focus on the high frequency words, which is the 2000 level, as suggested by most vocabulary scholars including Nation (2008). Thus, the 2000 level of high frequency words became the focus of instruction in this experiment. Once the level had been determined, the teacher provided a reading passage as a medium to select the target words of the instruction and vocabulary notebooks as a medium to records the students' learning activity during the class. The reading passages were graded readers that was compatible with the students' competence. The target words of the instruction were marked by the bolds which were taken from the 2000 level. The teacher selected the words to teach by conducting a small survey in the class. The teacher mentioned the bold words one by one and asked the students whether they knew the words or not. The words that were unknown by most of the students (>50%) were selected as the target words and were put on the list of the vocabulary notebooks.

The second step was to provide initial understanding of the target words. At this stage, the teacher provided inputs to the students about the nature of the target words in order to develop their background knowledge of the words. The teacher started the instruction by showing pictures representing the target words and asked students to relate the picture to the particular target words on the list. Then, the teacher pronounced the words and asked the students to repeat after him. The teacher kept repeating the strategy until the students could pronounce it correctly. Next, the teacher explained and demonstrated the importance of using dictionary to learn vocabulary. Then, the teacher provided examples of the word uses in sentences. At last, the students were required to record the teacher's explanation of the word meanings and samples on their vocabulary notebooks. In this step, the teacher highlighted two vocabulary learning strategies namely determination strategy through the activity of using dictionary to learn the words and cognitive strategy through the verbal repetition in pronouncing the words. The teacher provided sufficient training to the students on how to do the strategies, so they could do the strategies at home on their own.

In the third step, the students were required to restate the teacher's explanation of the target words on their own words and make their own sentences by using the words. At this stage, the teacher trained the students on how to paraphrase a sentence. After that, the teacher explained and showed how to generate a sentence by learning the sentences that they have learned before. In the end of the step, the students were required to record their activity in this step on their vocabulary notebooks. The teacher introduced and trained memory strategies through the activity of paraphrasing sentences and making sentences.

A pictorial representation is an important way to help students remember words, and this was the strategy that the students were required to do in fourth step. At this step, the teacher explained the importance of pictures in learning new words. A guidance and training were also provided by the teacher before letting the students do this task. To help the students draw the pictures, the teacher allowed the students to duplicate pictures from the internet. Creating a pictorial representation of the target words was one strategy used by the teacher to introduce and train students to a memory strategy. In the fifth step, the teacher did an activity that helped learners add their knowledge of the target words on their vocabulary notebooks. The aims of this activity was to deepen students' knowledge of the words as well as to introduce and train as many vocabulary learning strategies as possible to the students. Therefore, a number of strategies were implemented at this stage. In Week 3, teacher introduced and guided students on how to connect words with their synonyms and antonyms (memory strategy). In Week 5 and 7, teacher introduced and guided students on how to construct a semantic mapping of the words (memory strategy). In Week 9, teacher introduced and guided students on how to analyze word parts in order to determine the word meaning (determination strategy).

In the sixth step, the teacher put the students in pairs. Firstly, teacher explained the benefit of group discussion in learning words and guided the students on how to do the discussion. Then, the teacher asked the students to discuss and compare the entries of their vocabulary notebooks from the previous steps to their partner. At the end of the activity, the teacher asked the students to add up or revise the entries of their vocabulary notebooks as the results of their discussion. This was the implementation of the social strategy that could be used by the students to learn with their friends out of the class.

In the next step, the teacher required the students to use the target words in playing games. There were two games introduced at this stage namely Charades and Pictionary. Charades is a vocabulary game that requires students to guess the words based on clues represented by using physical action, whereas Pictionary is a vocabulary games that requires students to guess the words based on clues presented through pictures. Charades was played in Week 3 and 7 and Pictionary was played in Week 5 and 9. Before starting the games, the teacher explained the benefit of the games and related them to the vocabulary learning. Next, teacher provided detail directions for playing the games and did the demonstration before allowing students to play on their own.

The last step was the assessment. The teacher conducted an assessment by collecting the students' vocabulary notebooks. The teacher took the students' vocabulary notebooks and brought them home to be assessed. The teacher checked the students' work in each step to see whether the students had done the tasks correctly and seek the mistakes done by the students. Most of the students' mistakes were in making

sentences and paraphrasing the teacher's information. Later in the class, the teacher discussed the mistakes with the students and showed them how to solve it. Next, the teachers gave some minutes to the students to fix their mistakes on the vocabulary notebooks.

Since the Marzano's six-step strategy consisted of long sequences, and the class duration was only 90 minutes, it was impossible to conduct all the instruction steps in one meeting. Therefore, one lesson plan was used for two meetings. The first step to the fourth step were applied in the first meeting and the rests were used in the following meeting. The division was based on the suggestion from R. J. Marzano (2009). The summary of the construct of the lesson plans is shown on Table 3.1 and the complete lesson plans can be seen in Appendix A.

Step	Procedures of Direct Vocabulary Instruction	Vocabulary Learning Strategies Instruction
1	<ul> <li>Teacher administers a vocabulary levels test (VLT) to determine the students' vocabulary level as the focus of the instruction</li> <li>Teacher conducts a small survey in the class to select the target words to learn</li> </ul>	ยาลัย VERSITY
2	<ul> <li>Teacher shows a picture and ask students what word the picture represents</li> <li>Teacher explains the benefit of verbal repetition in learning words</li> <li>Teacher pronounces the words and asks students to repeat after him.</li> </ul>	Teacher teaches verbal repetition (cognitive strategy) through the explanation and the repetitive pronunciation

Table 3.1 The Integration of Direct Vocabulary and Vocabulary Learning StrategiesInstruction

<b></b>		
	Teacher repeats until students can	
	pronounce them fluently.	
	- Teacher explains and trains	Teacher explains how to use
	students how to use dictionary in	dictionary in learning words
	learning new words	(determination strategy) through
	- Teacher provides the samples of	explanation and guidance
	sentences using the words.	
	- Teacher asks students to record	
	his explanation on students'	
	vocabulary notebooks	
3	- Teacher asks students to restate	Teacher teaches paraphrasing
	his explanation of the words on	word meanings (memory strategy)
	their own words. In order to do so,	through explanation and guidance
	teacher firstly explains and guides	
	students on how to paraphrase	
	sentences.	
	- Teacher asks students to make	Teacher teaches using new words
	sentences using the words on	in sentences (memory strategy)
	their own.	through explanation and guidance
	- Teacher asks students to record	
	the paraphrase and sentences on	ยาลย
	their vocabulary notebooks.	VERSITY
4	- Teacher explains the benefit of	Teacher teaches imaging word
	imaging word meanings and	meaning (memory strategy)
	guides students to construct	through explanation and guidance
	pictorial representation	
	- Teacher asks students to draw	
	their own pictorial representation	
	- Teacher asks students to record it	
	on their vocabulary notebooks	
5	Week 3	Teacher teaches connecting words
		to its synonyms and antonyms
I		

	- Teacher explains and guides	(memory strategy) through
	students on how to identify	explanation and guidance
	synonyms and antonyms of the	
	words	
	- Teacher asks students to identify	
	the synonyms and antonyms of the	
	words on their own on their	
	vocabulary notebooks	Teacher teaches semantic
	Week 5 and 7	mapping (memory strategy)
	- Teacher explains and guides	through explanation and guidance
	students on how to make semantic	
	mapping	
	- Teacher asks students to make	
	semantic mapping of the words on	
	their own	Too shor too shop word nort
	Week 9	Teacher teaches word part
	- Teacher explains and guides	analysis (determination strategy)
	students on how to analyze word	through explanation and guidance
	parts to determine the word	
	meaning	10
	- Teacher asks students to analyze	ยาลัย
	the word parts to determine the	VERSITY
	word meaning on their own	VEHOIT I
	- Teacher asks students to record	
	the task on their vocabulary	
	notebooks	
6	- Teacher puts students in pairs	Teacher teaches group discussion
	- Teacher explains the benefit of	of words (social strategy) through
	group discussion in learning	explanation and guidance
	words	
	- Teacher asks students to discuss	
	and compare the entries of their	
	-	

	vocabulary notebooks to their	
	partner	
	- Teacher provides chance for	
	students to add up or revise the	
	entries of their vocabulary	
	notebooks	
7	- Teacher groups the students	
	Week 3 & 7	
	- Teacher explains the benefit of	Teacher teaches the use of
	playing with words through	physical action (memory strategy)
	physical action	through explanation and
	- Teacher explains the directions	demonstration of Charades
	of playing Charades and provide	
	demonstration	
	- Teacher allows students to play	
	the game on their own	
	Week 5 & 9	0
	- Teacher explains the benefit of	Teacher teaches the use of
	6	pictorial representation (memory
	pictorial representation	strategy) through explanation and
	- Teacher explains the direction of	demonstration of Pictionary
	playing Pictionary and provides	VERSITY
	demonstration	
	- Teacher allows students to play	
	the game on their own	
8	- Teacher conducts an assessment	
	by collecting and checking the	
	students' vocabulary notebooks	
	- Teacher discuss the students'	
	mistakes and let them fix the	
	mistakes and let mem mix the	

mistakes on their vocabulary				
notebooks				

### 3.3.1.2 The validation of the lesson plans

Before the lesson plans were used in the experiment, they were evaluated by experts to check the content validity. Three experts were invited to validate one sample of the lesson plans. The criteria for choosing the three experts are: 1) they are working in the field of Teaching English as a Foreign Language (TEFL) and Teaching English to Speakers of Other Languages (TESOL), and 2) they have been experiencing in teaching English for university level for 4 to 10 years. They were asked to validate the appropriateness of a lesson plan (Meeting 1 and 2) applying direct vocabulary and vocabulary learning strategies instruction using Marzano's six-step strategy in terms of objectives, teaching procedures, and assessment. The experts validated the lesson plan by using a validation form (IOC). The form used three-rating scale that indicated the experts' opinions for each item. The scales are explained as follows:

1	means	the item is appropriate

0 means not sure

-1 means the item is not appropriate

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In order to examine the value of the IOC, the research used the following

formula:

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

IOC	means	the index of congruence
R	means	total score from the experts' opinions
N	means	the number of experts

The instrument is considered as appropriate to use in the study if the IOC value is higher than 0.5, but if the IOC value is lower than 0.5, it means that the instrument is not appropriate for the study and need revision. Table 3.2 below shows the results of IOC form of the lesson plan.

Items		<b>Experts' Opinions</b>		
	1	0	-1	-
1. Objectives				
1.1 Terminal Objective:				
Students will be able to:				
- Use academic vocabulary in academic contexts	3	-	-	1
- Implement vocabulary learning strategies on their				
own	3	-	-	1
1.2 Enabling Objectives:				
Students will be able to:				
- Pronounce the academic words correctly				
- Guess the academic word meaning from its	3	-	-	1
contexts	3	-	-	1
- Paraphrase teachers' explanation of the				
academic words	2	1	-	0.67
- Make sentences by using the academic words				
- Construct a picture, symbol, or graphic	3	-	-	1
representing the academic words	2	1	-	0.67
- Identify the synonyms and antonyms of the				
academic words	SIT <sup>3</sup>	-	-	1
- Discuss and compare their vocabulary notebook				
entries to their partner	3	-	-	1
- Identify or guess the academic words correctly				
based on the physical action clues (Playing	3	-	-	1
Charades)				
3 Assessment				
Evaluate students' vocabulary notebooks	2	1	-	0.67
4 Teaching Procedures				
4.1 Pre-task	2	1	-	0.67

Table 3.2 The Results of the IOC form of the Lesson Plan

Mean Score of IOCs				0.86
4.8 Extra-class work	-	3	-	0
4.7 Step 6	3	-	-	1
4.6 Step 5	3	-	-	1
4.5 Step 4	3	-	-	1
4.4 Step 3	3	-	-	1
4.3 Step 2	3	-	-	1
4.2 Step 1	2	1	-	0.67

Form the table 3.2, it shows that all the items in the IOC form were higher than 0.5, except for the extra-class work in teaching procedures. It indicated that all the items were appropriate and could be used in the study, except the extra-class work that needed to be revised. Overall mean score of the IOC was 0.86 (IOC > 0.5). it means that all experts agreed that the lesson plan was appropriate to be used. Apart from that, the researcher still needed to make some revisions based on the results and the experts' comments. The experts' comments of the IOC form are as follows:

Expert A: The lesson plan seemed to be very teacher-centered, and the teacher needed to apply theories into practice and made the lesson plan more interactive and more interesting.

Expert B: The teacher should have briefly explained how to do the assessment, and the teacher should have applied the same strategy as in the pre-task for the extra-class work, so the students could follow the same process as they did in the class at home.

Expert C: The extra-class work in teaching procedures was not relevant to the Marzano's strategy.

Based on the experts' comments, the researcher made some adjustments in the part of the extra-class work and the assessment. The researcher agreed with the suggestion of the Expert B which was to use a reading passage as in pre-task to introduce the target words to the students. In this case, the students would do completely the same process as they did in the class but on their own without any assistance from the teacher. Other than that, the researcher also added a brief explanation on how to do the assessment.

In response to the Expert A who claimed that the lesson plan was very teachercentered, the researcher did not make any changes on the teaching procedures since it has been adapted from the strategy and model designed by R. J. Marzano (2004a, 2004b, 2009). Apart from that, the instruction did not only aim to improve the students' vocabulary size, but also to introduce and train the students some vocabulary learning strategies that they could apply on their own learning out the class. As a trainer, the teacher was supposed to take most control to explain and demonstrate how to perform the strategies before letting them do on their own. It was teacher-centered in the class but the students would be able to take control of their own learning at home. As the vocabulary scholars says that it is impossible for learners to learn all the words in the class since the time is very limited. So that the students should autonomously learn most of the words at home, and it is the teacher's responsibility to introduce them a number of vocabulary learning strategies.

In response to the Expert B and C, the researcher added a brief explanation about the extra-class work. In addition, the researcher also changed the activity in extra-class work from giving the students a list of vocabulary and asked them to learn them at home to a reading passage with some bold words. This was the same activity as they did in the pre-task, but the content of the reading passage was totally different.

#### 3.3.1.3 The pilot study

After revising the sample of the lesson plan based on the experts' comments, the researcher conducted a pilot study to check its appropriateness. The pilot study was conducted at University of Kutai Kartanegara, Indonesia. It was conducted among 32 students from the second year majoring in English education department, Faculty of Education for academic year 2017/2018. After the pilot study, the research found that some parts of the lesson plan need adjustments, especially in the time allocation. The researcher found that the students needed longer time to deal with the tasks in Step 1 and did less time in Step 2. Therefore, the researcher lengthened the time allocation in Step 1 from 15 to 20 minutes to 25 to 30 minutes and shortened the time allocation in Step 2 from 25 to 30 minutes to 15 to 20 minutes.

An adjustment was also made in the vocabulary notebooks. While the pilot study, the students were difficult to deal with the design of the vocabulary notebooks

that they considered too small. They needed more spaces to work on the activities in Step 1, 2, and 3 especially for the pictorial representation. Therefore, the researcher adjusted the design of the vocabulary notebooks to be bigger and larger.

While doing the Step 1, the researcher found that the students could not perform the strategy of guessing word meaning from its context. The students were difficult to guest the meaning because they did not understand many words around the target words. Nation (2008) suggests some conditions that need to apply for this strategy to be effective, and one of them is that the learners need to know around 98% of the running words of the passage. In order to cope with the coverage, the students need to master the 2000 – 3000 high frequency words since they cover most of the texts. Therefore, the researcher implied that the difficulty was caused by the lack of vocabulary size possessed by the students. If it were the case, the researcher needed to switch the strategy to the other strategy that was more suitable for the students because what happened to the students of the preliminary study, as well as the pretest, showed that the students have not mastered the 2000 level of high frequency words. It implied that the students had very low vocabulary size and might be difficult to perform the guessing word meaning from its context strategy.

### **3.3.2 Data collection tools**

The data collection tools included the Vocabulary Levels Test (VLT) and the semi-structured interviews. The VLT was used before and after the treatment to see the difference of the students' vocabulary size, whereas the semi-structured interviews were administered after the treatment to investigate the students' opinions towards the implementation of the treatment.

### 3.3.2.1 Vocabulary Levels Test (VLT)

The Vocabulary Levels Test (VLT) used in this study was the version of Schmitt et al. (2001). It has been widely used in vocabulary knowledge assessment (Nation, 2008) and vocabulary research (Nirattisai & Chiramanee, 2014). According to Meara (1996), VLT has been called the nearest thing to a standardized vocabulary test available. It is a diagnostic test which can also be used to measure vocabulary size (Nation, 2008). As a diagnostic test, was used to see the students' present vocabulary levels and was administered before the treatment as pretest to identify which levels that the students were lack of and how large vocabulary they had. The results of the test were analyzed to determine the vocabulary levels that would be focused on the vocabulary instruction.

The VLT that was adopted in the present study was the revised version of the one that was originally developed by Nation (1983). It consisted of two blocks, one on the left and one on the right. The left block consisted of six words numbered 1 to 6 as the answer choices, whereas the right block consisted of 3 definitions with blanks. The students selected the available choices on the left based on the definitions on the right block by putting the number of the word chosen on the blanks. The following illustrates the format of the test.

Figure 3.2 The Format of the VLT

1 concrete	
2 era	circular shape
3 fiber	top of a mountain
4 hip	a long period of time
5 loop	
6 summit	

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The VLT measured five vocabulary levels based on the frequency namely the 2,000, 3,000, 5,000, academic vocabulary, and 10,000 word level. Each of those levels consisted of 1,000 word families. Each level of the test consisted of 30 items and it made up the total 150 items for all levels. Each item in 2,000, 3,000, 5,000, and 10,000 levels represented 33 words (1000:30). It means that if a student correctly answered 20 out of 30 items, the learners knew approximately 667 words from the level. For Academic Word List level, each item represented 19 words because the level only consisted 570 words in total. Thus, a score of 20 out of 30 means that learners knew about 380 words in the level. Nation (2008) requires 90% of the words, meaning 27 out of 30 words, should be known by learners to claim that the learners know the level. The sample VLT that will be used on this study can be seen on Appendix C.

### 3.3.2.2 Semi-structured Interviews

The qualitative data of this study were taken from the semi-structured interviews administered after the treatment completed. The data were analyzed by using content analysis.

### 3.3.2.2.1 The construct of the semi-structured interview questions

After the treatment and the posttest, six students were chosen purposively to participate in semi-structured interviews. The six students represented three categories of students based on their vocabulary scores in posttest. Those categories are including students' low vocabulary size level (LVS), mid vocabulary size level (MVS) and high vocabulary size level (HVS). Two students with the lowest posttest scores were chosen to represent the low vocabulary size level, two students with the closest posttest scores to the mean score were chosen to represent the mid vocabulary size level, and two students with the highest posttest scores were chosen to represent the high vocabulary size level. The students were asked to respond to six questions in the interview process in order to explore their opinions about the treatment of direct vocabulary and vocabulary learning strategy training using Marzano's six-step strategy. The semi-structured interview questions were about the students' general opinion about the vocabulary instruction, their feeling about doing the activities, their comments about teachers' explanation and demonstration, the effect of their involvement during the activity, their impact of the strategies towards their vocabulary development, and the implementation of the strategies at home. The interviews were conducted in Bahasa Indonesia to let the students express their opinions freely without language barriers. The process of interviews was audio-recorded and transcribed for qualitative data analysis. The interview questions were developed by the researcher and were validated by experts by administering IOC form. The questions of interviews are presented in Appendix B.

### 3.3.2.2.2 The validation of the semi-structured interview questions

Three experts were employed in the validation process of the interview questions. The three experts validated the instrument by administering an IOC form. The IOC form had the same format as the IOC form of the lesson plan. The results of the IOC form are presented on the table 3.3 below.

Interview Questions		Expe	rts' Op	inions	IOC
		1	0	-1	
1. Wha	t do you think about the vocabulary class?	3	-	-	1
2. How	do you feel about the activities used in	3	-	-	1
each	step?				
3. Did	you learn from teacher's explanation and	2	1	-	0.67
demo	onstration?				
4. To w	hat extent did you learn new vocabulary	3	-	-	1
items	s when you were asked to get involved in				
the p	rocess?	5			
5. Does	the vocabulary class affect your	3	-	-	1
voca	bulary development?	4			
6. Do y	ou use the activities to learn vocabulary	3	-	-	1
at he	ome? What activities do you use most				
frequ	ently?				
	Mean Score of IOC	3			0.95

Table 3.3 The Results of IOC Form of the Semi-structured Interviews

The results of the IOC showed that all the questions were appropriate because the IOC of each question was higher than 0.5. The mean score of the IOC was 0.95 which means that overall the instrument was appropriate to use in the study. Among the three experts, only one expert that provided comments for the revision. The expert's comments are shown as follow:

Expert A: The question 3 and 5 should be added another question 'How?'.

According to the experts' comments, the researcher revised the interview questions as follows:

- 1. What do you think about the vocabulary class?
- 2. How do you feel about the activities used in each step?
- 3. Did you learn from teacher's explanation and demonstration? How?

- 4. To what extent did you learn new vocabulary items when you were asked to get involved in the process?
- 5. Does the vocabulary class affect your vocabulary development? How?
- 6. Do you use the activities to learn vocabulary at home? What activities do you use most frequently?

Since the interviews were conducted by using the students' mother tongue, Bahasa Indonesia, the researcher conducted a back translation to make sure that the translated version of the instrument was equivalent with the original one. Two experts who were fluent in both English and Bahasa Indonesia were employed in the process. Expert A was asked to translate the original version of the instrument into Bahasa Indonesia. And, Expert B was asked to translate the Bahasa Indonesia version from the Expert A into English. Next, the researcher checked the equivalence of the English version from the Expert B and the original version. The result showed that the two versions of the instruments were equivalent. It indicated that the Bahasa Indonesia version of the instrument was equivalent with the original version, and so that the instrument was ready to use in the study.

3.3.2.2.3 The process of coding the interview transcripts

The process of coding the interview transcripts in this study followed the coding guidelines from Raymond (1992). The guidelines consist of six-step process of coding the interview transcripts such as; 1) define the coding categories, 2) assign the code labels to the codes, 3) classify the relevant information into the categories, 4) test the reliability of the coding, 5) measure the reliability of the coding, and 6) locate the sources of the unreliability in the coding.

In order to define the coding categories, the researcher read the interview transcripts many times to determine the key concepts. In general, the researcher found that all the students' answers referred to the positive and negative effects of the implementation direct vocabulary and vocabulary learning strategies instruction. The researcher then labelled the positive effects as "Advantage" and the negative effects as "Challenge". After that, the researcher reread the transcripts after being separated into the two key concepts and classified the sub-categories of each key concepts. The "Advantage" were classified into three sub-categories namely self-expression and

motivation in learning vocabulary, vocabulary improvement, and improvement in using the strategies. On the other hand, the "Challenge" were also classified into three subcategories namely task complexity, lack of motivation in learning vocabulary, and struggles in learning and applying the strategies.

Next, the researcher labelled the transcripts based on the key concepts by highlighting the "Advantage" with yellow highlighter and the "Challenge" with blue highlighter. Then, each statement was labelled with an abbreviation regarding the subcategories such as self-expression and motivation in learning vocabulary marked as "SM", the vocabulary improvement marked as "VI", the improvement in using the strategies marked as "IS", the task complexity marked as "TC", the lack of motivation in learning vocabulary marked as "LM", and the struggles in learning and applying the strategies marked as "SL". After labelling the codes, the researcher split the statements of the interview transcripts into the relevant sub-categories. The other process are presented in the following description.

### 3.3.2.2.4 The reliability of coding interviews

In order to check the inter-rater reliability of coding the interviews, the researcher employed Pearson Product-Moment correlation coefficient. The results suggested that the two raters were highly consistent in coding the information.

Raters	Pearson Product-Moment
R1 & R2	<del>นั้นหาวิทยาลัย</del> 0.987
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### 3.3.2.2.5 The pilot study

In order to check whether the students understood the questions, the pilot study was conducted by the researcher among 3 students who were not from the experimental class. The three students were chosen randomly. The 3 students were asked six questions in the interview, and it took around 3 to 5 minutes for each student to complete the interview process. The interview was using Bahasa Indonesia as the mother tongue of the students. The students' interviews were audio-recorded and transcribed later for the analysis. During the interview, the researcher made a note of the students' response, pause, and obstacles. In the interview, the researcher also asked

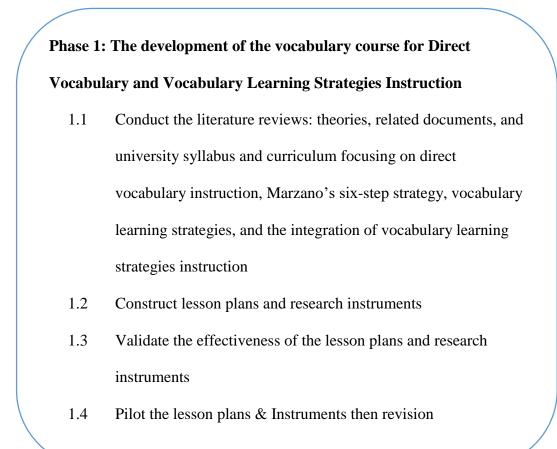
the students whether they could understand the questions well and gave the appropriate answers. All the students claimed they could understand the questions clearly and could also give the appropriate answers to the interviewer's questions. The students' answers also confirmed that the students could answer the questions very well. In conclusion, the students of the pilot study had no problems in understanding the questions, and thus the interview questions were ready to be administered for the experimental class.

### **3.4** Research Procedures

The research procedures included two phases which were the preparation phase and the implementation phase. The preparation phase involved the review of related literatures and theories, related documents, and university syllabus and curriculum. The review of related literature and theories were focused on direct vocabulary instruction, Marzano's six-step strategy, vocabulary learning strategies, and the instruction of vocabulary learning strategies. The researcher constructed the lesson plans and research instruments, had them validated, and used them in piloting. The process also included the revision of the lesson plans and research instruments.

In the implementation phase, the researcher firstly started conducting the pretest before doing the treatment by implementing Marzano's six-step strategy for direct vocabulary and vocabulary learning strategies. The pretest was conducted by administering VLT in order to determine students' present vocabulary level. The result of the test determined what vocabulary levels students were lack of and it became the focus on the instruction. Besides that, the test was used to measure students' vocabulary size before being given treatment.

The pretest was conducted in Week 1, whereas the treatment was conducted in Week 2 until Week 9. After giving the treatment, the posttest was conducted in Week 10 in order to examine the students' vocabulary size before conducting interviews in Week 11. The interviews aimed to investigate the students' opinions towards the implementation of the strategy in the treatment. After that, the researcher started doing the data analysis including both quantitative and qualitative data. The process of the Phases 1 and 2 are presented in Figure 3.3 below.



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## Phase 2: The implementation of Direct Vocabulary and Vocabulary

### **Learning Strategies Instruction**

- 2.1 Pretest: to examine students' vocabulary size as well as their vocabulary mastery level
- 2.2 During the experiment the researcher conducts direct vocabulary and vocabulary learning strategies instruction
- 2.3 Posttest: to examine students' vocabulary size after the treatment
- 2.4 Semi-structured Interviews: to investigate the students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction
- 2.5 Data Analysis:
  - Compare the students' vocabulary size before and after having treatment of direct vocabulary and vocabulary learning strategies instruction
  - Investigate students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction

### **3.5 Data Collection Procedure**

The data collection approximately took 11 weeks including the process of conducting pretest, classroom intervention, posttest, and interviews. The data collections are described in details in Table 3.4.

Week	Lesson / Content	Products
1	Conducting pretest by administering VLT	Vocabulary size / vocabulary mastery level
2 - 9	Applying the treatment of direct vocabulary and vocabulary learning strategies instruction	Vocabulary notebooks and vocabulary assignments
10	Conducting posttest by administering VLT	Vocabulary size
11	Conducting interviews	Students' opinions

Table 3.4 The Summary of Data Collection Procedures

### 3.6 Data Analysis

The data analyses involved both quantitative and qualitative data. The Table 3.5 below presents the summary of data analysis divided by two research objectives.

Research Questions	Types of	Types of	Data Analysis
	Instruments	Data	
<b>RQ.1</b> To what extent does direct vocabulary and vocabulary learning strategies instruction enhance Indonesian prospective English teachers' vocabulary size?	ารณ์มหาวิท VLT NGKORN UNI	Quantitative data	Mean scores, SD, and dependent t- test, Cohen's <i>d</i>
<b>RQ. 2</b> What are students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction?	Semi- structured Interviews	Qualitative data	Content analysis

### 3.6.1 Estimating Vocabulary Size, Pretest-posttest Analysis and Categories of Interview Findings

1. The students' vocabulary size reflected by their scores in VLT both in pretest and posttest. Since the VLT measures five levels of vocabulary; 2,000, 3,000, 5,000, academic vocabulary, and 10,000 levels, the scores of each level were counted and were later accumulated to get the total scores. All vocabulary levels represented 1,000 words except the academic vocabulary, consisting only 570 words. Therefore, the calculation of academic words were different from the others. The scores of 2,000, 3,000, 5,000, and 10,000 levels are counted by using the following formula:

Vocabulary scores = 
$$\frac{total \ correct \ items}{30} x \ 1,000$$

Whereas, the scores of academic vocabulary level were counted based on the following equation:

Vocabulary scores (VS) = 
$$\frac{total \ correct \ items}{30} x \ 570$$

To get the total vocabulary size possessed by a student, the vocabulary scores in 2,000, 3,000, 5,000, 10,000 and Academic word list were summed up. In order to determine the students' vocabulary mastery level, the focus of vocabulary instruction, the researcher reflected to Nation's guidance (2008). He assumes that students master the particular levels of vocabulary if they can answer 27 out of 30 items correctly. It means that if a student correctly answers 27 out of 30 items, he does not need to learn that level anymore. For instance, Abraham correctly answers 28 items in 2,000 level, 25 items in 3,000 level, 27 items in 5,000 level, 20 items in 10,000 level and 26 items on Academic word list.

$$2,000 \text{ level} = \frac{28}{30} \times 1,000 = 933$$
$$3,000 \text{ level} = \frac{25}{30} \times 1,000 = 833$$
$$5,000 \text{ level} = \frac{27}{30} \times 1,000 = 900$$
$$10,000 \text{ level} = \frac{20}{30} \times 1,000 = 667$$
$$3,000 \text{ level} = \frac{26}{30} \times 570 = 494$$

Total Vocabulary Size= 933+833+900+667+494 = 3,827

So, the vocabulary size possessed by Abraham is approximately 3,827 word families. On the other hand, to determine which level Abraham should focus on, we should firstly look at the high frequency words which is the 2,000 level. He correctly answers 28 out of 30 items. It means that Abraham is assumed to have mastered the level, so the focus should move to the academic word list. He only correctly answers 26 of the level. It is less than 27 as the standard of mastery level. It suggests that Abraham should focus his vocabulary development on academic word list.

2. The pretest and posttest scores were analyzed by using mean scores, standard deviation (SD), and dependent t-test to prove the hypotheses.

3. The students' opinions were analyzed by using content analysis. The researcher transcribed the interviews and classified the information into categories. The criteria of key concept category were developed by the researcher based on the positive and negative effects of the direct vocabulary and vocabulary learning strategies instruction on the students' on the students learning. The two key concepts were "Advantages" and "Challenges". The "Advantages" consisted of 3 subcategories namely self-expression and motivation in learning vocabulary, vocabulary improvement, and Improvement in using the strategies, whereas the "Challenges" also consisted of 3 subcategories namely task complexity, lack of motivation in learning vocabulary, and struggles in learning and applying the strategies. The key concepts and the statements are presented on the table 3.6 below.

Key Concepts of Interview		Key Statements
Findings		
Advantages	1	
Self-expression and motivation	-	Students were happy to join the vocabulary
in learning vocabulary		class
(SM)	-	Students thought that the vocabulary class
		was useful
	-	Students were happy to learn new words

Table 3.6 Categories of Interview Findings

Vocabulary Improvement	- Students felt that their vocabulary was
(VI)	improved
	- Students learned the meaning of new words
	- Students could use the words in appropriate
	context
	- Students could remember the words easily
	- Students could visually represent the words
Improvement in using the	- Students could perform the strategy well
strategies	- Students understand the teacher' instruction
(IS)	- Students could understand the tasks better
	from demonstration
	- Students applied the strategies to learn
	vocabulary at home
Challenges	
Task complexity	- The tasks was so difficult to do
(TC)	- The time used for the activities was too short
	- The tasks were overwhelming
Lack of motivation in learning	- Students did learn new words at home
vocabulary	- Students did not apply the strategies on their
(LM)	own
Current of	- Students rarely used the strategies to learn
GHULALUN	new words
Struggles in learning and	- Students mentioned their problems in
applying the strategies	dealing with the strategies
(SL)	- Students mentioned their problems in
	learning
	- Students expressed their feeling or opinions
	towards the difficulties in learning
L	

### 3.7 Summary

This study was one-group pretest-posttest, pre-experimental design. It was aimed to investigate the effects of direct vocabulary and vocabulary learning strategies

instruction on Indonesian prospective English teachers' vocabulary size. The research was conducted among 33 first-year students majoring in English education department at University of Kutai Kartanegara, Indonesia. The students were given tests before and after the treatment to measure their vocabulary size. Later, three students were purposively selected to participate in a semi-structured interview to figure out their opinions about the implementation of the treatment. The finding of the study will be presented in the following chapter.



## CHAPTER 4 FINDINGS

This chapter presents the results from the study of the effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size. In this section, the results are presented in two parts based on the research questions of the study as follows:

- 1. To what extent does direct vocabulary and vocabulary learning strategies instruction enhance Indonesian prospective English teachers' vocabulary size after learning?
- 2. What are the students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction?

## 4.1 Part one: To what extent does direct vocabulary and vocabulary learning strategies instruction enhance Indonesian prospective English teachers' vocabulary size after learning?

In order to answer the research question 1, the researcher administered the t-test to figure out the difference of the mean score in pretest and posttest as well as to test the hypothesis. The results of the dependent t-test is presented on the table 4.1 below.

	n	Min	Max	Mean	SD	Mean	t	Sig.(2-
						Difference		tailed)
Pretest	33	11	102	41.18	24.706	4.46	2.114	.042
Posttest	33	18	108	45.64	23.261			

Table 4.1 The Difference of the Students' Pretest and Posttest

The results of the table 4.1 show that the mean difference between the pretest and the posttest was 4.46, and the t-value was 2.114. It showed that there was a significant difference between the students' scores in pretest and posttest at 0.05 level (p < 0.05). Since the p-value (0.042) was less than 0.05, the null hypothesis was rejected. It indicated that there was a significant effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size.

Furthermore, the researcher employed Cohen's d to investigate the effect size of the direct vocabulary and vocabulary learning strategies instruction on the students' vocabulary size. The value of the effect size was interpreted based on the classification by Cohen (2013) as follow:

Value of dLabel0.2 > 0.4Small Effect0.5 > 0.7Medium Effect> 0.8Large Effect

The effect size of direct vocabulary and vocabulary learning strategies instruction on the students' vocabulary is presented on the table 4.2 below.

Table 4.2 The Effect Size of Direct Vocabulary and Vocabulary Learning StrategiesInstruction

0.37จุฬาลงกรณ์มหาวิทยาลัย Small

From the table 4.2 above, the Cohen's d value was 0.37 which fell into 0.2 category. The result indicated that direct vocabulary and vocabulary learning strategies instruction had a small effect in enhance the students' vocabulary size.

Table 4.3 below presents the students' scores of the VLT in the pretest and posttest as well as the vocabulary size. The students' vocabulary size was estimated based on the guidance from Nation (2008). Since each level of the VLT did not represent the same number of words, the researcher counted and presented the data based on every level.

Levels	n	Pretest		Posttest	
		Scores	VS	Scores	VS
2000	33	16.06	535	17.48	583
3000	33	10.24	341	10.85	362
5000	33	5.70	190	5.88	196
1000	33	2.24	75	2.12	71
AWL	33	6.94	132	9.30	177
Total	33	41.18	1,273	45.64	1,388
		1918 -	11/1/1		

Table 4.3 The Students' Scores and Vocabulary Size

From the table 4.3, the students' mean score in the pretest was 41.18 out of 150 items, or only 27.5% from the total items in the VLT. It estimated that on average the students had approximately 1,273 word families before the implementation of direct vocabulary and vocabulary learning strategies instruction. The data also revealed that the students did not master any levels in the test because their average score on each level were below 90% as suggested by Nation (2008). The students did the best performance at the 2000 level. They gained the average score of 16.06 out of 30 items at the level. It assumed that the students knew 535 word families at this level, which is high frequency words. Since the score was below 90%, the researcher decided that the level became the focus of the instruction during the treatment. On the other hand, the data showed that the students did the worst performance at the 10000 level, which is the low frequency words. They only answered 2.24 out of 30 items on average at that level or around 7.5% from the total items. The score implied that the students only knew around 75 word families at the level.

On the contrary, the students' mean score after the treatment was 45.64 out of 150 items, or around 30.4% from the total items in the VLT. On average, the students probably knew 1,388 word families after the implementation of direct vocabulary and vocabulary learning strategies instruction. It showed that the students' vocabulary size had improved for 9.03% after being taught by using direct vocabulary and vocabulary learning strategies instruction. However, the students still did not master any levels of the test because their average scores for each level were still below 90%. The students' did the best performance at the 2000 word level, which was the focus of the instruction.

On average, the students could only answer about 17.48 out of 30 items correctly. It assumed that the students knew about 583 word families at that level. On the other hand, the students did the worst performance at the 10000 word level, which is the low frequency words. This level was not taught during the experiment. The students could only answer about 2.12 out of 30 items in that level. It equals to 71 word families.

The comparison between the students' vocabulary size before and after the treatment of direct vocabulary and vocabulary learning strategies instruction is presented on the figure 4.1 below.

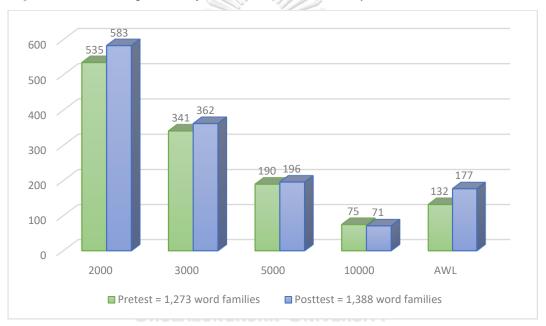


Figure 4.1 The Comparison of the Students' Vocabulary Size in Pretest and Posttest

From the figure 4.1, the students' average vocabulary size in pretest was 1,273 word families and in posttest was 1,338 word families. It showed that there was an improvement of 115 word families on the students' vocabulary size after the treatment. Furthermore, the students' vocabulary size on the 2000 level improved from 535 to 583 word families. This level was the focus of the instruction during the experiment. Another significant improvement was also shown on the academic word level. The students' academic words improved from 132 to 177 word families. Contrarily, the students' vocabulary size in 10000 word level, low frequency words, decreased from 75 to 71 word families.

## 4.2 Part two: What are the students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction?

In order to answer research question 2, the researcher employed semi-structured interviews. The interview was conducted to investigate the students' opinions towards the implementation of direct vocabulary and vocabulary learning strategies instruction to improve their vocabulary size. There were 6 students who were selected purposively to participate in the interview. The six students represented 3 different categories namely high vocabulary size level (HVS), mid vocabulary size level (MVS), and low vocabulary size level (LVS). The interview was conducted in Bahasa Indonesia and lasted for about 3-6 minutes for each student. The interview questions of the study were: 1) What do you think about the vocabulary class? 2) How do you feel about the activities used in each step? 3) Did you learn from teacher's explanation and demonstration? How? 4) To what extent did you learn new vocabulary items when you were asked to get involved in the process? 5) Does the vocabulary class affect your vocabulary development? How? and 6) Do you use the activities to learn vocabulary at home? What activities do you use most frequently? The interview was audio-recorded and transcribed for the data collection and analysis. The data were analyzed using the content analysis based on the method proposed by Burnard (1991).

The students' answers were categorized into two key concepts. The two key concepts were developed by the researcher based on the positive and the negative effects of direct vocabulary and vocabulary learning strategies instruction. The two key concepts were "Advantages" and "Challenges". The "Advantages" implied the positive effects of the treatment, whereas the "Challenges" implies the negative effects of the treatment. The "Advantages" consisted of three subcategories namely self-expression and motivation in learning vocabulary, vocabulary improvement, and improvement in using the strategies, while the "Challenges" consisted of three subcategories namely subcategories namely task complexity, lack of motivation in learning vocabulary, and struggles in learning and applying the strategies.

Students' Answers	Frequencies of key concepts found in students' answers (N=43)	Percentage
Advantages		
- Self-expression and motivation in	12	27.9 %
learning vocabulary		
- Vocabulary improvement	12	27.9 %
- Improvement in using the strategies	11	25.6 %
Challenges		
- Struggles in learning and applying the	5	11.6 %
strategies		
- Task complexity	2	4.7 %
- Lack of motivation in learning	1	2.3 %
vocabulary	2 7	
Total	43	100%

Table 4.4 The Frequencies and Percentage of the Students' Answers in the Interview

### N = Frequencies of the key concepts found in the Interview

Table 4.4 reported the summary of the students' opinions towards the implementation of direct vocabulary and vocabulary learning strategies instruction. In terms of positive aspects, the students expressed that they had positive impressions on the vocabulary class and the implementation of the strategies which affected their motivation in learning new vocabulary (27.9%). The students also felt that the implementation of the strategies had improved their vocabulary size (27.9%). In addition, the students revealed that they could understand and apply the strategies to learn new words (25.6%). On the negative effects of the treatment, the students reported that they found difficulties in dealing with the tasks given by the teacher (4.7%). Besides, the students also revealed that the vocabulary class did not affect their motivation in learning new words at home (2.3%). In addition, the students reported

that they were struggling in dealing with their learning and applying the strategies (11.6%).

### Advantages

### Self-expression and Motivation in Learning Vocabulary.

From the interview, the students expressed their positive impression towards the vocabulary class and the strategies used in learning vocabulary. They claimed that they were happy to join the vocabulary class because it was beneficial for their vocabulary improvement. In addition, they also reported that they liked the strategies used in the class.

Excerpt 1: "Ya sangat membantu karena banyak strategi yang bisa saya pelajari di sini dan tidak saya temukan di tempat lain." [Siswa HVS1]

"<u>The vocabulary class was very beneficial for me</u> because I could learn many strategies that I did not know before." [Student HVS1]

Excerpt 2: "Saya merasa senang karena kegiatan-kegiatannya sangat membantu saya dalam mengingat kosakata. Selain itu, strateginya juga bervariasi sehingga saya tidak hanya belajar arti dari sebuah kata namun juga cara penggunaannya dalam kalimat." [Siswa HVS2]

"<u>I felt happy to learn many new vocabulary and new strategies</u> although I had difficulties in doing semantic mapping." [Student HVS2]

Excerpt 3: "Sangat membantu sekali untuk meningkatkan atau mengingat kembali kosakata yang sudah dipelajari sebelumnya." [Siswa MVS1]

"<u>I think the vocabulary class was so beneficial to improve and recall the</u> vocabulary we have learnt before." [Student MVS1]

Excerpt 4: "Menurut saya kegiatannya sangat bermanfaat. Saya merasa senang dan mudah mempelajari kata-kata baru terutama pada strategi menggambar dan game. Namun, saya merasa agak kesulitan dalam membuat kalimat saya sendiri." [Siswa MVS2]

"<u>I felt that the strategies were beneficial and made me happy and easy to learn</u> <u>new words especially for the strategies of playing games and making pictorial</u> <u>representation</u>. But, I felt difficult to deal with the strategy of making my own sentence." [Student MVS2] Excerpt 5: "Saya rasa sangat berguna karena dengan banyaknya kegiatan, saya berkesempatan mempelajari kata-kata baru secara berulang-ulang dengan metode yang berbeda. Namun saya merasa agak kesulitan dalam membuat definisi kata saya sendiri." [Siswa LVS1]

"<u>I think the strategies were useful and various. So, I could learn new words</u> <u>repeatedly with different strategies.</u> But, I was still difficult to make my own sentence." [Student LVS1]

Excerpt 6: "Menurut saya kelas ini sangat bermanfaat dan menyenangkan." [Siswa LVS2]

"I think the vocabulary class was beneficial and interesting." [Student LVS2]

### **Vocabulary Improvement**

Most of the students reported that their vocabulary was improved after joining the vocabulary class. They claimed that the multi-strategies used in the class made them easily remember the new words and the words that they previously learned. The students also explained that through the strategies used in the class they could not only know the meaning of the words but also could also use the words in sentences based on its context.

Excerpt 7: "Saya merasa lebih mudah mengingat kata-kata yang dipelajari serta memahami cara penggunaannya dalam kalimat." [Siswa HVS1)

"<u>I could remember new words more easily and could use the words in</u> <u>sentences.</u>" [Student HVS1]

Excerpt 8: "Ya sangat berpengaruh. Dari proses pembelajaran yang berlangsung ternyata saya menyadari bahwa masih banyak kata-kata dasar yang belum saya ketahui. Namun, dengan adanya kelas ini, saya bisa menambah kosakata saya terutama untuk kosakata yang paling sering digunakan dalam kehidupan sehari-hari." [Siswa HVS2]

"<u>Yes, the vocabulary class really affected my vocabulary</u>. While learning, I realized that there were still many basic words that I did not know. But, <u>the vocabulary</u> <u>class helped me improved my vocabulary especially for the high frequency words</u>." [Student HVS2] Excerpt 9: "Saya rasa saya bisa menambah kosakata saya serta lebih memahami arti kata beserta penggunaannya. Saya juga lebih mudah mengingat kosakata yang diajarkan." [Siswa MVS1]

"<u>I felt that I could improve my vocabulary, understand the meaning and the use,</u> <u>and remember the words</u>." [Student MVS1]

Excerpt 10: "Sangat berpengaruh sekali. Saya bisa mempelajari banyak kosakata baru dan saya mudah mengingatnya." [Siswa MVS2]

"<u>The vocabulary class had a positive impact in my vocabulary development</u> <u>because I not only learned many new words but also could remember them</u>." [Student MVS2]

Excerpt 11: "Saya menjadi lebih mudah dalam mengingat kosakata yang dipelajari serta memahami arti dan penggunaannya." [Siswa LVS1]

"I could easily remember the new words and understand the meaning and the <u>use</u>." [Student LVS1]

Excerpt 12: "Iya karena saya bisa mempelajari beberapa kosakata baru yang sangat berguna dalam kehidupan sehari-hari." [Siswa LVS2]

"The vocabulary class affected my vocabulary development because I could learn many new words useful for daily life." [Student LVS2]

### **Improvement in Using the Strategies**

Most of the students reported that they were able to apply the vocabulary learning strategies taught by the teacher. Most of them confessed that they had frequently used particular strategies in learning new words on their own outside the class. They also stated that they could better understand how to perform the strategies from the teacher's demonstration. In addition, the student mentioned particular strategies that they mostly used in learning new words at home.

Excerpt 13: "Ya, saya merasa lebih mudah memahami tugas dari demonstrasi guru." [Siswa HVS1]

"<u>I could understand the tasks better from the teachers' demonstration</u>." [Student HVS1] Excerpt 14: "Ya sangat sering. Saya juga menggunakan strateginya untuk menyelesaikan tugas kosakata yang diberikan guru.... Saya paling sering menggunakan strategi membuat kalimat sendiri." [Siswa HVS2]

"<u>I frequently used the strategies at home to do the assignment given by the</u> teacher and to learn new words on my own....<u>I mostly used the strategy of making my</u> own sentence." [Student HVS2]

Excerpt 15: "Ya, saya bisa lebih memahami tugas melalui peragaan dan demonstrasi yang disampaikan oleh guru. Pada awalnya saya merasa sedikit bingung tentang tugastugasnya, namun setelah dikasih contoh akhirnya saya bisa lebih paham." [Siswa MVS1]

"<u>I could understand how to do the tasks better with the teacher's demonstration</u>. At first, I felt confused about the tasks, but after the demonstration I could get it." [Student MVS1]

Excerpt 16: "Ya, saya selalu menggunakannya.... Saya sering mempelajari kata-kata baru yang saya asosiasikan dalam bentuk gestur dan gambar." [Siswa MVS2]

"<u>I always use the strategies at home, mostly for pictorial representation and</u> <u>associating the words with gesture</u>." [Student MVS2]

Excerpt 17: "Ya, karena saya merasa lebih mudah memahami instruksi dari peragaan guru." [Siswa LVS1]

"<u>I felt that I could understand the tasks better from the teacher's</u> <u>demonstration.</u>" [Student LVS1]

Excerpt 18: "Iya, kadang-kadang.... Menghubungkan kata dengan bendanya (visual)." [Siswa LVS1]

"<u>I sometimes use the strategies at home especially for the pictorial</u> <u>representation.</u>" [Student LVS1]

### Challenges

### **Task Complexity**

Aside from the positive effects, the implementation of the treatment in the vocabulary class also had negative impacts including the task complexity. The students reported that they had found a difficulty in dealing with the tasks during the vocabulary class, especially the time allocation. Few students complained that the time allocated to

do the strategies was too short. It implied that the students needed more times to settle with the strategies and tasks.

Excerpt 19: "Menurut saya kegiatan-kegiatan pembelajarannya sangat menarik dan bervariasi, namun saya merasa waktu yang ada untuk menyelesaikan tugasnya terlalu sedikit." [Siswa MVS1]

*"I think the strategies were quite interesting and various, but <u>I think the time</u> <u>allocation was too short.</u>" [Student MVS1]* 

Excerpt 20: "Saya sangat senang dengan kegiatannya karena saya bisa belajar kosakata dengan banyak cara. Tapi, saya merasa kesulitan dalam mengikuti dan mengerjakan semua kegiatannya karena terlalu banyak dan waktunya sedikit." [Siswa LVS2]

"I liked the strategies because I could learn new words by using various strategies. But, I felt difficult to deal with all the strategies because <u>they were</u> overwhelming and <u>the time was too short.</u>" [Student LVS2]

### Lack of Motivation in Learning Vocabulary

The reports of the interview revealed that mostly the students applied the vocabulary learning strategies at home to learn new words on their own. But, there was a student who confessed that she rarely used the strategies that she learned at school to learn new words at home. It implied that she was not motivated in learning new words on their own.

Excerpt 21: "Agak jarang karena saya tidak punya waktu untuk belajar di rumah... (Pernah) Membuat gambar yang berhubungan dengan kata" [Siswa LVS2]

"<u>I rarely used the strategies at home</u> because I was busy.... I once used pictorial representation." [Student LVS2]

### **Struggles in Learning and Applying the Strategies**

From the interview, some students reported that although the vocabulary class mostly had positive effects towards their vocabulary learning, 11.6% of the students revealed that they were struggling in applying particular strategies such as semantic mapping and making sentences. In addition, a student reported that they were struggling because the strategies used were overwhelming, and another student confessed that she was very busy to deal with their learning.

Excerpt 22: "Ya senang sih karena bisa mempelajari kosakata dan strategi baru walaupun agak kesulitan dalam mengerjakan kegiatan-kegiatan tertentu seperti Semantic Mapping." [Siswa HVS1]

*"I felt happy to learn many new vocabulary and new strategies although <u>I had</u> <u>difficulties in doing semantic mapping.</u>" [Student HVS1]* 

Excerpt 23: "Menurut saya kegiatannya sangat bermanfaat. Saya merasa senang dan mudah mempelajari kata-kata baru terutama pada strategi menggambar dan game. Namun, saya merasa agak kesulitan dalam membuat kalimat saya sendiri." [Siswa MVS2]

"I felt that the strategies were beneficial and made me happy and easy to learn new words especially for the strategies of playing games and making pictorial representation. But, <u>I felt difficult to deal with the strategy of making my own sentence.</u>" [Student MVS2]

Excerpt 24: "Saya rasa sangat berguna karena dengan banyaknya kegiatan, saya berkesempatan mempelajari kata-kata baru secara berulang-ulang dengan metode yang berbeda. Namun saya merasa agak kesulitan dalam membuat definisi kata saya sendiri." [Siswa LVS1]

"I think the strategies were useful and various. So, I could learn new words repeatedly with different strategies. But, <u>I was still difficult to make my own sentence.</u>" [Student LVS1]

Excerpt 25: "Saya sangat senang dengan kegiatannya karena saya bisa belajar kosakata dengan banyak cara. Tapi, saya merasa kesulitan dalam mengikuti dan mengerjakan semua kegiatannya karena terlalu banyak dan waktunya sedikit." [Siswa LVS2]

"I liked the strategies because I could learn new words by using various strategies. But, <u>I felt difficult to deal with all the strategies because they were</u> <u>overwhelming</u> and the time was too short." [Student LVS2]

Excerpt 26: "Agak jarang karena saya tidak punya waktu untuk belajar di rumah." [Siswa LVS2]

"I rarely used the strategies at home because <u>I was busy</u>. I once used pictorial representation." [Student LVS2]

### 4.3 Summary

In this chapter, the results of effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size were presented based on two research questions: 1) To what extent does direct vocabulary and vocabulary learning strategies instruction enhance Indonesian prospective English teachers' vocabulary size after learning? 2) What are the students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction?

The part one revealed the findings of the research question one. It showed that there was a significant difference between the students' mean scores of the VLT in pretest and those in posttest at 0.05 significant level. It revealed that the implementation of direct vocabulary and vocabulary learning strategies instruction improved the students' vocabulary size. However, the effect size of the difference was 0.37 which fell into "small effect".

The part two presented the findings of the research question two regarding the students' opinions towards the implementation of direct vocabulary and vocabulary learning strategies during the experiment. The data were obtained by administering a semi-structured interview among 6 students. The findings confirmed that the students felt that the treatment of the study had positive effects towards their vocabulary learning.

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## CHAPTER 5 DISCUSSION AND RECOMMENDATIONS

This chapter deals with the discussion of the findings from the study of the effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size. The first section of this chapter elaborates the summary of the study and the findings. The second section elaborates the discussions of the results of the study, and the last section deals with the pedagogical implications, recommendations for future study, and the limitation of the study.

### 5.1 The Summary of the Study

This study was one-group, pretest-posttest pre-experimental design. It explored the effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size as well as investigated the students' opinions towards the implementation of the treatment. The research design was intended to collect both quantitative and qualitative data.

The objectives of this study were: 1) to explore the effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size, and 2) to investigate the students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction.

The population of the study was the university students majoring in English education department of the Faculty of Education, University of Kutai Kartanegara, Indonesia, for academic year 2017/2018. The total number of the population was 140 students. The samples of the study were the first-year students who were chosen by using random sampling technique. The number of the samples was 33 students.

The research was conducted in two phases which were the preparation phase and the implementation phase. The preparation phase involved the reviews of related literatures and theories, related documents, and university syllabus and curriculum. The reviews of related literature and theories were focused on direct vocabulary instruction, Marzano's six-step strategy, vocabulary learning strategies, and the instruction of vocabulary learning strategies. The researcher constructed the lesson plans and research instruments, had them validated, and used them in the pilot study. The process also included the revision of the lesson plans and research instruments after the pilot study.

In the implementation phase, the researcher firstly started conducting the pretest before doing the treatment by implementing Marzano's six-step strategy for direct vocabulary and vocabulary learning strategies. The pretest was conducted by administering the vocabulary levels test (VLT) to determine students' vocabulary level. The result of the test determined what vocabulary level that the students should focus on the instruction. Besides that, the results of the test was also used to explore the students' vocabulary size before implementing the treatment. The pretest was conducted in week 1, whereas the treatment was conducted in week 2 until week 9. After giving the treatment, the posttest was conducted in week 10 to explore the students' vocabulary size after the treatment, and the interview was conducted in the week 11. Six students were employed to participate in the interview to investigate their opinions towards the implementation of the treatment. After that, the data, both qualitative and quantitative, were analyzed. The quantitative data gained from the pretest and posttest were analyzed by using descriptive statistics such as mean scores and standard deviation (SD) and inferential statistics of dependent t-test. The dependent t-test was administered to prove the hypothesis of this study. On the other hand, the qualitative data were analyzed by using content analysis and frequency and percentage.

# The Summary of Findings

### 5.2

The findings of the effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size were presented into two sections based on the research questions: 1) to what extent does direct vocabulary and vocabulary learning strategies instruction enhance Indonesian prospective English teachers' vocabulary size after learning, and 2) what are the students' opinions towards the treatment of direct vocabulary and vocabulary learning strategies instruction.

In terms of the students' vocabulary size, the results showed that there was a significant difference between the mean scores of the pretest and the posttest at the significance level of 0.05. The results suggested that the students' vocabulary size was improved after the treatment of direct vocabulary and vocabulary learning strategies instruction by using Marzano's six-step strategy and Schmitt's vocabulary learning strategies. In short, it could be concluded that the implementation of direct vocabulary and vocabulary learning strategies instruction enhanced the students' vocabulary size.

Regarding the students' opinions towards the implementation of direct vocabulary and vocabulary learning strategies instruction, the data were obtained from semi-structured interviews of six students representing three categories, namely high vocabulary size level (HVS), mid vocabulary size level (MVS), and low vocabulary size level (LVS). The students' responses were categorized into two which were the positive effects and the negative effects. The results revealed that direct vocabulary and vocabulary learning strategies instruction mostly had positive effects on the students' vocabulary learning including their learning motivation, vocabulary improvement, and improvement in using the vocabulary learning strategies. In addition, the treatment also had some negative effects on the task complexity, students' lack of motivation in learning vocabulary and the students' struggles in learning and applying the strategies.

### 5.3 Discussion

The objectives of this study were to explore the effect of direct vocabulary and vocabulary learning strategies instruction on Indonesian prospective English teachers' vocabulary size and to investigate the students' opinions towards the implementation of the treatment. This section presents the discussions of the findings in relation to the previous studies.

### 5.3.1 The Instructional Design

From the previous related studies, it has been clearly highlighted that Indonesian prospective English teachers had insufficient vocabulary size in order to perform the language effectively. It has affected many researchers to find a teaching method or strategies which is effective to improve the students' vocabulary size. Nevertheless, many of the studies mostly focused on finding a way to teach vocabulary and sometimes without considering what vocabulary to teach. Picking an effective way to teach and learn vocabulary is surely important, however determining what vocabulary to teach is another issue that teachers need to take into account. Therefore, this study first concerned on determining the vocabulary level to teach during the treatment.

In order to determine what vocabulary should be taught during the instruction, the researcher administered the VLT. The result of the diagnostic test revealed the students' vocabulary mastery levels. It showed that the students did not master any levels in the test (2000, 3000, 5000, 10000, and AWL) because their average scores were still below 90% on each level. This is the threshold required by Nation (2008) to claim whether the students master the particular levels on the VLT. Since the students' did not master any levels in the VLT, it suggested that the researcher should first focus on the high frequency words which was the 2000 word level. This level was crucial to be learned and mastered by the students. Since they did not master this level, they could not deal with particular strategies such as guessing word meaning from context because this strategy required the learners to knew most of the words in the texts. In addition, it has been identified that high frequency words cover 80% to 90% of the running texts. On the other hand, although the 2000 word level had been set as the focus of the instruction, however, since the students were university students and used to work with academic tasks, it was also necessary to introduce them the academic word list. Although, this word level would not be taught during the treatment, at least the students knew how important it is for their study and could manage their own learning on this level.

Having determined the 2000 word level as the focus of the instruction, the researcher integrated Marzano's six-step strategy with Schmitt's vocabulary learning strategies for the teaching instruction. The vocabulary learning strategies implemented in the instruction were determination strategies, social strategies, memory strategies, and cognitive strategies. The metacognitive strategy was not used in this study because it is related to the students' awareness to set and determine their own learning and is something that the teacher could teach. In addition, the vocabulary learning strategies used by the researcher were the one that the students could perform on their own outside the classroom such as using dictionary to learn new words, using verbal repetition, paraphrasing the word meaning, using the words in sentences, making pictorial representation, identifying synonyms and antonyms of the words, making semantic mapping, word part analysis, studying the words in group, and associating the word meaning with physical action.

After implementing the treatment, it was necessary to test the students' vocabulary size to see their improvement. The result of the test could be used to judge whether the treatment worked effectively or not. In addition, the result of the test could also be used to set the next vocabulary development program or the future vocabulary instruction. The researcher administered the same test instrument as used in the pretest, which was the VLT. The result of the test showed that there was a significant improvement in the students' vocabulary size after the treatment. However, the students still did not master the 2000 word level, and it is suggested that the teacher should still focus on this level in the future instruction.

# 5.3.2 The Effects of Direct Vocabulary and Vocabulary Learning Strategies Instruction on the Students' Vocabulary Size

The results of the t-test revealed that there was a significant difference between the students' scores in pretest and posttest at the significance level of 0.05. It indicated that the implementation of direct vocabulary and vocabulary learning strategies instruction using Marzano's siz-step strategy and Schmitt's vocabulary learning strategies have improved the students' vocabulary size. The result of this study was consistent with the findings from other studies implementing Marzano's six-step strategy to enhance their vocabulary knowledge, particularly for vocabulary size (Purcell, 2015; Sanders, 2008; Suing, 2012).

The findings from the qualitative data revealed that the direct vocabulary and vocabulary learning strategies instruction had positive effects on the students' vocabulary learning and vocabulary acquisition. The students reported that the multiple strategies applied during the treatment made them remember the words easily, even without memorizing. It proved that providing multiple exposure in learning vocabulary was effective to anchor the target words into the students' long-term memory. In addition, the vocabulary learning strategies instruction also had positive impact on the students' learning autonomy. The findings of the interview showed that the students took an advantage from the teacher's guidance and demonstration of the vocabulary learning strategies in the classroom. It helped the students understand and could perform particular vocabulary learning strategies on their own at home. The use of the vocabulary learning strategies in learning vocabulary on their own at home might also help them boost their vocabulary size.

The findings from the VLT showed that the students' mean score in pretest was 41 out of 150. The number indicated that on average the students knew approximately 1,273 word families. On the other hand, the students' mean score in posttest was about 46 out of 150 indicating that the students probably knew about 1,388 word families. It showed that the students improved their vocabulary size for about 115 word families after being taught in direct vocabulary and vocabulary learning strategies instruction using Marzano's six-step strategy and Schmitt's vocabulary learning strategies for 8 weeks. The students did their best performance at the 2000 level because this level was the focus of the instruction. The students' vocabulary size improved up to 48 word families on average. In addition, the students also showed a big improvement at the academic word level. At this level, the students' vocabulary size improved up to 45 word families on average. It was a significant improvement because the students were not taught that level in the class. Thus, the improvement might be affected by their own learning at home by applying the strategies taught by the teacher such as finding the synonyms and antonyms of the words, using the words in sentences, making pictorial representation of the words, and associating the words with gestures. On the other hand, the S.D. value in pretest was higher than that in the posttest (24.706 > 23.261). It indicated that the students' vocabulary size in posttest was more homogeneous than that in the pretest. However, both S.D. values were considered as quite huge indicating that there was a wide range of the students' vocabulary size distribution. For example, the lowest vocabulary size in pretest was 309 word families, but the highest one was 3,099 word families. It simply showed that students' vocabulary size really varied from one another.

Administering the t-test by comparing the students' scores in the VLT and by comparing the students' vocabulary sizes would reveal a different result. It was caused by the way that the vocabulary size was counted. The estimation of the vocabulary size was counted by dividing the students' scores on each level to 30 (total items) and multiplying it to the total number of words in which the level represents for. Therefore, the estimation of the vocabulary size should be counted individually for each level since each level does not represent the same number of words. For instance, the 2000, 3000, 5000, and 10000 word levels represents 1,000 word families, but the academic words only represents 570 word families. It means that items in the four levels do not have the

same value with those in the academic word level. Therefore, the T-test should be run based on the students' scores in the VLT and not the estimation of their vocabulary size.

Even though the result of the t-test revealed that there was a significant difference between the students' scores of the VLT in pretest and posttest, the result of Cohen's *d* showed that the effect size was small. However, if we referred to students' vocabulary size improvement after the treatment, it showed that essentially the students gained a great improvement. According to Beck et al. (2013), a teacher can explicitly teach only 400 words a year in the class. It implies that by learning vocabulary in the class the students could probably learn up to 400 words a year. It means that on average the students could only learn about 200 words in a semester. In this study, the researcher just implemented the treatment to the students for 8 weeks or about 2 months, but their vocabulary size had been improved for 115 words.

In terms of vocabulary size, the students' vocabulary size before the treatment was about 1,273 word families. This number was a bit lower than the finding of the study conducted by Kweldju (1997). Kweldju found that Indonesian prospective English teachers probably knew about 2,800 word families. The finding of this study was not really different from the finding of the study conducted by Kurniawan (2017) who found that the Indonesian prospective English teachers' vocabulary size in Indonesia was about 1,400 words. The findings of those studies indicated that Indonesian prospective English teachers' vocabulary size was still very low, and the development of their vocabulary size was even decreased year after year. Besides that, the vocabulary size of the students majoring in English department was not really different from the students from other levels and majors. A study by Quinn (1968) revealed that the first-year university students from different majors only possessed less than 1,000 of high frequency words even after learning English for at least 6 years. Another study from Nurweni and Read (1999) found that university students from across fields probably knew about 1,226 word families, and Nurhemida (2007) revealed that senior high students only knew about 1,240 word families. The findings of these studies revealed that the Indonesian students' vocabulary size was still very low. It implied that vocabulary size still become the major problem of Indonesian students, and what Kweldju (2005) claimed that vocabulary is the single problem in learning English for Indonesian students might be true.

Regarding the students' vocabulary mastery levels, both findings in pretest and posttest showed that the students were still lack of vocabulary in each level. According to Nation (2008), a learner can be considered as mastering the levels in the VLT if they can answer 90% of items (27 out of 30 items) in the level. Since the students' mean score was below 90% on each level, it could be concluded that they did not master all the levels in the VLT. Thus, they should focus on learning the high frequency words first, which is the 2000 word level. This finding was consistent with the finding from the studies conducted by Quinn (1968) and Nurhemida (2007).

# 5.3.3 The Students' Opinions towards Direct Vocabulary and Vocabulary Learning Strategies Instruction

The results from the interview indicated that direct vocabulary and vocabulary learning strategies instruction by using Marzano's six-step strategy and Schmitt's vocabulary learning strategies had positive effects on the students' vocabulary learning and acquisition. The positive effects could be seen from the students' motivation in learning new vocabulary, their vocabulary improvement, and their improvement in using the strategies to learn new words.

The results of the interview revealed that all students representing high vocabulary size level (HVS), mid vocabulary size level (MVS), and low vocabulary size level (LVS) expressed that they were happy and grateful to join the vocabulary class as stated in Excerpt 2 "I felt happy to learn many new vocabulary and new strategies." The students were motivated to engage in the learning process because they thought that the vocabulary class as well as the strategies used in each step were beneficial for them to improve their vocabulary as stated in Excerpt 3 "I think the vocabulary class was so beneficial to improve and recall the vocabulary we have learnt before." However, the students had disagreement when they was asked to picked the strategies that they struggled to deal with. The student from HVS level revealed that he was struggling in dealing with the semantic mapping as stated in Excerpt 22 "I had difficulties in doing semantic mapping." On the other hand, the students from MVS level expressed their difficulty when dealing with the strategy of making own sentences as stated in Excerpt 23 "I felt difficult to deal with the strategy of making my own sentence." Whereas, the students from the LVS complained that the strategies were too overwhelming and the time allocated was too short as stated in Excerpt 25 "I felt

*difficult to deal with all the strategies because they were overwhelming and the time was too short.*" It seemed that the students' struggles in dealing with the strategies might be affected by their learning styles.

On the other hand, the results of the interview also revealed that the students from all levels agreed that the vocabulary class had improved their vocabulary as quoted in Excerpt 10 "The vocabulary class had a positive impact in my vocabulary development because I not only learned many new words but also could remember them." They believed that the implementation of direct vocabulary and vocabulary learning strategies instruction by using Marzano's six-step strategy and Schmitt's vocabulary learning strategies had positive effects on their vocabulary development and it was in line with their results in posttest. The students reported that the implementation of the strategies used in each step had helped them remember the new words easily as stated in Excerpt 7 "I could remember new words more easily and could use the words in sentences." Some students said that they had difficulties in memorizing words, but through the strategies in each step they could remember the words easily because the six-step strategy gave opportunities for students to meet and learn the target words repeatedly by using different strategies in the steps as stated in Excerpt 5 "I think the strategies were useful and various. So, I could learn new words repeatedly with different strategies." The result was consistent with R. J. Marzano (2004a, 2009).

In terms of the improvement in using the strategies, the students from all levels confessed that they were able to apply the strategies to learn new words at home on their own as stated in Excerpt 14 "*I frequently used the strategies at home to do the assignment given by the teacher and to learn new words on my own.*" However, the strategies that the students used and the frequency of applying the strategies were varied among the students as in Excerpt 14, 16, and 18. The students' vocabulary learning strategy preference might be influenced by their learning styles. As the consequence, they might have picked the strategies that they felt suitable for them to work with. Although the students preferred to use different strategies on their own, however all the strategies used by them were still part of the memory strategies. The result was different from the findings of the studies conducted by Munandar et al. (2015) and Kristanto (2015). Munandar found that most of the students used determination strategies, whereas Kristanto found that social strategies were used by most of the students. On

the other hand, the findings showed that there was a difference among the students in terms of the frequency of applying the strategies at home. The students from the HVS and the MVS revealed that they had applied the strategies at home to learn new words for quite often as stated in Excerpt 14 and 16. Whereas, the student from the LVS confessed that she rarely used the strategies to learn new words on their own as stated in Excerpt 26 "*I rarely used the strategies at home*." This findings might be one factor that affected the students' vocabulary size.

The goals of the instruction was not only to teach new words to the students but also to teach them how to apply the vocabulary learning strategies at home. The findings of the interview had revealed that the students did apply the strategies at home to learn vocabulary on their own. It indicated that vocabulary learning strategies instruction had successfully promoted autonomous learning among the students and had proven that it also improved their vocabulary size. The students from all levels revealed that they could better understand how to perform the strategies and the tasks from the teacher's demonstration. It showed that the teacher's demonstration really affected the students' improvement in using the strategies on their own outside the class.

In brief, the results of the interview had proven that direct vocabulary and vocabulary learning strategies instruction had positive effects towards the students' vocabulary learning in terms of motivation, vocabulary improvement, and the improvement in using the strategies autonomously.

# 5.4 Limitation of the Study

Although this study have proven that direct vocabulary and vocabulary learning strategies instruction enhanced the students' vocabulary size, there were still some limitations found during the research as follows:

First, the research was conducted when the semester was on going. Therefore, the researcher needed to set an agreement with the students in terms of arranging the schedules for the pretest and posttest, the treatment, and the interview. In this case, the researcher needed to set the schedule that did not overlap with the students' regular class schedule. However, the classroom availability was also needed to be considered since the university had limited classrooms. So, the researcher and the students set the schedule based on that condition. As the consequence, the agreed schedule could not

fit with all students' activity. Some of the students could not come at the class because they needed to work at the time. As the result, some students did not get opportunities to learn particular lesson at some times. On the other hand, the students' punctuality was another challenge to deal with. Many of them could not come in time, so the researcher needed to delay the class for about 15 to 20 minutes for each meeting and could not make an extension because the following class had been occupied by other lecturers. So, the researcher should shortened the time allocation for the activities in order to cover all the steps. As the consequence, the researcher could not run the instructional procedures as planned.

Second, some activities in particular steps needed to present some pictures related to the target words. The researcher previously planned to present the pictures by using LCD projector and the slides. Nevertheless, the university only had few units of the equipment, and they had been occupied by the other lecturers at the time. So, the researcher needed to present his materials by using a printed paper even though the size would be a bit small and was not really clear for the students.

Third, the students' vocabulary knowledge really varied, and it was another challenge for this study. In the pre-task, the researcher did a small survey to pick the target words by asking the students to raise their hands to the words that they did not know. In many cases, the students with low vocabulary size voted many words that were already known by the students with the high vocabulary size. In this situation, the researcher needed to accommodate the majority of the students, which were the low-vocabulary-size students. As the effect, the students with high vocabulary size looked a bit bored when concerning on the words during the class.

Last, the participants of the study were 33 students including 12 males and 21 females. Essentially, there were about 40 first-year students in that university, but only 33 of them were willing to participate in this study. This number was still considered as small, so it might be quite difficult to generalize the results of this study to the entire population.

#### 5.5 Pedagogical Implications

The findings of this study lead to some suggestions for the implication of direct vocabulary and vocabulary learning strategies instruction as follows:

The findings of this study have revealed that direct vocabulary and vocabulary learning strategies instruction improved the students' vocabulary size and had positive effects on the students' vocabulary learning. The use of Marzano's six-step strategy in direct vocabulary instruction gave opportunities for students to learn words in many ways through the learning steps. The multiple exposure of the target words through the learning process in each step helped the students store the words in their long term memory. Thus, the English teachers, especially in Indonesia, should consider to apply this strategy to help students improve their vocabulary size before going too deeper on the other skills.

The results of the interview showed that the students could better understand how to perform the strategies from the teacher's demonstration. So, the students could apply the strategies to learn new words on their own outside the class. It proved that the vocabulary learning strategies instruction successfully promoted autonomous learning to the students and it really affected their vocabulary size. Therefore, besides teaching new words to the students, the English teachers should also spend their time in the classroom for vocabulary learning strategies instruction.

The research procedures of this study could also become a framework in terms of developing a vocabulary teaching course. The process of vocabulary instruction could be started from measuring the students' vocabulary size in order to determine their mastery level. Next, the combination of direct vocabulary instruction and vocabulary learning strategies instruction proved that it was effective to improve the students' vocabulary size as well as to promote autonomous learning. Last, the teachers should measure their vocabulary size once again after the learning process to see their vocabulary development.

### 5.6 Recommendations for Further Study

The recommendations for the future study are as follows:

First, the future research that will implement direct vocabulary and vocabulary learning strategies instruction on students' vocabulary size should employ bigger sampling groups. The bigger sampling groups will enable the researcher to generalize the results in bigger contexts. Besides that, the future researchers should also lengthen the duration of learning to deal with all the teaching steps especially when demonstrating how to perform the strategies. The students may need longer time to understand the tasks.

Second, the future research should also consider to investigate the effect of direct vocabulary and vocabulary learning strategies instruction using Marzano's sixstep strategy on the other dimension of vocabulary knowledge which is vocabulary depth other than vocabulary size. Investigating the effect of the treatment on the two dimension of vocabulary knowledge will grow a deeper understanding about its effect. Last, the future research should also employ the use of technologies in the instruction process. The use of language application such as linguistic corpus, pronunciation program, online dictionary and so on are very beneficial to help students deal with the strategies and tasks during the instructional process. The internet connections will be another thing to prepare during the instructional process to let the applications used work properly. The last but not the least, the use of LCD projector is very important to provide a visual aid during the instructional process.



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# Appendix A

## Lesson Plan 1 & 2

LESSON PLAN		
Course : Vocabulary Building	Topic : Academic Vocabulary	
Date: 12 December 2017	<b>Time :</b> 2 x 90 minutes	
Instructor : Sudarman	Class : PBI 1	
Terminal objectives	l à s	
Students will be able to:		
• Use academic vocabulary for	academic context	
• Implement vocabulary learni	ng strategies on their own	
Enabling objectives		
Students will be able to:		
• Pronounce the academic wor	ds correctly	
• Guess the academic word me	eaning from its contexts	
• Paraphrase teachers' explana		
• Make sentences by using the	academic words	
• Construct a picture, symbol,	or graphic representing the academic words	
• Identify the synonyms and ar	ntonyms of the academic words	
• Discuss and compare their vo	ocabulary notebook entries to their partner	
• Identify or guess the academ	ic words correctly based on the physical	
action clues (Playing Charad	es)	

## Assessment & Evaluation

• Evaluate Students' vocabulary notebooks to see whether students have done the tasks properly and to avoid them from making mistakes in interpreting and using the words and to see what vocabulary that students have learned on their own outside the class.

## Materials

- Vocabulary notebooks
- Whiteboard and markers
- Reading passages
- Powerpoint slides and a projector
- Vocabulary paper lots



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Times and Materi al	Procedures	Integration of Schmitt's Vocabulary Learning Strategies Instruction
	Welcome	
3–5	• Greet the Ss	
min.	• Take attendance	
	• Ask about Ss weekend, and how they	
	spent it	
	Pre-Task: Introduction	
7-10	• T distributes reading passages of	
min.	academic texts for each Ss	
	• T asks some Ss to read it and has them	Teacher guides
App. C	tell what the passage talks about	students to make
	• T asks Ss to identify the words on the	vocabulary list
	passage that they do not know and has	and vocabulary
App. A	them put it on the list of their vocabulary	notebooks
	notebooks	(Implementation
	• T explains the importance of keeping of	of Cognitive
	vocabulary notebooks in the treatment	Strategies)
	and guides them how to make the format.	
20-25	Main Task	
min.	Step 1: Provide description, explanation, or	
	examples of the new terms	

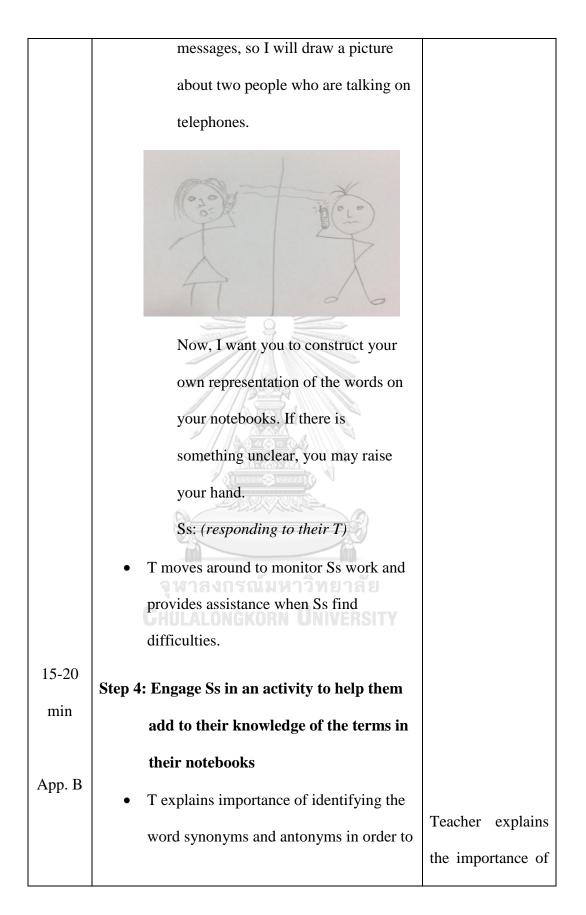
	• T shows the pictures representing	
	particular words and asks Ss to identify	
PPT	what words on the list the pictures	
&	represent for.	
Project or		
	$\checkmark$ T: Look at this picture! What word on	
	the list does this picture represent for?	
	Ss: It represents 'communication'.	
	✓ T: Well done! This picture represents	
	communication because we can see	
	that the two persons are talking to	
	each other. So, they are doing communication.	
	• T explains the importance of pronounce	Teacher explains
	the words correctly and explains the	the importance of
	benefit of doing verbal repetition to	verbal repetition
	retain the words in memory	and implements
	• T pronounces the words and ask Ss to	the strategy
	repeat after him. For instance:	through

$\checkmark$ T: Please, repeat after me,	repetitively
· T. Flease, repeat after file,	repetitivery
kəmju:nı keı∫(ə)n (communication)!	pronouncing the
Ss: kəmju:nı keil(ə)n	words
(communication)!	(Implementation
✓ T: Very good.	of Cognitive
T does the repetition until Ss can	Strategy)
pronounce them well.	
• T explains the benefit of using dictionary	
to learn new words	Teacher explains
• T picks one word from dictionary and	the benefit of
explains the meaning and the lexical	using dictionary to
categories. Then, T conclude the meaning	learn new words
and the characteristics of the words	and provides a
• T asks students to do the same as he did	guidance on how
before	to do the strategy
• T provides examples of the use of the	(Implementation
words in sentences. For examples:	of Determination
✓ T: Communication functions as a	strategy)
subject such as Communication is an	
important aspect of human life, as an	
object such as One of important	
aspects in human life is	
communication, as an object of	

		,
	preposition such as There was a lack	
	of communication between Pamela	
	and her parents, and as a noun	
	adjunct such as A sales promotion	
	girl needs communication strategies	
	to attract customers.	
	• T asks Ss to record his explanation on	
	their vocabulary notebooks.	
15-20	Step 2: Ask Ss to restate the description,	
min.	explanation, or examples of the new	
	terms	
App. B	• T explains the benefit of paraphrasing the	Teacher explains
	word meaning and guides Ss to do the	and guides Ss on
	task	how to paraphrase
	✓ Look at my explanation of the word	the word meaning
	'communication'.	(Implementation
	'Communication' means the way people talk and share	of Memory
	ideas to other people by means of social media, emails, phones or in person.	Strategy)
	Firstly, we can do the paraphrase by	
	changing the known words using its	
	synonyms. The word 'talk' can be	
	changed with interact, share ideas can	
	be changed with deliver messages,	

and social media, emails and phones	
can be associated with electronic	
tools. So, we can say that	
communication is the way people	
interact and deliver messages through	
electronic device or direct	
communication.	
• T asks Ss to paraphrase the meanings of	
other words on their own and asks them	
to record them on their vocabulary	
notebooks.	
• T moves around to monitor Ss work and	
provides assistance when Ss find	
difficulties.	
• T explains the benefit of using the words	Teacher explains
in sentences and asks Ss to make	the benefit of
examples of the word use in sentences	using words in
without duplicating the examples from	sentences and
the T and has them write it on their	assist students
notebooks.	who find
$\checkmark$ T: Now, I want you to make	difficulties
sentences by using the words.	(Implementation
Remember, you cannot duplicate my	
	1

1	anomalas an anomalas from other	of Memory
	examples or examples from other	of Memory
	sources. You have to make your own	Strategy)
	examples on your notebooks.	
	Ss: (responding to their T)	
	• T moves around to monitor Ss work and	
	provides assistance when Ss find	
	difficulties.	
25-30	Step 3: Ask Ss to construct a picture /	
min.	pictograph / symbol representing the	
	new terms	
App. B	• T explains the importance of making	
	pictorial representation of the words and	Teacher explains
	guides Ss to do the task by duplicating	the importance of
	pictures on internet.	making pictoria
	• T asks students to construct their own	representation to
	pictures, pictographs or symbols that	help retain the
	represent the words on their vocabulary	words in long-
	notebooks.	term memory and
	$\checkmark$ T: Next, we are going to draw	guide Ss how to
	something that represents the words.	perform the task
	It can be a picture, a pictograph or a	(Implementation
	symbol. For instance, the word	of Memory
	'communication' is associated with	Strategy)



	deepen their understanding of the words	connecting words
	and guides them how to perform the task.	to its synonyms
	• T asks Ss identify the synonyms and	and antonyms and
	antonyms of the words and write them on	guides Ss how to
	their notebooks.	perform the task
	$\checkmark$ T: Well, at this time, I want you to	(Implementation
	identify as many antonyms and	of Memory
	synonyms as possible of the words	Strategy)
	and write them on your notebooks.	
	Ss: (responding to their T)	
	• T moves around to monitor Ss work and	
20-25	provides assistance when Ss find	
min.	difficulties.	
	Step 5: Ask Ss to discuss the terms with one	
App. B	another	
ripp. D	จุหาลงกรณ์มหาวิทยาลัย	
	• T puts Ss in pairs.	
	• T explains the benefit of group discussion	Teacher explains
	in learning words and guides them to	the benefit of
	discuss and compare the entries of their	group work in
	vocabulary notebooks with their partner.	learning words
	✓ T: Now, I want you to open your	and guides them
	notebooks and then compare and	the do the
	discuss the entries of your	discussion of their

	vocabulary notebooks with your	notebook entries
	partner. If you find any disagreement	with their partner
	or something unclear, please, discuss	(Implementation
	it with your partner.	of Social Strategy)
	Ss: (responding to their T)	
	• T moves around to monitor Ss work and	
	provides assistance when Ss find	
	difficulties.	
	• T lets Ss add up or revise their notebook	
35-40	entries after the discussion.	
min.		
	Step 6: Involve Ss in a game that allows them	
App. D	to play with the words	
	• T divides Ss into groups of five.	Taashar avalain
	• T explains the benefit of using physical	Teacher explain
	action in identifying the words.	the benefit of
	• T introduces a vocabulary game named	using physical
	Charades. Then, T explains the rules of	action in learning
	playing the game, as follows:	or playing with the
	Each group have to appoint one of	words and
	their teammates to be the leader.	provides
	The group leader comes forward and	demonstration on
	pick a paper lot provided by T. The	how to play the

<u>г</u>	1	1	
	paper lot contains a sentence	game	
	consisting of the words they have just	(Impleme	entation
	learned.	of	Memory
	> The group leader pantomimes the	Strategy)	
	sentence. No sounds or written clues		
	are required.		
	> The members of the group have to		
	guess the complete sentence by		
	considering the clues given by their		
	leader.		
	> The game will be over if the members		
	of the group cannot guess the sentence		
	correctly in 3 minutes.		
	<ul> <li>Once they cannot guess it correctly in</li> </ul>		
	3 minutes, T lets other group to guess		
	it. The faster group will get the chance		
	CHULALONGKORN UNIVERSITY		
	first. If they still cannot guess it		
	correctly, it will be passed to the other		
	group.		
	The group who can guess the sentence		
	correctly will get score 100 points,		
	and if they cannot answer it correctly,		
	they will get no scores.		

	<ul><li>At the end, the group with the highest</li></ul>
	scores will be the winner.
	• T starts the game by inviting the first
	group, and then followed by the other
	group in sequence.
	• T awards the winner.
3-5	Assessment
min.	• T asks Ss to submit their vocabulary
	notebooks.
App. B	• T brings the Ss' notebooks to home for
	evaluation. T checks the Ss' notebook
	entries to make sure that they do not
	make any misinterpretations of the
	words. T will return the notebooks in the
	next meeting.
3-5	Closure: Extra-Class Work
min	• T gives a reading passage with some bold
	words on it
App. E	• T asks Ss to select the bold words that
	they do not know and learn it on their
	own at home by applying some strategies
	that they have learned from the class.

•	T asks Ss to records the words that they	
	have learned on their notebooks.	



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# Appendix A

Vocabulary Notebook List

Vocabulary List		Page	
I.	Meeting 1		
	1. Cup	1	
	2. Coffee	1	
	3. Taste	1	
	4. Century	2	
	5. Temperature	2	
II.	Meeting 2		
	1. Access	2	
	2. Accompany	3	
	3. Appreciate	3	
	4. Chart	3	
	5. Conflict	4	
III.	Meeting 3		
	1. Adult	4	
	2. Alternative	4	
	3. Benefit	5	
	4. Community	5	
	5. Compute	5	

# Appendix B Vocabulary Notebook Sheet

Word:			
Description: Teacher: communication is the way people tall to other people by means of social media, em- person Mine: communication is the way people inter- messages through electronic device or direct of	ails, phones or in act and deliver		
Synonyms Interaction, contact, tra connection Antonyms: Quiet, denial, silence	<ul> <li>ansmission,</li> <li>1) Communication is an important aspect of human life.</li> <li>2) One of important aspects in human life is communication.</li> <li>3) There was a lack of communication between Pamela and her parents</li> <li>4) A sales promotion cirl needs communication</li> </ul>		
W	ord:		
Description:	Picture:		
Synonyms:	Example:		
Antonyms:			
W	ord:		
Description:	Picture:		
Synonyms:	Example:		
Antonyms:			

## Appendix C Reading Passage

#### The Story of Coffee

Many people enjoy a **<u>cup</u>** of **<u>coffee</u>** at their local coffee shop, but few people know the story of coffee and how it is produced. Coffee growing is a global industry. Research shows that as many as a third of the world's population are coffee drinkers. Some people enjoy drinking coffee for its rich smell and <u>taste</u>. Others like the awakening effect of caffeine, a chemical in coffee.

Coffee trees are native to eastern Africa and areas of the Arabian Peninsula. Coffee was first grown and traded in the 15<sup>th</sup> <u>century</u>. Back then, most coffee came from the country we know as Yemen. Before long, coffee was in high demand all over the Middle East. By the 17<sup>th</sup> century coffee had been introduced to Europe. European traders started bringing coffee plants to other parts of the world. The Dutch brought coffee to the islands of Indonesia. By the 20<sup>th</sup> century, most of the world's production came from Central and South America. Today, Brazil is the largest producer of coffee in the world.

Most people know what a coffee <u>bean</u> looks like, but what about the plant? Coffee trees can grow up to nine meters high, but they are cut short for production. These trees have shiny dark green leaves that grow on <u>opposite</u> sides of each other on a <u>stem</u>. The plant produces a fruit that is called a coffee cherry. When the coffee cherries are <u>ripe</u> and ready to <u>pick</u>, they are bright, red, and <u>firm</u>. Inside the fruits are the green coffee beans. After these beans are <u>roasted</u> at high <u>temperatures</u> they are ready to be made into a drink.

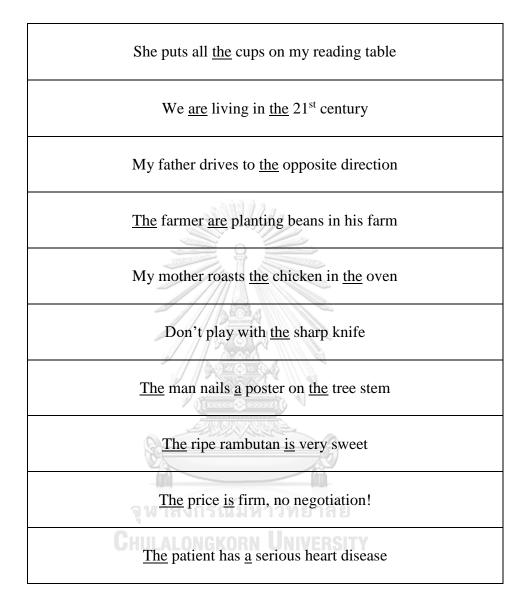
The two most important kinds of coffee plants are Arabica and robusta. Arabica coffee makes up around 70% of the world's production. These trees produce a fine and <u>mild</u> coffee with a rich smell. Robusta has more caffeine that Arabica. It is usually mixed with other coffee beans or used for <u>instant</u> coffee. Most of the world's robusta is grown in Central and Western Africa. I can also be found in parts of Southeast Asia and Brazil. Robusta is less costly to grow because it is more resistant to <u>diseases</u> than the Arabica plant. Also, robusta plants can survive in a warmer climate.

There may only be two main kinds of coffee plants, but geography and climate differences have a big effect on how coffee tastes. For example, coffee grown in Ethiopia is known for its lively, **sharp** taste and its flowery **smell**. Coffee from the **island** of Sumatra is full bodied, with an earthy and intense taste. Coffee roasters **combine** beans from different areas to make coffees with different tastes and qualities.

Source: VOA

Retrieved from https://www.esolcourses.com/content/reading/intermediate/graded-readers/the-story-of-coffee.html

## Appendix D Paper Lot for Charades game



Appendix E Reading Passage for Extra-class Work

#### Love Is Blind

Deshi turned off his computer and opened his English book. He had a **<u>pile</u>** of homework to do but it was just impossible to <u>concentrate</u> on phrasal verbs and <u>mixed</u> conditionals. He couldn't stop thinking about the girl in the building opposite. She had such beautiful eyes. He opened his bedroom window and looked across the street. Her window was open too and he could hear her <u>practising</u> a classical piece. It sounded really sad and beautiful. She was good. Deshi sighed. "I bet she <u>hates</u> rock music," he thought. "Have you finished your homework yet?" said Deshi's mum, opening the door. "<u>Hurry</u> up, dinner will be ready in half an hour, and you haven't <u>tidied</u> your room since last week." <u>Suddenly</u>, Deshi didn't feel very hungry.

That night, Deshi couldn't sleep and he was late for school next morning. He ran out of the house with his shoelaces undone and looked down the street to the bus stop. Oh no! The bus was just leaving. He **bent** down to **tie** his shoelaces. There was no point in **rushing**, he was going to be in trouble anyway. He looked up and, suddenly, there she was! She was sitting in her dad's car with the window open. Deshi dropped his schoolbag and she turned to look at him. He couldn't move. Her eyes were green. He'd never seen anyone with green eyes before. He smiled at her but she just stared at him like he didn't exist. Deshi could feel his face turning bright red. He picked up his bag and ran off down the street.

Author: Brendan Dunne

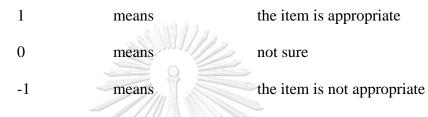
Retrieved from <u>https://learnenglishteens.britishcouncil.org/study-break/graded-reading/love-blind-level-3</u>

## Appendix B

#### **Research Instrument Evaluation Form for Lesson Plan**

## **Guidelines for evaluation**

Please mark  $\sqrt{}$  in the rating box (1,0,-1) on each item indicating your opinion. Please provide comments on each item.



Part 1: Objectives and Assessments

Objectives & Assessments	L	0	-1	Comments
Terminal Objectives:				
Students will be able to:				
- Use academic vocabulary in academic		9		
contexts		2		
- Implement vocabulary learning	กยาล IIVER	ล ย SITY		
strategies on their own				
Enabling Objectives:				
Students will be able to:				
- Pronounce the academic words				
correctly				
- Guess the academic word meaning				
from its contexts				

- Paraphrase teachers' explanation of	
the academic words	
- Make sentences by using the	
academic words	
- Construct a picture, symbol, or	
graphic representing the academic	
words	
- Identify the synonyms and antonyms	
of the academic words	
- Discuss and compare their	
vocabulary notebook entries to their	
partner	
- Identify or guess the academic words	
correctly based on the physical action	
clues (Playing Charades)	nei nei
Assessments:	
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- Evaluate Students' vocabulary	
notebooks	

Are the objectives in this lesson plan appropriate?

Yes

Yes

No

No

Are the assessments in this lesson plan appropriate?

135

Additional comments:



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**Part 2: Teaching Procedures** 

Teaching Procedures	1	0	-1	Comments
Pre-task: Introduction				
- Students select unknown words from				
reading passages given by teacher				
- Teacher explains the importance of				
keeping of vocabulary notebooks in				
the treatment and guides them how to				
make the format	hA/			
Main Task:		à		
Step 1: Provide description, explanation,	ľ	1		
or examples of the new terms				
- Teacher guide students how to				
pronounce the words correctly		9		
- Teacher explains and guides students		2		
how to guess word meaning from	ายาล IVER	าย SITY		
context				
- Teacher shows the samples of the				
word use in sentences				
- Students record teacher explanation				
on their vocabulary notebooks				

Step 2: Ask students to restate the	
description, explanation, or examples of	
the new terms	
- Teacher explains and guides students	
how to paraphrase word meanings	
- Students paraphrase the word	
meanings, make sentences using the	
words and record them on their	
vocabulary notebooks	
Step 3: Ask students to construct a	
picture/ pictograph/ symbol	
picture/ pictograph/ symbol	
representing the words	
- Teacher explains the benefit of	
constructing pictorial representation	
of words and guides students to do it	
- Students draw pictures representing	ทยาลัย
<b>CHULALONGKORN</b> UN the words on their vocabulary	IVERSITY
notebooks	
Step 4: Engage students in an activity to	
help them add to their knowledge of the	
terms in their vocabulary notebooks	
- Teacher explains the benefit of	
identifying synonyms and antonyms	

of the words and guides students to	
perform the task	
- Students identify the synonyms and	
antonyms of the words and record	
them on their vocabulary notebooks	
Step 5: Ask students to discuss the terms	
with one another	
- Teacher explains the benefit of group	
discussion in learning words and ask	
students to discuss and compare the	
entries of their vocabulary notebooks	
with their partner	
- Students add up or revise the entries	
of their vocabulary notebooks after	
discussing with their partner	
Step 6: Involve students in a game that	ายาลย
Step 6: Involve students in a game that	IVERSITY
allow them to play with the words	
- Teacher explains the benefit of using	
physical action in learning words and	
applies it in a game named	
'Charades'	

Closure: extra-class work			
- Teacher provides a list of vocabulary			
and asks students to learn it on their			
own at home and record it on their			
vocabulary notebooks			

Are the teaching procedures appropriate to apply direct vocabulary and vocabulary learning strategies instruction using Marzano's six-step strategy?

Yes	No
Additional comments	
	จุหาลงกรณ์มหาวิทยาลัย
C	HULALONGKORN UNIVERSITY

# Appendix C Semi-structured Interview Questions

Ger	nder: Male Female					
1.	What do you think about the vocabulary class?					
2.	How do you feel about the activities used in each step?					
3.	Did you learn from teacher's explanation and demonstration? How?					
4.	. To what extent did you learn new vocabulary items when you were asked to get involved in the process?					
5.	. Does the vocabulary class affect your vocabulary development? How?					
6.	Do you use the activities to learn vocabulary at home? What activities do you use most frequently?					
	จุหาลงกรณ์มหาวิทยาลัย					

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## Appendix D

## **Research Instrument Evaluation Form for Semi-structured Interview Questions**

## **Guidelines for evaluation**

Please mark  $\sqrt{}$  in the rating box (1,0,-1) on each item indicating your opinion. Please provide comments on each item.

1	means	the item is appropriate			appropriate
0	means	2	not sure		
-1	means		the item is not appropriate		
It	em	1 0 -1 Commen			Comments
1) What do you vocabulary class	A PERSONAL AS				
2) How do you fee used in each step	el about the activities		66		
3) Did you lea explanation and	หาลงกรณ์มหาวิท	ายา IVE	ลัย RSI	TY	
	t did you learn new s when you were asked n the process?				
5) Does the vocabu vocabulary deve	ulary class affect your lopment?				

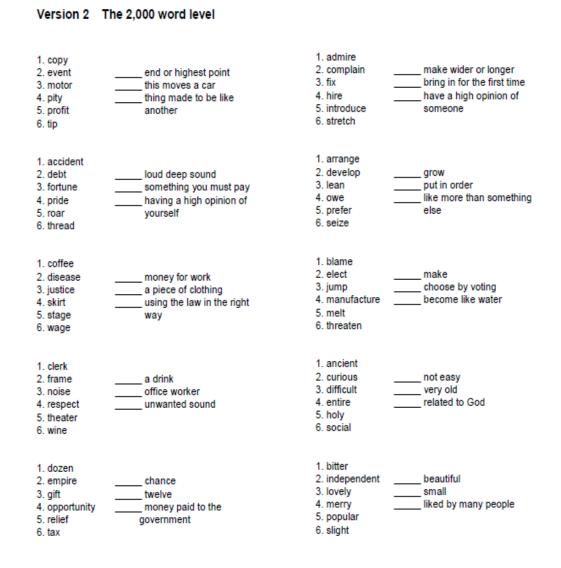
6) Do you use the activities to learn		
vocabulary at home? What activities		
do you use most frequently?		

## Additional comments:

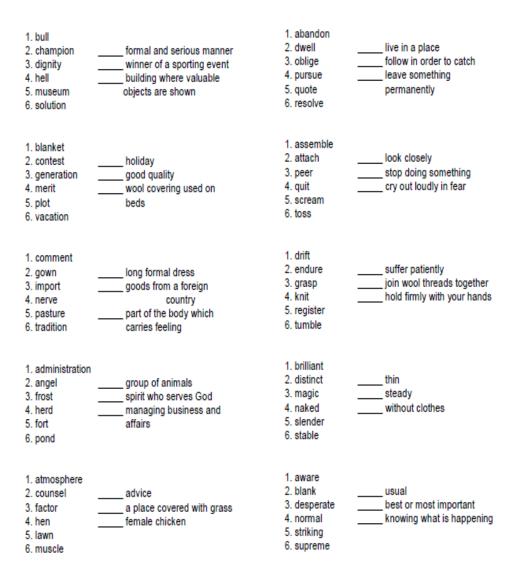


#### Appendix E Vocabulary Levels Test (VLT)

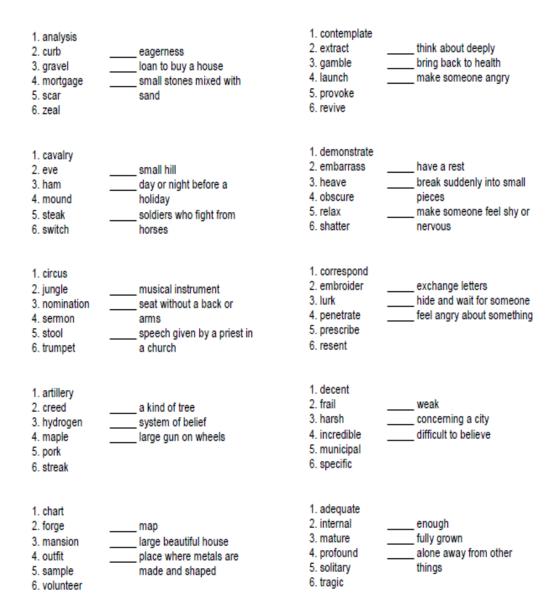
Name : Gender: Age : Class :



#### Version 2 The 3,000 word level



#### Version 2 The 5,000 word level



VITA

Sudarman was born on August 21st 1987 in Bone, South Sulawesi Province, Indonesia. He got his first formal education ever in Malaysia and graduated from the elementary school there. After spending life in Malaysia for about 15 years, he moved back to Indonesia to proceed his formal education. Due to the document issue, he had to retake his elementary education in a state elementary school near his new home and graduated after one year. He then pursued his secondary school and graduated six years later as the best graduate. He started loving English when he was in higher secondary school by joining English debate team. He was sent to compete in an English debate competition for province level as the representative of his region. After graduating from higher secondary school, he pursued his dream as an English teacher by taking English education as his major at Alauddin State Islamic University, Makassar, Indonesia. He got his bachelor degree in English education after 4 years at the university. Two years later, he was awarded a scholarship from Lembaga Pengelola Dana Pendidikan, provided by Indonesian Ministry of Finance, to study at Chulalongkorn University, Thailand for Master of Education in Teaching English as a Foreign Language (TEFL). He graduated from the program in 2018.

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