



**The Relationship between Vocabulary Learning Strategies and
Vocabulary Knowledge of Thai Undergraduate Students**

Tinutda Komol

**A Thesis Submitted in Partial Fulfillment of the Requirements for the Master of
Arts Degree in Teaching English as an International Language**

Prince of Songkla University

2011

Copyright of Prince of Songkla University

Thesis Title The Relationship between Vocabulary Learning Strategies
and Vocabulary Knowledge of Thai Undergraduate
Students
Author Miss Tinutda Komol
Major Program Teaching English as an International Language

Major Advisor:

.....
(Asst. Prof. Dr. Waraporn Sripetpun)

Examining Committee:

.....Chairperson
(Assoc. Prof. Unchalee Sermsongswad)

.....
(Assoc. Prof. Dr. Nisakorn Charumanee)

.....
(Dr. Usa Intharaksa)

.....
(Asst. Prof. Dr. Waraporn Sripetpun)

The Graduate School, Prince of Songkla University, has approved this thesis as partial fulfillment of the requirements for the Master of Arts Degree in Teaching English as an International Language.

.....
(Prof. Dr. Amornrat Phongdara)

Dean of Graduate School

ชื่อวิทยานิพนธ์	ความสัมพันธ์ระหว่างกลวิธีการเรียนรู้คำศัพท์กับความรู้ด้านคำศัพท์ ของนักศึกษาไทยระดับปริญญาตรี
ผู้เขียน	นางสาวธนิษฐา โกมล
สาขาวิชา	การสอนภาษาอังกฤษเป็นภาษานานาชาติ
ปีการศึกษา	2553

บทคัดย่อ

การวิจัยครั้งนี้มีจุดประสงค์คือ 1) ศึกษาการใช้กลวิธีการเรียนรู้คำศัพท์ของนักศึกษาชั้นปีที่ 2 คณะศิลปศาสตร์ ณ มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตหาดใหญ่ 2) ศึกษาความแตกต่างในการใช้กลวิธีการเรียนรู้คำศัพท์ของนักศึกษาที่มีความรู้ด้านคำศัพท์ภาษาอังกฤษสูงและต่ำ 3) ศึกษาความสัมพันธ์ระหว่างกลวิธีการเรียนรู้คำศัพท์และคะแนนแบบทดสอบความรู้ด้านคำศัพท์ กลุ่มตัวอย่างในการวิจัยเป็นนักศึกษาชั้นปีที่ 2 จำนวน 192 คน แบ่งเป็นนักศึกษาที่มีความรู้ด้านคำศัพท์ภาษาอังกฤษสูงและนักศึกษาที่มีความรู้ด้านคำศัพท์ภาษาอังกฤษต่ำ โดยเกณฑ์การแบ่งระดับใช้คะแนนจากแบบทดสอบความรู้ด้านคำศัพท์ หลังจากนั้นให้นักศึกษาเลือกกลวิธีการเรียนรู้คำศัพท์ภาษาอังกฤษซึ่งประยุกต์มาจากแบบสอบถามกลวิธีการเรียนรู้คำศัพท์ของ Schmitt (1997).

ผลการวิจัยมีดังนี้

1. นักศึกษาชั้นปีที่ 2 คณะศิลปศาสตร์ใช้กลวิธีการเรียนรู้คำศัพท์ภาษาอังกฤษอยู่ในระดับปานกลาง และกลวิธีที่นักศึกษาเลือกใช้มากที่สุดคือ เรียนรู้คำศัพท์โดยการใช้พจนานุกรม อังกฤษ-ไทย เรียนรู้คำศัพท์จากสื่อภาษาอังกฤษ เรียนรู้คำศัพท์โดยการจดบันทึกคำศัพท์ใหม่ในขณะที่เรียนอยู่ในชั้นเรียน เรียนรู้และจดจำความหมายของคำศัพท์โดยการแปล และเรียนรู้คำศัพท์จากการถามความหมายจากเพื่อน
2. นักศึกษาที่มีความรู้ด้านคำศัพท์สูงใช้กลวิธีการเรียนรู้คำศัพท์ภาษาอังกฤษดีกว่านักศึกษาที่มีความรู้ด้านคำศัพท์ต่ำอย่างมีนัยสำคัญทางสถิติ ($P < 0.01$)
3. มีความสัมพันธ์เชิงบวก ($P < 0.01$) ระหว่างกลวิธีการเรียนรู้คำศัพท์และคะแนนแบบทดสอบความรู้ด้านคำศัพท์ภาษาอังกฤษ

จากภาพรวมของการศึกษาอนุมานได้ว่ากลวิธีในการเรียนรู้คำศัพท์ของนักศึกษา เป็นปัจจัยสำคัญต่อการเรียนรู้คำศัพท์และการเพิ่มพูนความรู้ด้านคำศัพท์ภาษาอังกฤษของนักเรียน ครูควรกระตุ้นให้นักเรียนตระหนักถึงความสำคัญของการใช้กลวิธีต่างๆ ในการเรียนรู้คำศัพท์ และส่งเสริมการใช้กลวิธีดังกล่าว เพื่อเพิ่มพูนความรู้ด้านคำศัพท์ของผู้เรียน

Thesis Title The Relationship between Vocabulary Learning Strategies and Vocabulary Knowledge of Thai Undergraduate Students
Author Miss Tinutda Komol
Major Program Teaching English as an International Language
Academic Year 2010

ABSTRACT

The purpose of this study was threefold: 1) to identify the vocabulary learning strategies used by second year students in the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat-Yai Campus; 2) to investigate the differences in vocabulary learning strategies used by the students with high and low vocabulary size and; 3) to find out the vocabulary learning strategy use in relation to vocabulary size. 192 PSU second year students were divided into two groups based on their vocabulary size scores and were asked to rate the vocabulary learning strategies questionnaire which was adapted from Schmitt's (1997) VLS taxonomy.

The findings of this study can be summarized as follows:

1. The second year students in the Faculty of Liberal Arts used vocabulary learning strategies at a moderate level. The strategies that were rated at the highest level were using English-Thai dictionary, using English media, taking notes of the newly-learned words in class, learning the words by translating the word meaning, and asking classmates for meaning.
2. The students with high vocabulary size used the strategies more significantly often ($P < 0.01$) than low vocabulary size students did.
3. Statistically positive correlation existed ($P < .01$) between the students' vocabulary learning strategies and their vocabulary size scores.

The overall findings of this study imply that the vocabulary learning strategies are important factors that affect the student's vocabulary learning and their vocabulary size. Teacher should encourage students to realize the importance of vocabulary learning strategies and enhance their use to increase the students' vocabulary knowledge.

ACKNOWLEDGEMENTS

This research study has been compiled with the help of several persons whose contributions deserve to be acknowledged. Firstly, I would like to give my special thanks to Asst. Prof. Dr. Waraporn Sripetpun, whose guidance, advice, and academic experience, have been invaluable to me. I am also very grateful, and would like to express my gratitude and deep appreciation to Assoc. Prof. Unchalee Sermsongswad, Assoc. Prof. Dr. Nisakorn Charumanee, and Dr. Usa Intharaksa the examining committee, for their constructive comments and valuable recommendations for the study. My grateful appreciation is extended to all instructors in M.A. Program in Teaching English as an International Language who taught me and shared their expertise with great care and kindness.

Additionally, I would like to thank and acknowledge my classmates who are always at my side when in need. My peers also deserve my sincere thanks for words of encouragement, and specially Mrs. Sammireh Nagaratnam for proofreading my thesis. Without their cooperation, my study would not have been successful.

Besides, I would like to thank the subjects who provided me with survey data that I regard highly valuable and to my brother and sister who kept encouraging me throughout my study.

In particular, I would like to express my gratitude and appreciation to my beloved parents, Mrs. Pranom Komol and Mr. Radom Komol, for their love, understanding, encouragement, and financial support when it was most required.

Tinutda Komol

CONTENTS

	Page
ABSTRACT (THAI)	iii
ABSTRACT (ENGLISH)	v
ACKNOWLEDGEMENTS	vi
CONTENTS	vii
LIST OF TABLES	xi
CHAPTER	
1. INTRODUCTION	1
1.1 Rationale of the study.....	1
1.2 Purposes of the study.....	4
1.3 Research questions.....	5
1.4 Significance of the study	5
1.5 Scope and limitations of the study.....	6
1.6 Definition of terms.....	6
2. REVIEW OF LITERATURES AND RELATED RESEARCH	8
2.1 Importance of vocabulary learning	8
2.2 Vocabulary learning approaches	10
2.2.1 Direct or explicit vocabulary learning.....	11
2.2.2 Indirect or implicit vocabulary learning	12
2.3 Vocabulary learning strategies.....	12
2.3.1 Second language learning strategies.....	13
2.3.2 Vocabulary learning strategies in second language.....	14
2.4 Classification of vocabulary learning strategies.....	15
2.4.1 Vocabulary learning strategies classification by Oxford (1990).....	15
2.4.2 Vocabulary learning strategies classification by Gu and Johnson (1996).....	15
2.4.3 Vocabulary learning strategies classification by Cook (2001).....	16

CONTENTS (Continued)

	Page
2.4.4 Vocabulary learning strategies classification by Nation (2001).....	16
2.4.5 Vocabulary learning strategies classification by Schmitt (1997).....	17
2.4.5.1 Determination strategies.....	18
2.4.5.2 Social strategies.....	19
2.4.5.3 Memory strategies.....	20
2.4.5.4 Cognitive strategies.....	22
2.4.5.5 Metacognitive strategies.....	23
2.5 Vocabulary knowledge in English language learning.....	24
2.6 Importance of measuring learners' vocabulary size.....	26
2.7 Vocabulary size tests.....	27
2.8 Related studies on vocabulary learning strategies and vocabulary size.....	29
2.8.1 Related studies in Thai context.....	29
2.8.2 Related studies in others countries.....	31
3. RESEARCH METHODOLOGY.....	34
3.1 Subjects of the study.....	34
3.2 Research instruments.....	35
3.2.1 Vocabulary learning strategies questionnaire.....	35
3.2.1.1 The pilot study.....	37
3.2.2 Semi-structured interview.....	37
3.2.3 The vocabulary level test.....	38
3.3 Data collection.....	39
3.3.1 Administering the questionnaire.....	39
3.3.2 Administering the vocabulary level test.....	39
3.3.3 Administering the semi-structured interview.....	39
3.4 Data analysis.....	40

CONTENTS (Continued)

	Page
4. FINDINGS	42
4.1 The overview of the use of vocabulary learning strategies of the second year students	42
4.1.1 Five main categories of determination, social, memory, cognitive, and metacognitive used by second year students....	43
4.1.1.1 Determination strategies used by the second year students.....	43
4.1.1.2 Social strategies used by the second year students	44
4.1.1.3 Memory strategies used by the second year students	45
4.1.1.4 Cognitive strategies used by the second year students.....	46
4.2.1.5 Metacognitive strategies used by the second year students.....	47
4.2 A comparison of the use of vocabulary learning strategies between high and low vocabulary size students.....	48
4.2.1 A comparison of determination strategies used by high and low vocabulary size groups.....	50
4.2.2 A comparison of social strategies used by high and low vocabulary size groups.....	51
4.2.3 A comparison of memory strategies used by high and low vocabulary size groups.....	53
4.2.4 A comparison of cognitive strategies used by high and low vocabulary size groups.....	56
4.2.5 A comparison of metacognitive strategies used by high and low vocabulary size groups.....	57
4.2.6 Results from the semi-structured interview of the students With high and low vocabulary size.....	59

CONTENTS (Continued)

	Page
4.3 The relationship between vocabulary learning strategies and students' vocabulary size scores.....	62
4.3.1 Relationship between all five categories and vocabulary level test scores of high vocabulary size group.....	63
4.3.2 Relationship between all five categories and the vocabulary level test scores of low vocabulary size group.....	63
4.3.3 Relationship between 40 items of vocabulary learning strategies and the overall vocabulary size scores of high vocabulary size group.....	64
5. SUMMARY, DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS.....	67
5.1 Summary of the findings.....	67
5.2 Discussion of the findings.....	68
5.2.1 The vocabulary learning strategies used by the second year students	68
5.2.2 The differences between the students with high and low vocabulary size in using vocabulary learning strategies.....	69
5.2.2.1 Determination strategies.....	70
5.2.2.2 Social strategies.....	71
5.2.2.3 Memory strategies.....	72
5.2.2.4 Cognitive strategies.....	73
5.2.2.5 Metacognitve strategies.....	74
5.2.3 The relationship between vocabulary learning strategies and the vocabulary size.....	76
5.2.4 Relationship between 40 items of vocabulary learning strategies and the overall vocabulary size of high and low vocabulary size groups.....	78

CONTENTS (Continued)

	Page
5.2.4.1 Determination strategies.....	78
5.2.4.2 Social strategies.....	80
5.2.4.3 Memory strategies.....	81
5.2.4.4 Cognitive strategies.....	82
5.2.4.5 Metacognitive strategies.....	83
5.3 Pedagogical implications.....	84
5.4 Recommendations for further studies.....	85
REFERENCES.....	87
APPENDICES.....	97
Appendix A: Vocabulary learning strategies questionnaire.....	98
Appendix B: Semi-structured interview.....	107
Appendix C: The vocabulary level test.....	110
VITAE.....	115

LIST OF TABLES

Tables		Page
3.1	Scale and interpretation of six levels of opinions in the questionnaire...	36
3.2	Interpretation of data in questionnaire.....	36
4.1	Frequencies of use of all vocabulary learning strategies	43
4.2	Frequencies of use of determination strategies.....	44
4.3	Frequencies of use of social strategies.....	45
4.4	Frequencies of use of memory strategies.....	46
4.5	Frequencies of use cognitive strategies.....	47
4.6	Frequencies of use metacognitive strategies.....	48
4.7	Vocabulary size scores of high and low vocabulary size groups.....	49
4.8	Five categories of vocabulary learning strategies used by the students With high and low vocabulary size.....	49
4.9	A comparison of the use of determination strategies of high and low vocabulary size groups.....	51
4.10	A comparison of the use of social strategies of high and low vocabulary size groups.....	53
4.11	A comparison of the use of memory strategies of high and low vocabulary size groups.....	55
4.12	A comparison of the use of cognitive strategies of high and low vocabulary size groups.....	57
4.13	A comparison of the use of metacognitive strategies of high and low vocabulary size groups.....	58
4.14	Interview results of the students with high and low vocabulary size.....	59
4.15	Correlation between vocabulary learning strategies and vocabulary size of high vocabulary size group.....	63
4.16	Correlation between vocabulary learning strategies and vocabulary size of low vocabulary size group.....	64
4.17	Vocabulary learning strategies correlated with vocabulary size scores of students with high vocabulary size.....	66

CHAPTER 1

INTRODUCTION

This thesis explored vocabulary learning strategies employed by Liberal Arts second year students and the relationship of the strategies to the students' vocabulary knowledge. This introductory unit consists of the research rationale, purposes of the study, research questions, significance of the study, scope and limitations, and definitions of key terms in the study.

1.1 Rationale of the study

English is the language most widely learned, read, and spoken that the world has ever known (Jenkins, 2006; Kachru & Nelson, 1996; Pakir, 2000). Besides, English plays a vital role in economic progress, modern technology, internationalization (Spolsky, 1998), as well as the Internet and the World Wide Web (Pakir, 2000). Lexical knowledge is also considered an important part of the foundation of learning English as a Second Language (ESL) and English as a Foreign Language (EFL). Mastering a new word involves such common abilities as form recognition (pronunciation, spelling, derivations) and knowing its dictionary meaning. Knowledge of its specific grammatical properties, as well as the ability to use the word appropriately in certain context and function (frequency and appropriateness), are all part of the mastery process (Nation, 1990; Oxford & Scarcella, 1994). McCarthy (2001, cited in Fan, 2003) explained that vocabulary forms the biggest part of the meaning of any language, and vocabulary is the biggest problem for most learners.

The implication for L2 vocabulary learning is that only when the learners have adequate schema, they would comprehend language situation or text. Background knowledge has been found to be important to the understanding of L2 texts (Carrel & Eisterhold, 1983). Fan (2003) recommended that in teaching, a teacher should try to

build up the learners' background knowledge by using prereading activities, including those that provide learners with the appropriate vocabulary.

The importance of vocabulary knowledge in second language (L2) is supported by the schema-based approach to language learning (Fan, 2003). The learning theory based on information processing and the role of cognitive processes suggests that the information from long-term memory can be used to enrich the learners' understanding or retention of the new ideas by providing related information or schemata into which the new ideas can be organized (O' Malley & Chamot, 1990).

Calls for helping learners improve the way they learn vocabulary have been made by a number of scholars (Read, 2000). Sokmen (1997) argues for helping learners learn how to acquire vocabulary on their own, noting that it is not possible for students to learn all the vocabulary they need in the classroom. Cunningsworth (1995) regards helping learners develop their own vocabulary learning strategies as a powerful approach, which can be based on sensitization to the systems of vocabulary, encouragement of sound dictionary skills and reflection of effective learning techniques.

Second language acquisition (SLA) depends crucially on the development of a strong vocabulary. Researchers in SLA's sub-discipline known as second language vocabulary acquisition (SLVA) have focused their attention on the need for second language learners to optimize their vocabulary knowledge (Singleton, 1999; Schmitt, 2000). Vocabulary learning strategies (VLS) are a part of language learning strategies which have been receiving more attention since the late 1970s and their investigation has advanced our understanding of the processes learners use to develop their skills in a second or foreign language. Nation (2001) has taken this conscious choice factor into account when defining vocabulary learning strategies. A strategy would need to a) involve choice, that is, there are several strategies to choose from; b) be complex, that is, there are several steps to learn; c) require knowledge and benefit from training; and d) increase the efficiency of vocabulary learning and vocabulary use.

In general, learning a second language involves the manipulation of four main skills: speaking, writing, listening and reading, which lead to effective communication. One crucial factor for facilitating effective communication is the amount of vocabulary one possesses as vocabulary forms the biggest part of the meaning of any language (McCarthy, 1988). The amount of second language vocabulary knowledge (L2) can serve as a predictor of L2 learners' proficiency (Meara, 1999; Zareva et al, 2005). Vocabulary, however, is the biggest problem for most L2 learners. In view of this, vocabulary acquisition is currently receiving attention in second language pedagogy and research. It is still a contentious issue how learners acquire vocabulary effectively and efficiently or how it can best be taught (Schmitt, 2000).

Vocabulary teaching in many classrooms is largely incidental and used as a support for reading comprehension (Catalan, 2003; Fan, 2003). This means that when a particular word or phrase appears difficult to the students, they are told the definitions. Occasionally, this may be supplemented with the collocations of the target words or information about how the words are used, e.g., whether they are used to express negative emotions or whether the word is used in formal situations. More often, however, finding out about new vocabulary items is left to the discretion of the students, and they are encouraged to turn to dictionaries to look up meanings of words.

Catalan (2003) maintains that vocabulary learning is, therefore, largely very dependent on the efforts of the teachers and students. This type of dependent vocabulary learning may lead to a general inadequacy in vocabulary knowledge among Asian university students. As Fan (2003) states, this inadequacy has been repeatedly pointed out by the researchers and lecturers as one of the factors in the unsatisfactory performance of students in their exams. He maintains that the inadequacy in lexical knowledge may hinder students' proficiency development and affect their performances in public exams. It is high time for teachers to look into ways to enhance vocabulary knowledge.

Regarding English language learning at Prince of Songkla University, students did not perform well in most of the English language courses. Academic results of the two fundamental English courses which are compulsory for PSU students across different disciplines showed that 20%, 40%, and 5% of the students gained grades C, D, and E respectively. Vocabulary knowledge is one of the problems of those PSU students' English language proficiency. This inadequate vocabulary knowledge hinders the students' learning in other elective English courses. Learning to learn and learning to use to learn new vocabulary and store them in the learners' repertoire of knowledge have been widely accepted among English language professionals (Brown, 1987 & Laufer, 1998). Teachers should therefore be aware of their students' learning strategies.

Moreover, Laufer (1998) pointed out that investigating students' vocabulary size can be of substantial value to language research and pedagogy. It provides the realistic situation for lexical syllabus and indicates what would constitute optimal syllabuses which will, in turn, guide material design, testing, teaching and learning.

A number of studies (Intaraprasert, 2004; Krajangsirisin, 2001; Muensorn, 2007, Siriwan, 2007) have been conducted to investigate the vocabulary learning strategies used by Thai students. However, there is no research focusing on the relationship between vocabulary learning strategies used by learners and the vocabulary knowledge they possess. The present study, therefore, intends to investigate this relationship in a group of students in the Faculty of Liberal Arts, Prince of Songkla University.

1.2 Purposes of the study

This study was conducted to understand aspects of one area of language learning acquisition, namely vocabulary learning in order to possibly identify implications for effective teaching and learning. This study is also designed to provide baseline data for further research on the vocabulary learning strategies of EFL

learners and to provide insights for the EFL classroom. The present study mainly aims:

(1) to investigate vocabulary learning strategies used by the second year students in the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat-Yai Campus, Thailand;

(2) to investigate the frequencies of vocabulary learning strategies used by students with high and low vocabulary size;

(3) to determine the relationship between vocabulary learning strategies the students use and their vocabulary knowledge.

1.3 Research questions

(1) What vocabulary learning strategies are employed by second year students in the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat Yai Campus, Thailand?

(2) Are there any significant differences between students with high and low vocabulary size in their use of vocabulary learning strategies?

(3) What are the relationships between the students' vocabulary learning strategies and their vocabulary knowledge?

1.4 Significance of the study

This study aims to investigate the vocabulary learning strategies of Thai EFL learners. The researcher believes that an awareness of individual differences in learning makes teachers, students, and curriculum designers more sensitive to their role in teaching and learning English. Furthermore, it will enable them to match teaching and learning so as to develop students' potentials in language learning as well as to assist them to become cognizant of the ways they learn most effectively. It also helps the students to develop their vocabulary learning strategies and ways to become more motivated and independent learners. The understanding of the students' beliefs and the vocabulary learning strategies they use will enable teachers and

researchers to design appropriate materials and activities to help them improve their vocabulary learning so as to enhance their lexical competence.

1.5 Scope and limitations of the study

(1) This study focused on the main five categories of vocabulary learning strategies based on Schmitt's (1997) taxonomy including determination strategies (DET), social strategies (SOC), memory strategies (MEM), cognitive strategies (COG), and metacognitive strategies (MET).

(2) It was designed to investigate the vocabulary learning strategies used by students with high and low vocabulary knowledge and its relationship to their vocabulary size. No other non-relevant vocabulary was tested.

(3) It was limited to a particular group of students at the university, where the situation and context might differ from those in other age groups, proficiency levels, and locations.

1.6 Definition of terms

(1) **Vocabulary learning strategies** refer to any set of techniques or learning behaviors which language learners reported using in order to discover the meaning of a new word, to retain the knowledge of newly-learned words, and to expand their vocabulary.

(2) **Determination Strategies (DET)** refer to strategies to use one's own knowledge and ideas.

(3) **Social strategies (SOC)** refer to strategies to learn with other people.

(4) **Memory strategies (MEM)** refer to strategies for remembering more effectively.

(5) **Cognitive strategies (COG)** refer to strategies to use one's mental processes.

(6) **Metacognitive strategies (MET)** refer to strategies for organizing and evaluating one's learning.

(7) **High vocabulary size students** refer to students whose vocabulary level test scores were at the top 27% of the group of test takers.

(8) **Low vocabulary size students** refer to students whose vocabulary level test scores were at the bottom 27% of the group of test takers.

(9) **Vocabulary size** is the number of words for which a learner has at least the minimum knowledge of the meaning.

CHAPTER 2

REVIEW OF LITERATURE AND RELATED RESEARCH

This chapter presents a brief review of literature and studies in the following areas: importance of vocabulary learning, vocabulary learning approaches, vocabulary learning strategies, classification of vocabulary learning strategies, vocabulary knowledge in English language learning, importance of measuring vocabulary size, vocabulary size tests, and related studies on vocabulary learning strategies and vocabulary size.

2.1 Importance of vocabulary learning

Avila and Sadoski (1996) stated that the mastery of vocabulary is an essential component of second language acquisition. Vocabulary is a prime concern in second language settings because it plays a dominant role in classroom success. According to Krashen and Terrell (2000), vocabulary is important for the English as a second language acquisition process. It is believed that a person will use form and grammar to understand meaning. Vocabulary is the tool learners use to think, to express ideas and feelings, as well as to explore and analyze the world around them, a limited vocabulary knowledge keeps them from expressing their thoughts and feelings. Kitajima (2001) affirms that without words that label objects, actions, and concepts, one cannot express the intended meaning. Normally, people will acquire morphology and syntax because they understand the meaning of utterances. Acquisition depends crucially on the input being comprehensible, and comprehensibility is directly dependent on the ability to recognize the meaning of key elements in the utterance. Thus, acquisition will not take place without comprehension of vocabulary (Krashen & Terrell, 2000).

It is moderately estimated that a native speaker university freshman acquires vocabulary at the rate of at least 1,000 words per year from childhood and knows 20,000 to 25,000 words upon college entrance (Nagy & Anderson, 1984; Nation,

1990). Moreover, native English speakers know a great deal about each word such as its subtlety of meaning, its range of meaning, and appropriate context of its use (Zimmerman, 1997). For a second language learner to enter university, it is found that knowing a minimum of about 3,000 words is required for effective reading at the university level, whereas knowing 5,000 words indicates possible academic success. Meara (1980) stated that lexical errors outnumbered grammatical errors by 3:1 or 4:1. Similarly, Leki and Carson (1994) found that second language students taking university course identified vocabulary as a major factor that held them back in academic writing tasks. Therefore, it is not surprising that vocabulary presents a serious linguistic obstacle to many nonnative English speaking students.

Regarding vocabulary in communication, it is apparent that vocabulary is basic in learning to communicate effectively while listening, speaking, reading, and writing. This is asserted by many scholars such as Lewis (1993) who views the importance of vocabulary as being a basis for daily communication. He indicates that if language learners do not recognize the meanings of the words used by those who address them, they will be unable to participate in the conversation, even if they know the morphology and syntax. Krashen and Terrell (2000) indicate that if language learners wish to express some ideas or ask for information, they must be able to produce lexical items to convey their meaning. Besides, Schmitt (2000) indicates that vocabulary is central to communicative competence and to acquisition of a second language.

In communication situation, Davies and Pearse (2000) also point out that vocabulary is often more important than grammar. It is frustrating for language learner when they discover that they cannot communicate effectively because they do not know many of the words they need. McCarthy (1990) affirmed that learners not only communicate in words but also they do most of their thinking in words because words are the tools they use to think, to express ideas and feelings, as well as to explore and analyze the world around them; therefore, wrong vocabulary frequently interferes with communication, and communication breaks down when learners do not use the right words.

To sum up, those language learners with vocabulary knowledge can achieve a great deal of success in their classroom, their social life, and their continuing acquisition of the target language. A large size of vocabulary enable language learners to express their real thought, ideas, and feelings. It can be concluded that vocabulary plays a dominant role in learning and understanding a language as well as in communication situations.

2.2 Vocabulary learning approaches

Vocabulary has been established as an essential component of Second Language Acquisition (SLA) and English as a Foreign Language (EFL) and it is in a major resource for language use. One cannot learn a language without learning vocabulary (Ellis, 1997; Cameron, 2001). In other words, vocabulary learning is very important since it is a key unit in building up skills and knowledge. Learning new words in a new language is not simply a matter of committing them to memory, but it concerns also how to use them in appropriate situations as well as how to expand the knowledge of one's vocabulary. However, vocabulary has long been found as language learners' big problem that obstructs their language learning. Meara (1980) and Nation (1990) affirm that many of language learners' difficulties in both receptive and productive use of vocabulary arise from their inadequate acquisition of lexical knowledge. However, it is evident that language learners learn words in a variety of ways, vocabulary learning strategies; therefore, include several types of strategies such as those for knowing the word as well as for using it (Ellis, 1994). Furthermore, Hedge (2000) suggests that the ultimate role of the teacher, besides explaining new words to learners, may be to build independent learning by training them good strategies for vocabulary learning.

In order to be successful in learning new unfamiliar words, and be successful as independent language learners, Miller and Gildea (1987) and Nation (1990) suggest that language learners are required of a tremendous effort in learning new words. They also need to find appropriate and effective ways for them to comprehend, acquire, retain, use and expand their vocabulary. Language learners not only need to

expand their knowledge of words, but they also need to understand words well enough to be able to use them appropriately in their social life. It is useful to teach language learners the strategies to learn vocabulary so that they can be autonomous or self-directed vocabulary learners. Harmer (1991) and Schmitt (1997) affirm that introducing language learners to a wide range of strategies is a very useful way since they can choose the strategies that suit their individual learning styles. However, language learners may not be able to adopt strategies automatically, and thus some explicit teaching of different vocabulary learning strategies may be helpful for their success or being independent language learners (Cameron, 2001).

Since vocabulary is the heart of mastering a foreign language, it is necessary to discuss vocabulary learning approaches. According to Nation, (1990), Rubin and Thompson, (1994), and Richek et al, (1996), there are two general ways in which learner learn vocabulary: direct vocabulary learning approach, and indirect vocabulary learning approach.

2.2.1 Direct or explicit vocabulary learning

Direct or explicit (intentional) vocabulary learning is concerned with conscious learning processes when language learners learn vocabulary explicitly, either in context or in isolation, through direct instruction (Laufer & Hulstijn, 2001). In direct learning, learners are systematically taught specific words and structures (Richek et al, 1996). This approach of vocabulary learning is necessary for learning the core vocabulary that is used in most situations. This is particularly true for the learning of basis lexical and semantic knowledge, particularly for beginner-level or less successful language learners (Nation, 1990). The learning of single words explicitly should be emphasized at an early stage of second language learning. After the language ability is developed, indirect vocabulary learning through contexts is essential to be emphasized to language learners (Coady & Huckin, 1997).

2.2.2 Indirect or implicit vocabulary learning

Indirect or implicit (incidental) vocabulary learning involves learning the meaning of new words implicitly when language learners hear or see the words used in many different contexts, for example, through daily opportunities, through conversations with others and through reading extensively on their own (Read, 2000; Laufer & Hulstijn, 2001). Indirect vocabulary is concerned with unconscious processes of learning through reading or listening without language learners necessarily being aware of the goals of learning. In this type of learning, new words are learned incidentally while reading or listening to stories, films, television or the radio (Nagy & Anderson, 1984; Nation, 1982; Sternberg, 1987). Moreover, learners absorb vocabulary meaning, grammatical structures, and concepts simply from being exposed to rich language (Richek et al, 1996).

Language learners may learn vocabulary incidentally through direct or/and indirect vocabulary learning; however, it is impossible to teach everything learners may face. Since learners not only learn vocabulary intentionally as part of the course requirements but also gain knowledge of words incidentally through their reading and listening; therefore, both direct and indirect vocabulary learning approaches are very useful and essential for them to learn and acquire vocabulary items. Learners also learn vocabulary items when vocabulary items are explicitly taught, not only individual words but also vocabulary learning strategies. Some vocabulary should be taught directly even though a great deal of vocabulary is learned indirectly.

2.3 Vocabulary learning strategies

To provide a background for vocabulary learning strategies used in this study, the general framework of language learning strategies and some taxonomies/inventories for second language strategies and second language vocabulary learning strategies are provided.

2.3.1 Second language learning strategies

Learning strategies are particular approaches or techniques that learners employ to try to learn a second language (Ellis, 1997) or thoughts and actions that individuals use to accomplish a learning goal (Chamot, 2004). Besides, Rubin (1987) has defined language learning strategies as strategies which contribute to the development of the language system which the learner constructs and affect learning directly. Likewise, language learning strategies are defined as the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information (O'Malley & Chamot, 1990). Furthermore, Oxford (1990) specially defines learning strategies as tools for active, self-directed involvement, which is essential for developing communicative competence. Appropriate language learning strategies result in improved proficiency and greater self-confidence. The main purposes of language learning strategies taken by learners are to make learning easier, faster, more enjoyable, more self-directed, and more transferable to new situations (Oxford, 1990).

Previous research works on language learning strategies employed by both second and foreign language learners learning a target language, mainly English, have been widely conducted. The findings of these studies such as Oxford, 1990, McIntyre and Noels, 1996 revealed that a variety of language learning strategies have the potential to facilitate language learning. In learning English, either as a second language (ESL) or a foreign language (EFL), Carroll (1997) mentioned that it is rather difficult and frustrating for language learners to learn a foreign language because learning a foreign language requires great effort. Language learners need to struggle to find suitable and effective ways for themselves on how to comprehend and retain knowledge of the target language.

2.3.2 Vocabulary learning strategies in second language

Vocabulary learning strategies are a part of language learning strategies which in turn are a part of general learning strategies (Nation, 2001). Therefore, the definition of vocabulary learning strategies stems from that for language learning strategies (Catalan, 2003). Cameron (2001) defines vocabulary learning strategies as the actions that learners take to help themselves understand and remember vocabulary items. Catalan (2003) adopts the definition of vocabulary learning strategies from Rubin and Wenden (1987), Oxford (1990), Schmitt (1997) as knowledge about the mechanisms (processes and strategies) used in order to learn vocabulary as well as steps or actions taken by students (a) to find out the meaning of unknown words, (b) to retain them in long-term memory, (c) to recall them at will, and (d) to use them in oral or written mode. Similarly, Intaraprasert (2004) defined vocabulary learning strategies as any set of techniques or learning behaviors, which language learners reported using in order to discover the meaning of new words, to retain the knowledge of newly known words, and to expand their knowledge of vocabulary.

In order to learn and acquire vocabulary and enlarge vocabulary size, that is, knowing a large number of words with their meanings, or how to pronounce and use them correctly, language learners need to deal with a wide range of vocabulary learning strategies and every language learner has their own way for learning vocabulary. Vocabulary learning strategies are very different depending on whether language learners' primary goal is to understand the language in reading or in listening to produce it in speaking or writing. Schmitt (2000) stated that active learning management is important. It was found that good language learners use a variety of strategies: structuring their vocabulary learning, reviewing and practicing target words and so on. Besides, Gu and Johnson (1996) indicate that successful strategy users need a strategy for controlling their strategy use. This involves choosing the most appropriate strategy from a range of known options and deciding how to pursue the strategy and when to switch to another strategy.

2.4 Classification of vocabulary learning strategies

Many language researchers have attempted to develop taxonomy of language learning strategies (Rubin & Wenden, 1987; O'Malley et al, 1990; Oxford, 1990; Stern, 1992; Ellis, 1994; Purpura, 1994; Schmit 1997; Gu & Johnson, 1996; Nation, 2001).

Oxford (1990), Gu and Johnson (1996), Cook (2001), Nation (2001), and Schmitt (1997), for example, propose taxonomy of vocabulary learning strategies based on the second or foreign learner's various strategies to acquire the target language words.

2.4.1 Vocabulary learning strategies classification by Oxford (1990)

Oxford (1990) attempts to present a comprehensive taxonomy of language learning strategies, the Strategy Inventory for Language Learning (SILL). This taxonomy makes distinction between "direct strategies" (working with the language itself) and "indirect strategies" (general management of learning). Direct strategies are divided into three subclasses: memory strategies (strategies to store and retrieve aspects of the target language), cognitive strategies (strategies for using the language and for understanding how it works), and compensation strategies (strategies for using the language despite gaps in knowledge). Indirect strategies include metacognitive strategies (strategies for planning, organizing and evaluating learning), affective strategies (strategies for approaching the task positively), and social strategies (strategies for working with others to get input and practice).

2.4.2 Vocabulary learning strategies classification by Gu and Johnson (1996)

Gu and Johnson (1996) developed second language vocabulary learning strategies including mtacognitive strategies, guessing strategies, dictionary strategies,

memory strategies (rehearsal and encoding), and activation strategies. Metacognitive strategies entail selective attention and self-initiation strategies. Foreign/second language learners who employ selective attention strategies know which words are important for them to learn and are essential for adequate comprehension of a passage. Learners employing self-initiation strategies use a variety of means to make the meaning of vocabulary item clear. Cognitive strategies consist of guessing strategies, skillful use of dictionaries and note-taking strategies; learners using guessing strategies draw upon their background knowledge and use of linguistic clues like grammatical structures of a sentence to guess the meaning of a word. Memory strategies are classified into rehearsal and encoding strategies. Encoding strategies encompass such strategies as association, imagery, visual, auditory, semantic and contextual encoding as well as word structure (i.e. analyzing a word in terms of prefixes, stems, and suffixes). Activation strategies are those strategies through which learners actually use words in different contexts. For instance, learners may set sentences using the words they have just learned.

2.4.3 Vocabulary learning strategy classification by Cook (2001)

Cook (2001) developed the vocabulary learning strategies which were divided into two groups; the first being the group concentrating on understanding the meaning of words and the other including the strategies for acquiring words. Strategies for understanding the meaning of words include guessing from the situation or context, using a dictionary, making deductions from the word form, and linking to cognates (finding similarities in words of two different languages). Strategies for acquiring word include: repetition and rote learning, organizing words in the mind, and linking to exist knowledge.

2.4.4 Vocabulary learning strategy classification by Nation (2001)

Nation (2001) proposed taxonomy of various vocabulary learning strategies which are divided into three general classes of planning, source, and processes. Each of which is divided into a subset of key strategies. The taxonomy separates different

aspects of vocabulary. The first category (planning) involves deciding on where and how often to focus attention on the vocabulary item. The strategies in this category are choosing words, choosing aspects of word knowledge and choosing strategies. The second category involves getting information about the word including all aspects of knowing a word. It can come from the word itself, from the context, from a reference source like dictionaries or glossaries, and from analogies and connections with other languages. The last category is process vocabulary learning strategies. It includes establishing word knowledge through noticing, retrieving and generating strategies.

To Nation (2001) noticing involves seeing the word item to be learned. Strategies at this level include putting the word in a vocabulary notebook, putting the word onto a word card and orally and visually repeating the word. He argues that although these strategies are all of recording types, they are useful steps resulting in deeper processing of words. Retrieval involves recalling the items seen. It contains recalling knowledge in the same way it was originally stored. Generating strategies include attaching new aspects of knowledge to what is known through instantiation (i.e. visualizing examples of words), word analysis, semantic mapping and using scales and grids. Generating strategies also include rule-driven generation, as well as creating context, collocations, and sentences containing the new word. Besides, the mnemonic strategies and using the word in different context through four skills are also defined as generating strategies.

2.4.5 Vocabulary learning strategy classification by Schmitt (1997)

Schmitt (1997) developed an extensive taxonomy of vocabulary learning strategies based on Oxford's (1990) taxonomy of learning strategies including two main groups of strategies: discovery strategies and consolidate strategies. Discovery strategies are the strategies used in discovering the meaning of a new word whereas consolidating strategies deal with the consolidation of a word once it has been encountered. The former consists of determination strategies and social strategies whereas the latter includes memory strategies, cognitive strategies and metacognitive

strategies. Schmitt's taxonomy, therefore, includes vocabulary learning strategies in five sub-groups: determination strategies, social strategies, memory strategies, cognitive strategies and metacognitive strategies. Each sub-category of these vocabulary learning strategies will be described as follows:

2.4.5.1 Determination strategies

Determination strategies are essential for learners to gain knowledge of new words. In other words, it contains strategies used by an individual in order to discover new words' meaning without recourse to another person's expertise. For example, learners may recognize parts of speech of new word to help them in guessing its meanings. Moreover, they can make use of clues for the meaning from word roots, prefixes, and suffixes. As Nation (1990) noted, learners may misunderstand from analyzing parts of words since it can bring invalid meaning to them. For this reason, It is recommended that this strategy will do well if learners have appropriate confirmation of guesses from the context. In other words, learners need to be able to break the new word into parts so that the affixes and roots are revealed, and they need to know the meanings of the parts, as that they will see the connection between the meanings of the parts (Nation, 1990).

Furthermore, determination strategies offer many routes for learners who do not know a word such as discovering the meaning by guessing from their structural knowledge of the language, guessing the word from an L1 cognate, guessing from context, or using reference materials. Cognates are words in different languages resulting from parent words. The use of cognates may be an excellent strategy to discover the meanings of new words if the target language (L2) is closely related to the source language (L1) (Schmitt, 1997).

According to Wragg (1990), using both monolingual and bilingual dictionaries as tools to discover the meanings of new words is also extensively practiced. Due to the fact that meanings and spellings have been standardized by the work of lexicographers, learners must make sure that the word they are going to use can

convey their meaning exactly. Moreover, Scholfield (1982) supports the argument that although their use is declining due to certain shortcomings; bilingual dictionaries seem to be used much more widely than monolingual dictionaries by L2 language learners. Additionally, Hulstijn (1993) found that more good learners preferred to confirm their guesses about the meaning of a word by consulting a bilingual dictionary than weak learners. When the learners saw words in contexts and then looked up the meaning in a bilingual dictionary, those learners could select an appropriate meaning in a particular situation. This to say all dictionaries can make an important contribution to students' vocabulary knowledge and learners can benefit from training in dictionary use.

2.4.5.2 Social strategies

Based on Schmitt's study (1997), the social strategies are one way to discover a new meaning by asking someone else. In other words, social strategies in learning vocabulary are a way to interact with other people to improve language learning. Most teachers are in charge to assist the learners in many different ways. For example, teacher may be asked for translation to the source language (L1). Learners may ask their teachers to give them synonyms or to translate the words for them or to put new words in a sentence. Translation into L1 is a faster way to understand words than others, but teachers should have a sufficient understanding of the learners' mother tongue, such as equivalents of words, in order to prevent incorrect transfer. However, Nation (1990) warns that although synonyms have similar meaning, students need to know collocation, style, and syntax in order to use them correctly.

As for the use of asking classmates or doing group word activities for new words, Schmitt (1997) states that learners can ask for the meanings of words from friends or classmates in most situations. Ahmed's (1989) finding reveals that Sudanese learners resort their friends as a resource of vocabulary knowledge. Group work activity is a useful way for learners to discover the meaning of a new word. Nation (1990) states that the cooperative group learning promotes active processing of

information since the social context enhances the motivation of the participants and it can prepare the participants for team activities outside the classroom.

According to McComish's study (1990), poor learners can get the meanings of words faster if they are given opportunities to learn words in pair or in group activities. With regard to Kramsch (1979), flash card and word lists are other types of social strategies. Teachers can check learners' work for accuracy using these two strategies since they are frequently used for independent learning outside the classroom.

Moreover, asking native speakers would be an excellent way to gain vocabulary. As Meara's (1980) study showed that non-native speakers who studied in a British University interacted with native speaker teachers increased their vocabulary by 1,325 words in six months, while they gained only 275 words when they studied in their hometowns.

2.4.5.3 Memory strategies

In general, memory strategies are commonly known as "mnemonics" which involve the retained words with some formerly learned knowledge by using imagery of grouping (Schmitt, 1997). Carter and McCarthy (1988) assert that one way that the learners can enhance storage is by using memory techniques that will aid them in committing words to memory.

According to Thompson (1987), mnemonic techniques can be in many different forms such as linguistic mnemonics (peg method, keyword method), spatial mnemonics (loci method, finger method), visual mnemonics (pictures, visualization), physical mnemonics, grouping, semantic mapping, self-assessment, review, and so on. She also states that the peg method allows unrelated items such as words in a word list to be recalled by linking them with a set of memorized 'pegs' or 'hooks'. Learners associate words to be memorized with these 'peg' to form composite images.

Regarding to Schmitt (1997), it is a possible way to discover and remember words by relating them with no sense relationship. The method for doing this is with 'peg' or 'hook' words. For example, learners may memorize a rhythm like 'one is a bun, two is a shoe, three is a tree, etc'. If the first word to be remembered is chair, then an image is made of a bun put on a chair. Moreover, the pegging process is another way of learning lists that link individual items to be memorized with the set of items that the students are already familiar with.

In respect of the use of a pictorial representation to study the meaning of words, Thompson (1987) shows that using pictures is an effective and efficient way to memorize vocabulary; it is much more effective than merely repeating the word. Learners can learn new words by using pictures instead of definitions. It will be better if learners pair L2 words with pictures, rather than pairing words with L1 equivalents. Furthermore, new words can also be related to a particularly personal experience of the significant concept; for example, learners mentally connect the word 'snow' to a memory of playing in the snow when they were children. Possibly, learners can create their own mental images of a word's meaning (Schmitt, 1997).

Regarding to keyword techniques, Pressley et al (1982) reach several conclusions in a comprehensive survey of almost 50 studies concerning the keyword technique. First, the keyword technique helps learner in learning foreign vocabulary and is more beneficial than other techniques, such as rote repetition, placing vocabulary in a meaningful sentence, and using pictures or synonyms, since it helps learners enhance retention of target words. Second, the use of keyword technique is not restricted to concrete nouns but it can be used with verbs, abstract nouns, and adjectives. Third, the use of keyword techniques is not restricted to adults. It can be used with children as young as three years olds. Fourth, the keyword technique does not slow down recall of the meanings of foreign words. Still, one difficulty with the keyword techniques is that it is often difficult to think of key words that sound like the foreign words.

When focusing grouping strategies in memory category, Schmitt (1997) supports the idea that grouping is an important way to aid recall, and people seem to organize words into groups naturally without prompting. In general, Schmitt (1997) states that words which belong to each meaning category are recalled together; for instance, vocabulary relating to the animal group comes together, then the memory may move on to another category such as flowers. Moreover, Gairns and Redman (1986) support that vocabulary consists of a series of interrelating systems, so there seems to be a clear case for presenting items to students in a systematical manner. Semantic fields, normally called lexical sets in pedagogical terms, are made up of sets of semantically similar items. Learners can group the words related by topic (e.g. types of fruits, furniture, and clothing) group the words which have similar meanings (e.g. ‘way of speaking’-stutter, stammer, babble, yell, scream, chat, gossip, ‘way of looking’ – peer, peep, glance, stare), or group the words from synonyms or opposites (e.g. new/old, sell/buy, stubborn/accommodating).

Another technique under memory strategies is using new words to relate to foreign words that learners already know. For example, if learners need to remember the foreign language word for ‘cat’, they may think of the word for ‘dog’. Alternatively, they can think of the super ordinate term of animal (Thompson, 1987). This method usually involves some types of sense relationships, such as coordination, hyponymy, synonymy or antonymy (Schmitt, 1997). Additionally, Gairns and Redman (1986) state that some words, such as gradable adjectives, have meanings related to other words in their set, so it will be useful if learners set these words in a scale to help them remember more easily (e.g. huge-big-medium-size-small-tiny).

2.4.5.4 Cognitive strategies

From Schmitt’s notion (1997), cognitive strategies in some cases are similar to memory strategies, but are not focused so specifically on manipulative mental processing; they include repetition and using mechanical means to study vocabulary. Written and verbal repetitions, repeatedly writing or saying words over and over again, and the keeping of vocabulary notebooks are common strategies used in many

parts of the world. Another kind of cognitive strategies are using study aids such as taking notes in class, and putting words onto word cards (Schmitt, 2000; Nation, 2001). Similarly, Sanaoui (1995) found that good learners keep vocabulary notebooks and lists of words together with them wherever they go for learning and memorizing.

Furthermore, using flash cards and word lists is another helpful way for learners as they can bring them anywhere and revise the words when having a free moment (Brown, 1987). Alternatively, taking notes in classroom may be said to be another kind of cognitive strategy. It is a good idea if learners take notes of word learned in class because they can create their own personal structure for new words. This way offers learners the chance for additional exposure during review. Students can make use of any special vocabulary sections in their notebook textbooks to help them study target words (Schmitt, 1997).

2.4.5.5 Metacognitive strategies

These strategies are used by learners to control and evaluate their own learning by having an overview of the learning process in general (Schmitt, 1997). Schmitt 1997 defines metacognitive strategies as a conscious overview of the learning process and making decisions about planning, monitoring, or evaluating the best ways to study. For example, the strategy of interactive with native speakers whenever possible increases input, and could be considered a metacognitive strategy if it is used as a controlling principle of language learning (Schmitt, 1997). Learners should be aware of their goals and their level of vocabulary knowledge. The learners need to aware of their vocabulary knowledge levels in order to select a suitable strategy in learning vocabulary (Schmitt, 2000). Moreover, it will be effective if the practice is scheduled and organized. Baddeley (1990) suggests that learner should review the new material soon after the first meeting, and then increase intervals gradually. One explicit memory schedule proposes reviews five to ten minutes after finishing the class, then 24 hours later, one week later, one month later, and finally six months later (Schmitt, 1997).

Another metacognitive strategy is skipping or passing new words which can take place if learners are sure that those words are low frequency words that they may not meet again. Noticeably, because of the large number of low frequency words and because of their infrequent occurrence and narrow range, it is best for learners to have their own strategies to deal with these words (Nation, 1990). They need to pay more attention to learning the most useful ones.

In addition, learning words from English-language media such as songs, movies, newscasts and so on may be one useful technique to increase students' vocabulary knowledge. Schmitt and Schmitt (1995) reveal that many teenaged learners are more comfortable and relaxed when they learn a second language in the classroom by listening to songs and noting the meaning of words on cards by themselves.

2.5 Vocabulary knowledge in English language learning

Since it has been established that the teaching of vocabulary is crucial and needs to be structured, it has been widely accepted that this structuring needs to be done on the basis of word frequency and text coverage (Meara 1980). It seems evident that the more frequent words are most useful and should be taught or learned first, before spending time on less frequent words or words that only occur in specialized domains. Nation (1990, 2001) reports that frequency-based studies have shown that a small group of very frequent words cover a very large proportion of the running words in any spoken or written text and occur in all kinds of uses of language. In other words, a relatively small amount of well-chosen vocabulary according to frequency and range can enable learners to a lot. Actually, Nation (1990) divides vocabulary into three groups: (1) a small number of high-frequency words, which are clearly so important that considerable time should be spent on them by teachers and learners; (2) a very large number of low-frequency words, which require the mastery of coping strategies; and (3) specialized vocabulary which is of interest for learners who are active in specific professional fields. Since the high-frequency words play so a prominent role in vocabulary learning, the question arises if this group of words

within a language is stable. According to Laufer and Hulstijn (2001), frequency lists may differ in frequency rank order of particular words but generally there is 80% agreement about what words should be included in the list, provided that the corpus has been well-designed.

With reference to word knowledge, Nation (2001) holds that knowing a word involves knowing the members of its word family and the number of members of the word family will increase as proficiency develops. A learner may be familiar with the word 'rich', 'richly' and 'richness' in an early stage and expand this word family with 'to enrich' and 'enrichment' in due time. There is research evidence supporting the idea that word families are psychologically real, and that rather than talking about 'knowing a word', there should be talking about 'knowing a word family' (Nation, 2001).

A frequency-based approach to vocabulary learning is based upon the assumption that frequency is strongly related to the probability that a word will be known. Alderson and Urquhart (1985) report that this hypothesis is supported by evidence from a number of studies. Hazenberg and Hulstijn (1996) researched on to which extent word frequency can be used to predict word knowledge. One might expect that the most frequent words are known by all students whereas more infrequent words are known only by particular individuals, depending on variables such as hobbies, work and experiences. Hazenberg and Hulstijn concluded that the relationship between word frequency and word knowledge appears to depend on vocabulary size. When individuals have a relatively large vocabulary there is no significant relationship. But when individuals have a relatively small vocabulary, word frequency can be used as a criterion to predict word knowledge. It has thus been established that the further you move on from the high-frequency vocabulary, the less significant frequency becomes in an absolute sense.

The selection of lower-frequency words to learn depends increasingly on the learners' specific size of needs and interests. This stresses once more the importance of the 3,000 word family (which corresponds more or less with the 5,000 most

frequent words) as a learning objective for any language learner. Beyond the 5,000 word level, Meara (1980) argues that vocabulary size is less important than the way in which the vocabulary is organized in the learner's mind. The hypothesis is that those with more developed vocabulary knowledge have a more complex and highly structured network of associations among the words they know.

Schmitt (2000) advocates that vocabulary should best be taught to foreign language learners according to a cost-benefit perspective. He mentions that the most frequent 2,000 words are the most commonly cited initial goal for beginners and agrees that these have to be taught explicitly. Meara (1980) claims these are so essential for any real language use that it might be a good idea to teach them right at the beginning of the language course. When learners move on to read authentic texts in the target language, the consensus among applied linguists seems to be that 3,000 to 5,000 word families should suffice. However, Hazenberg and Hulstijn (1996) calculated that foreign students reading university texts need to have 10,000 to 11,000 word families at their disposal. For communication in specific professional domains, it is recommended to have a solid base of high-frequency vocabulary, complemented with the specialized vocabulary required for the domain.

Most vocabulary researchers agree that although explicit vocabulary instruction should not cease after the 2,000 most frequent words, it is very important to make the learners responsible for their individual vocabulary learning. Several vocabulary learning strategies should be acquired so that learners can learn words autonomously. Learning word-building processes in the target language, guessing from context and applying mnemonic techniques are strategies that have been proven to be very useful (Nation, 1990).

2.6 Importance of measuring vocabulary size

Vocabulary learning is distinguished into “breadth” or “size” of knowledge (the number of words of which a learner knows at least some significant aspects of the meaning) to “depth” of knowledge, refer to the quality of vocabulary knowledge,

namely how well a particular word is known (Nation, 2001). Although both measures are considered important knowledge of word progresses from superficial to deep at various stages of learning, a lot of work on vocabulary testing has focused on vocabulary size. Meara (1980) convinces that these two dimensional approaches are too a limited view because it does not suffice to explain the diversity that is found in language learners and would prefer more research to be done into the accessibility of words in the L2 lexical. He confirmed that the basic dimension of lexical competence is size.

Concerning L1 knowledge, Alderson and Urquhart (1985) agree that measuring vocabulary knowledge is a great predictor of a variety of indices of linguistic ability. In the past, researchers even went as far as saying that the size of a person's vocabulary is a very good predictor of that person's general intelligence (Meara, 1980). It has been shown to be an important factor for obtaining fluency in speech, and to be a good predictor for reading comprehension (Coady, 1993).

From a pedagogical perspective, it is useful to know how much vocabulary instruction is needed before learners have reached the vocabulary threshold level which is necessary for English learning. Vocabulary researchers believe that measures of vocabulary size could shed light on the relationship between vocabulary growth and different input conditions so that it becomes clear at what state to prefer comprehension.

2.7 Vocabulary size tests

In order to assess vocabulary size in a valid and reliable way, vocabulary size tests must consist of many items. However, it calls for a non-time-consuming administration procedure which entails that the test task has to be fairly simple (Nation, 2001). This is why the instruments that have been proposed to date are discrete and context independent in nature (Read, 2000). One of the most well-known of these discrete vocabulary measures is Nation's Vocabulary Level Tests (1982, 1990), which Meara (1980) considered the nearest to a standard test in vocabulary.

This test samples words from the 2,000, 3,000, 5,000 and 10,000 word frequency levels, and from an academic register known as the University Word List. It samples recognition knowledge of 18 words from each of the five frequency levels. The test task requires test takers to match a word with its definition, presented in multiple choice formats in the form of a synonym or a short phrase. With only 18 items at each of the five levels, the test is compact and usable in classroom conditions.

A second well-known standard vocabulary size test is Mearas' Yes/No Vocabulary Test (Meara 1980). It makes an estimate of learners' vocabulary size using a sample of words covering several frequency levels. It is a checklist test consisting of words and non-words in which the learners have to tick the words they know the meaning of. It has been turned into a computer application, The Eurocentres Vocabulary Size Test (Meara & Jones, 1990) and the format has also been selected as vocabulary test within the European DIALANG system. However, this yes/no vocabulary test was found to produce unreliable results by Cameron (2002). This was largely because of the inclusion of nonsense words in the options to judge whether the testees know the word or not. Problems have been noted with reactions to the nonsense words, particularly with low-level learners and with native speakers of certain languages.

Other type of vocabulary size tests includes the self-made ones. For example, in Fan's (2003) study, the size test was similar to the vocabulary level tests but it included 360 test items making it four items as long as Nation's Vocabulary Level Tests (1990). Increasing the length of the test was indeed an effective way to increase the reliability of the test. However, practicality is still needed to be taken into consideration. It might take about 1.5 to 2 hours for an adult EFL to finish it, which is probably too long (Schmitt, 2000).

Besides vocabulary size test, the other category of vocabulary test is depth test, which tends to focus on only a small number of items for practicality reason. Their value lies in researching specific items targeted for investigation amongst specific research participants. Read (1997), Qian (1999), and Qian & Schedle (2004)

researched the depth tests. The newest measure of in-depth vocabulary knowledge for assessing reading performance was designed by Qian and Schedle (2004). They also found in their study that the depth test could predict a learner's reading ability. However, no matter what skill the depth test is used to measure, they can still only measure learners' partial vocabulary knowledge.

While depth tests look at a small number of targets, breadth (size) tests include large samples of words chosen randomly from different word frequency levels and the sample words represent the entire vocabulary at these levels. According to Read (2000), size tests give more representative pictures of the overall state of the learners' vocabulary than an in-depth probe of a limited number of words. For these reasons, the present study focused only size (breadth) of vocabulary knowledge.

2.8 Related studies on vocabulary learning strategies and vocabulary size

Investigation into the learner's vocabulary learning strategies and their vocabulary size can be served as the guidance in designing learning materials, teaching techniques and learning procedure to suit the students' English proficiency (Laufer, 1998). A number of studies have been carried out to investigate vocabulary size, the relationship between vocabulary size and vocabulary learning strategies or the relationship between vocabulary size and other language skills or overall language proficiency.

2.8.1 Related studies in Thai context

Waemusa (1993) investigated vocabulary learning strategies used by 82 Mathayom Suksa six students at Sasanupatam School, an Islamic private school, Pattani Province. The students were divided into two groups: the good and the poor students based on their scores on the English test. Results revealed that the good students occasionally used vocabulary learning strategies. The strategy of comprehension category was more frequently used than the strategy of vocabulary production category. The strategies which the good students frequently used were

using Thai to write the meaning of a new word, looking up the word in an English-Thai dictionary, and pronouncing a new word when looking it up in a dictionary or when listening to the teacher. The poor students used vocabulary comprehension strategies slightly more often than vocabulary storing strategies and vocabulary production strategies. The strategies which they frequently used were looking up words in an English-Thai dictionary, and using Thai and Arabic to write the meaning of a new word. There was a significant difference between the good and the poor students only in using vocabulary production strategies. However, there was no significant difference in using vocabulary comprehension strategies and vocabulary learning storing strategies.

Sripetpun (2000) conducted a study exploring the influence of vocabulary size on vocabulary learning and vocabulary learning strategies of Thai university students studying English as a foreign language. The finding showed that there was a positive relationship between the knowledge of Threshold Level Words and the ability to guess the meaning of the remaining unknown words in a given text.

Mingsakoon (2003) compared vocabulary learning strategies used by Mattayom Suksa 6 students in the sciences and arts programs of Hunkhapittayakom School, Hunkha District, Chainat Province. He adapted Schmitt's (1997) VLS taxonomy for his study. The sample of the study was 129 students. The students in each program were classified into three groups (High, Middle, and Low) based on the scores in the vocabulary test and the Quick Placement Test. He employed a questionnaire, an interview and think-aloud protocol as his research instruments in order to find out what vocabulary learning strategies in each program and each group used. The results showed that the science students used an English-Thai dictionary to look up the meanings of words, asked their classmates to learn English words, learned words through traffic signs, produced labels and computer games. While the arts students knew the meaning of a word because of their friends had told them. They also liked to work in groups and listen to English songs in order to learn English vocabulary. Mingsakoon suggested that the students should be trained in the use of effective vocabulary learning strategies, such as using dictionary.

Intaraprasert (2005) conducted preliminary investigation to explore vocabulary learning strategies employed by 133 English for Science and Technology (EST) university students at Suranaree University of Technology, Nakhon Ratchasima, in Northeastern Thailand. This investigation aimed to find out what strategies the EST students used to discover the meaning of new words and to retain the knowledge of newly-learned words. An open-ended questionnaire was used as the main instrument for collecting data. The findings of the research detailed two categories of strategies. Firstly, strategies to discover the meaning of the new words comprise 10 strategies: 1) using a Thai-English dictionary 2) using an English-Thai dictionary 3) using an English-English dictionary 4) guessing the meaning from the context 5) asking their classmates or friends 6) asking the teachers 7) asking someone else 8) looking at the word roots, prefixes or suffixes 9) using an on-line dictionary and 10) using an electronic dictionary. Secondly, the strategies to retain the knowledge of newly-learned vocabulary items consist of 11 strategies: 1) memorizing with or without a word list 2) keeping a vocabulary notebook 3) grouping words based on synonymy or anonymity 4) associating new words with the already-learned ones 5) using new words in writing 6) using new words to converse with peers 7) speaking Thai with English loanwords 8) displaying words as the computer background 9) keeping word cards or word charts in one's bedroom 10) keeping words as rhymes or songs 11) using pictures.

2.8.2 Related studies in other countries

Ahmed (1989) studied the good and the poor first-year university students in learning L2 vocabulary. The good learners were found to be more aware of what they could learn about new words, paid more attention to collocation and spelling, and were more conscious of contextual learning. Moreover, the good learners saw their peers as a source for vocabulary learning. In contrast, the poor students ignored to learn more about new words and refused to consult the dictionary to discover the unknown words. Generally, the poor students used the smaller range of strategies than the good students.

Gu and Johnson (1996) investigated the vocabulary learning strategies used by Chinese university learners of English and the relationship between their strategies and the outcomes in learning English. The results showed that the subjects did not rely on memorization, and reported using more meaning-oriented strategies than rote strategies in learning vocabulary. The results also indicated that these vocabulary learning strategies: contextual guessing, skillful use of dictionary for learning purposes, note-taking, paying attention to word formation, contextual encoding, and intentional activation of new words all were positively correlated with vocabulary size and general English proficiency.

Lawson and Hogben (1996) investigated the vocabulary learning strategies of foreign-language students. A think aloud procedure was used to observe the behavior of 15 university students in Australia with experience in Italian in learning a new foreign language (Italian words). The results showed that the subjects relied on the strategies of repetition of the new words and their meaning, but they gave little attention to the grammatical feature of words. It was found that using the cues in the sentences to generate possible meanings for the target words did not help students understand the meaning of the words.

Schmitt (1997) conducted a survey study on vocabulary learning strategies used by Japanese students. The purposes were to identify the pattern of vocabulary learning strategies use and to find out which strategies were perceived to be the useful for Japanese students. 600 Japanese students were asked to participate in his study and they were asked to rate the vocabulary learning strategies questionnaire. The resulted showed that the strategy of using bilingual dictionary was most frequently used while the most useful strategies were using bilingual dictionary, practicing written repetition, practicing verbal repetition, saying a word aloud, studying a word's spelling, and taking notes in class.

Regarding to the above reviewed research on vocabulary learning strategies and vocabulary size, a number of studies were found to investigate the vocabulary learning strategies used by high and low English proficiency students in terms of types and effectiveness but not many studies focused on the vocabulary learning strategies use in relation to vocabulary size. Laufer (1998) pointed out that investigating students' vocabulary size can be of substantial value to language research and pedagogy. It provides the realistic situation for lexical syllabus and indicates what would constitute optimal syllabuses which will, in turn, guide material design, testing, teaching and learning. This present study, therefore, attempted to find the extent to which vocabulary learning strategies used by high and low vocabulary size students and the extent to which vocabulary learning strategies influence their vocabulary size.

CHAPTER 3

RESEARCH METHODOLOGY

The aims of this study were to find out the use of vocabulary learning of all second year students from the Faculty of Liberal Arts, to indentify vocabulary learning strategies of high and low vocabulary size students, and to investigate the relationship between vocabulary learning strategies and the vocabulary size. In order to achieve the aims of the study and to answer the research questions, the appropriate methodology needs to be well-prepared and well-designed for collecting and analyzing data. This chapter provides information about the research subjects, instruments, data collection, and data analysis.

3.1 Subjects of the study

The subjects of this study consisted of 192 students majoring in language learning from the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat Yai Campus. These subjects were purposively sampled since they had the same experience in learning the two compulsory English courses. Moreover, it is believed that language students would have more exposure to language learning strategies.

The subjects took the vocabulary level test and they were divided into two groups: the students with high and the students with low vocabulary size. The purposes of dividing the subjects into two groups (48 high and 48 low vocabulary size groups using 27% technique) were to investigate to which extent each group used vocabulary learning strategies, to determine if there were significant differences in terms of the frequency of vocabulary learning strategies they used, and to find out whether there were significant relationships between the vocabulary learning strategies they used and their vocabulary size.

3.2 Research instruments

This study employed the vocabulary learning strategies questionnaire, the vocabulary level test, and the semi-structured interview as the instruments to obtain research data. Each type of instruments was designed and constructed as described below:

3.2.1 Vocabulary learning strategies questionnaire

In this study, the main aims of the vocabulary learning strategies questionnaire were to have a better understanding of the strategy use of the Liberal Arts second year students, and to identify strategies that may be related to success in learning English vocabulary. The questionnaire was adapted from the vocabulary learning taxonomy proposed by Schmitt (1997). The questionnaire was designed in the Thai language for the students in order to avoid confusion and misinterpretation. An English version was also used to describe the results. After that the questionnaire was sent to supervisory committee to ascertain its appropriateness and validity. The drafted questionnaire was revised based on the comments and suggestions of the supervisory committee; then the questionnaire was rechecked and re-organized by the research to obtain the final version.

The vocabulary learning strategies questionnaire consists of two parts. The first part asked about the subjects' personal background information. The second part examined five categories of vocabulary learning strategies including determination strategies (DET) (items 1-6), social strategies (SOC) (items 7-13), memory strategies (MEM) (items 14-26), cognitive strategies (COG) (items 27-32), and metacognitive strategies (MET) (items 33-40). In this part, the students were asked to rate the most used strategies and the frequency use the listed strategies in six rating scale. Isaac and Michael (1973) suggest that six levels of opinion can describe the students' thoughts most clearly (Appendix A).

The scale which the students used covers six numbers referring to the following meaning:

Table 3.1: Scale and interpretation of six levels of opinions in the questionnaire

Levels of opinions	Interpretation of levels opinions
5	always
4	usually
3	often
2	occasionally
1	seldom
0	never

In facilitating data analysis, the criteria for the rating scale interpretation are as follows.

Table 3.2: Interpretation of data in questionnaire

The rang of mean for each items	The interpretation of the data in the questionnaire
4.16-5.00	Most frequently used
3.33-4.15	Frequently used
2.50-3.32	Moderately used
1.67-2.49	Slightly used
0.84-1.66	Least used
0.00-0.83	Never used

3.2.1.1 The pilot study

The pilot study was done before conducting the main study to test the reliability of the questionnaire and to ensure that the questionnaire covered the strategies relevant to learning English vocabulary and that the students could understand the questionnaire clearly. The pilot study was conducted at Prince of Songkla University (PSU), Hat Yai Campus with a group of 30 third year students of the Faculty of Liberal Arts who were not involved in the main study. The purpose of choosing these students was that their background and qualification were similar to the subjects in the main study. They were asked to respond to the questionnaire.

The Cronbach Alpha method was used to analyze the reliability of the questionnaire. The questionnaires' total alpha was 0.95. The Alpha coefficient range in value from 0 to 1; the higher the score, the more reliable the generated scale is. Based upon the alpha scores, the researcher was confident in using this questionnaire with the main research subjects.

3.2.2 Semi-structured interview

The questionnaire survey was triangulated by interviews in the present study. Interviews were adequate to investigate phenomena not directly observable. Moreover, interviews were interactive, thus the researcher could elicit additional data when initial answer was off-topic or not clear enough. This removes the concern of misunderstanding.

In the present study, semi-structured interviews, a list of questions prepared in advance guided the interviewees to address the issues in the questionnaire. This allowed the researcher to compare the students' responses in different settings. As a result, the consistency in the students' responses can be checked. Moreover, the researcher still has freedom to probe for more information (Nation, 2001) for clarification and understanding of the vocabulary learning strategies held by a particular student. The semi-structured interviews were individual interviews, for they

ensure a high level of confidentiality, thus it is more likely to generate truth from the interviewees (Brown, 1987). Each interview lasted about 20 minutes and was audio-taped. Simultaneously, the researcher took notes during the interviews (Appendix B).

3.2.3 The vocabulary level test

In the present study, the vocabulary levels test was adapted from the monolingual vocabulary level test by Schmitt et al. (2001). It was used in bilingual instead of monolingual vocabulary level test. Nation (2008) stated that a bilingual vocabulary level test is a more valid measure for lower proficiency learners, because understanding the first language translation is much easier. This vocabulary level test was used to measure the vocabulary size by assessing the learners' basic knowledge of common words and to classify the subjects into two groups: high and low vocabulary size students. The test consisted of test items from the 2,000, 3,000, 5,000, 10,000 word levels and the Academic Word List. As the subjects were second year tertiary level L2 learners, the 10,000 word level test was not used. The test used a word-definition matching format. Students were requested to match correctly three out of the six words with the appropriate definitions. It included 60 words and 30 definitions at each of the four levels, with a total of 120 test items. The total score for each word level was 30 (raw score) and for the whole set of the test was 120 (raw score).

Additionally, this vocabulary level test was reviewed by the thesis supervisor and other two English language lecturers in the Faculty of Liberal Arts in order to ascertain its appropriateness and validity. The drafted vocabulary level test was revised based on the comments and suggestions made by the supervisory committee; then the vocabulary level test was rechecked and re-organized by the researcher to obtain the final version (Appendix C).

3.3 Data collection

The data were collected during the second semester of the 2010 academic year. When meeting the subjects, the researcher began the class by informing them of the purposes of the data collection and the benefits of the outcome of this study. Then, the students were asked to look through the questionnaire and they were encouraged to ask any questions if they did not understand the questionnaire.

3.3.1 Administering the questionnaire

105 Liberal Arts students from Language for Development majors and 87 Chinese for Communication majors were asked to complete the questionnaires. The researcher spent 10 minutes explaining the instructions on how to fill out the questionnaire. In total, this session took twenty minutes. The completed questionnaires were then collected.

3.3.2 Administering the vocabulary level test

After the students finished completing the questionnaire, they were then asked to do the vocabulary level test. After that, the answers sheets were manually scored by the researcher to divide the subjects into two groups. The 27% technique of language testing (Hughes, 1989) was adopted to divide subjects into two groups, getting 48 students from the highest scores and the other 48 students from the lowest scores. These students were then divided into 2 groups: high vocabulary size group and low vocabulary size group.

3.3.3 Administering the semi-structured interview

Among the 192 subjects, 14 (7 high vocabulary size and 7 low vocabulary size students) were interviewed. The interviews functioned for three purposes: to check the consistency in the students' response, to understand the vocabulary learning strategies they held, and to generate any new category of vocabulary learning strategies not

described previously or not covered by the questionnaire. This session began after the vocabulary level test and the questionnaire survey were collected. The interviews took place in the participants' classrooms in after-class hours. This ensured a familiar and private setting for the interviewees, and contributed to maximizing the interview data representation of the interviewees' natural behaviors (Nation, 2001). Furthermore, warm-up questions were asked before each interview to ensure that the interviewees felt comfortable and willing to share their views and experiences. Each interview took about 20 minutes, and was audio-recorded. Notes were also taken during the interviews (Appendix C).

3.4 Data analysis

The data gathered from the questionnaire, semi-structured interview, and the vocabulary level test were collected and computed using SPSS (Statistical Package for the Social Sciences). The data were analyzed using the following methods:

Research question 1: What vocabulary learning strategies are employed by second year students in the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat Yai Campus, Thailand?

In answering the research question 1, frequency and percentage distributions were utilized to calculate frequency of use of the subjects' vocabulary learning strategies. Descriptive statistics were used to compute the mean scores and standard deviations of the subjects' level of vocabulary learning strategies.

Research question 2: Are there any significant differences between students with high and low vocabulary size in their use of vocabulary learning strategies?

In answering the research question 2, independent sample t-test was applied to test if there were statistically significant differences between the frequency of vocabulary learning strategies used by the students with high and low vocabulary size.

Research question 3: What are the relationships between the students' vocabulary learning strategies and their vocabulary knowledge?

In answering the research question 3, Pearson correlation was applied to investigate whether there was a relationship between vocabulary learning strategies used and vocabulary knowledge.

CHAPTER 4

FINDINGS

This chapter presents the findings of the study in relation to the following research questions.

(1) What vocabulary learning strategies are employed by second year students in the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat Yai Campus, Thailand?

(2) Are there any significant differences between students with high and low vocabulary size in their use of vocabulary learning strategies?

(3) What are the relationships between the students' vocabulary learning strategies and their vocabulary knowledge?

This chapter presents three main sections. The first section aims to present the overview of vocabulary learning strategies used by the second year students in the Faculty of Liberal Arts. The second section presents a comparison of the use of vocabulary learning strategies between high and low vocabulary size groups. The last section presents the relationship between vocabulary learning strategies the students employed and their vocabulary size scores.

4.1 The overview of the use of vocabulary learning strategies by the second year students

The first research question was to find out the five main categories of vocabulary learning strategies: determination, social, memory, cognitive, and metacognitive strategies used by the second year students in the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat Yai campus, Thailand. Descriptive statistics (means and standard deviations) were employed. The results of vocabulary learning strategies were presented in Table 4.1.

4.1.1 Five main categories of determination, social, cognitive, metacognitive strategies used by second year students

As table 4.1 exhibits, the second year students in the Faculty of Liberal Arts used vocabulary learning strategies at a moderate level ($\bar{X}=3.01$). By categories, it was found that the determination strategies (DET) were most frequently used ($\bar{X}=3.37$) followed by memory strategies (MEM) ($\bar{X}=3.20$), and cognitive strategies (COG) ($\bar{X}=3.20$). For metacognitive strategies (MET) were moderately used ($\bar{X}=2.99$). In this study, it is found that the second year students used social strategies ($\bar{X}=2.61$) less than other vocabulary learning strategies.

Table 4.1: Frequencies of use of all vocabulary learning strategies

Strategies	N	Min	Max	\bar{X}	SD
DET	192	1.25	5.00	3.37	0.69
SOC	192	0.86	4.73	2.61	0.74
MEM	192	0.83	4.83	3.20	0.72
COG	192	0.83	4.83	3.20	0.80
MET	192	0.75	5.00	2.99	0.77
Total	192	1.25	3.96	3.01	0.74

4.1.1.1 Determination strategies used by the second year students

The finding in Table 4.2 showed that the average mean score of the determination strategies used by the second year students was at the most frequently used level ($\bar{X}=3.37$). In more detail of each item, it was found that the strategies of using English-Thai dictionary ($\bar{X}=4.33$), guessing the meaning from the context clue ($\bar{X}=3.52$), using the pictures or gestures to understand the meaning of words ($\bar{X}=3.39$), analyzing affixes and roots to guess the meaning of words ($\bar{X}=3.34$), were most frequently used. Using Thai-English dictionary ($\bar{X}=3.32$), analyzing part of

speech ($\bar{X}=3.32$) were frequently used whereas the strategies of listing vocabulary and reviewed it ($\bar{X}=2.93$), and using English-English dictionary were used at the moderate level ($\bar{X}=2.79$) respectively.

Table 4.2: Frequencies of use of determination strategies

Determination strategies	N	\bar{X}	SD
- Analyze parts of speech (e.g. noun, verb, adjective).	192	3.32	1.09
- Analyze affixes and roots to guess the meanings of words (e.g. replay – re means do it again).	192	3.34	1.12
- Use the pictures or gestures to understand the meaning of Words	192	3.39	1.00
- Guess the meanings of words form context clue.	192	3.52	1.52
- Look up a word in English - English dictionary.	192	2.79	1.24
- Look up a word in English – Thai dictionary.	192	4.33	0.81
- Look up a word in Thai – English dictionary.	192	3.32	1.27
- List vocabulary and review it.	192	2.93	1.21
Total	192	3.37	0.09

4.1.1.2 Social strategies used by the second year students

A preliminary examination of the data is shown in Table 4.3. The average mean of social strategies was 2.61 indicating that the second year students used social strategies at a moderate level. When considering at by item, it was found that the strategy of asking classmates for meaning was frequently used with the mean of 3.72 whereas the strategies of asking the teacher to translate the meaning of a word that they do not understand ($\bar{X}= 2.74$), asking the teacher for synonyms or similar meaning of new word ($\bar{X}= 2.58$), and asking the teacher to check their word lists for accuracy ($\bar{X}=2.52$) were determined at a moderate level. The strategies which the students slightly used were asking the teacher to make a sentence by using a new word ($\bar{X}=2.39$), discovering the meaning through group work activities ($\bar{X}=2.32$), and interacting with native speakers ($\bar{X}=2.01$).

Table 4.3: Frequencies of use of social strategies

Social strategies	N	\bar{X}	SD
- Ask the teacher to translate the meaning of a word that they do not understand	192	2.74	0.98
- Ask the teacher for synonyms or similar meaning of new words	192	2.58	1.12
- Ask the teacher to make a sentence by using the new word	192	2.39	1.15
- Ask classmates for meaning	192	3.72	0.94
- Discover the meaning through group word Activity	192	2.32	1.17
- Ask for the teacher to check your word lists for accuracy	192	2.52	1.18
- Interact with native speaker	192	2.01	1.43
Total	192	2.61	0.74

4.1.1.3 Memory strategies used by the second year students

As revealed in Table 4.4, the second year students employed memory strategies at a moderate level. The average mean score of memory strategies was 2.91. It was found to note that the strategies of learning the words by translating the words' meaning ($\bar{X}=3.85$) and associating the word with other words they have learned ($\bar{X}=3.58$) were frequently used. For the strategy that the second year students used at a moderate level were remembering a word from its strange form, pronunciation or difficult spelling ($\bar{X}=3.23$), studying the word with pictures ($\bar{X}=3.19$), saying the new word aloud when studying in order to easily remember ($\bar{X}=3.13$), connecting the word to their experience ($\bar{X}=3.08$), reviewing the word they have learned by spelling it aloud ($\bar{X}=2.82$), making a list of vocabulary arranged by topic or group for reviewing ($\bar{X}=2.91$), learning the word and idiom together ($\bar{X}=2.77$), and trying to use the new word at once after learning ($\bar{X}=2.67$). However, the strategies of making a list of vocabulary in alphabetical for reviewing ($\bar{X}=2.36$), using physical action

when learning a word ($\bar{X}=2.14$), and remembering the word by underlining the first letter ($\bar{X}=2.05$) were less used.

Table 4.4: Frequencies of use of memory strategies

Memory strategies	N	\bar{X}	SD
- Study the word with pictures	192	3.19	1.05
- Connect the word to your experience	192	3.08	1.31
- Make a list of vocabulary in alphabetical for reviewing	192	2.36	1.19
- Make a list of vocabulary arranged by topic or group for reviewing (e.g. animals, parts of body, flower)	192	2.91	1.23
- Try to use the new word at once after learning	192	2.67	1.29
- Associate the word with other words you have learned	192	3.58	1.15
- Review the word you have learned by spelling it aloud	192	2.82	1.22
- Remember the word from its strange form, pronunciation or difficult spelling	192	3.23	1.25
- Say the word aloud when studying in order to easily remember	192	3.13	1.23
- Remember the word by underline the first letter	192	2.05	1.35
- Learn the word by translating the words' meaning	192	3.85	0.92
- Learn the word of an idiom together	192	2.77	1.26
- Use physical action when learning a word	192	2.14	1.20
Total	192	2.91	0.79

4.1.1.4 Cognitive strategies used by the second year students

With regard to Table 4.5, the average mean scores of cognitive strategies used by the second year students was at a moderate level ($\bar{X}=2.81$). A closer look into each item found that there were a number of vocabulary learning strategies were frequently used. These strategies were: taking notes of the newly-learned words in class ($\bar{X}=3.86$), using the vocabulary section in their textbook ($\bar{X}=3.72$), learning the word through written repetition ($\bar{X}=3.69$), listening to a tape of words lists ($\bar{X}=3.36$) whereas the strategies of learning the word through verbal repetition ($\bar{X}=3.20$) and keeping a vocabulary notebook wherever they go ($\bar{X}=2.41$) were determined as a moderate used.

Table 4.5: Frequencies of use of cognitive strategies

Cognitive strategies	N	\bar{X}	SD
- Learn the word through verbal repetition	192	3.20	0.80
- Learn the word through written repetition	192	3.69	1.10
- Take notes of the newly-learned words in class	192	3.86	1.06
- Use the vocabulary section in your textbook	192	3.72	1.00
- Listen to a tape of word lists	192	3.36	1.12
- Keep a vocabulary notebook wherever you go	192	2.41	1.22
Total	192	2.81	1.42

4.1.1.5 Metacognitive strategies used by the second year students

As shown in Table 4.6, the average mean value of metacognitive strategies used by the second year students was 3.00. This indicated that they used metacognitive strategies at a moderate level. When looking by item, the strategies of using English media such as songs, movies, newspapers, leaflets, the internet, magazines ($\bar{X}=3.89$), translating the meaning of the word from English into Thai ($\bar{X}=3.72$) were frequently used. For the strategies of translating the meaning of the word from Thai into English ($\bar{X}=3.09$), playing vocabulary games ($\bar{X}=3.04$), testing themselves with word tests ($\bar{X}=2.82$), and trying to speak or describe things in English ($\bar{X}=2.73$) were used at a moderately level. The strategies of practicing by doing vocabulary exercises such as filling words in the spaces ($\bar{X}=2.47$) and continuing to study the word over time ($\bar{X}=2.22$) were less used than other strategies.

Table 4.6: Frequencies of use of metacognitive strategies

Metacognitive Strategies	N	\bar{X}	S.D
- Use English media (song, movie, newspaper, leaflets, the Internet, magazines, etc.	192	3.89	1.05
- Test yourself with word tests.	192	2.82	1.14
- Translate the meaning of the word from Thai into English.	192	3.09	1.11
- Translate the meaning of the word from English into Thai.	192	3.72	1.11
- Continue to study the word over time.	192	2.22	1.04
- Practice by doing vocabulary exercises (e.g. filling words in the spaces)	192	2.47	1.18
- Play vocabulary games.	192	3.04	1.26
- Try to speak or describe things in English	192	2.73	1.19
Total	192	3.00	0.77

4.2 A comparison of the use of vocabulary learning strategies between high and low vocabulary size groups

To answer the research question number 2 asking whether there are any significant differences between students with high and low vocabulary size in the use of vocabulary learning strategies, the students were divided into two groups based on their vocabulary level test scores using the 27% technique, as shown in Table 4.7, the test scores of vocabulary level test of the students with high vocabulary size was significantly higher than those of students with low vocabulary size at the 0.01 level. An independent sample t-test was then carried out with each strategy as a dependent variable and high and low vocabulary size groups as independent variables to determine whether the use of a particular strategy was significantly different between the two groups. The results of these analyses were presented in Table 4.8.

Table 4.7: Vocabulary size scores of high and low vocabulary size groups

Vocabulary size	No of item	High		Low		t	Sig
		\bar{X}	SD	\bar{X}	SD		
Total scores	30	23.41	2.83	12.25	3.30	17.338	.000**

** Significant at the 0.01 level

Table 4.8 displayed the mean of vocabulary learning strategies used by the students with high vocabulary size and their low vocabulary size counterparts. The results revealed that the students with high vocabulary size reported using all five categories of strategies significantly higher than the students with low vocabulary size ($p < .01$). When looking into each category of the vocabulary learning strategies used by the high and low vocabulary size students, the determination strategies (DET) were used significantly more often by the high vocabulary size group than did the low vocabulary size group (high group, $\bar{X} = 3.60$; low group, $\bar{X} = 3.14$; $p < .01$), followed by cognitive strategies (COG) (high group, $\bar{X} = 3.47$; low group, $\bar{X} = 2.94$; $p < .01$), metacognitive strategies (high group, $\bar{X} = 3.28$; low group, $\bar{X} = 2.72$; $p < .01$), and memory strategies (high group, $\bar{X} = 3.15$; low group, $\bar{X} = 2.66$; $p < .01$). Social strategies were determined as the least used strategies by the two groups and were found at a significant of 0.05 difference in the frequency of use between the two groups (high group, $\bar{X} = 2.80$; low group, $\bar{X} = 2.43$; $p < .05$).

Table 4.8: Five categories of vocabulary learning strategies used by the students with high and low vocabulary size

Strategies	N	High		Low		t	Sig
		\bar{X}	SD	\bar{X}	SD		
DET	96	3.60	0.59	3.14	0.72	3.457	.001**
SOC	96	2.80	0.75	2.43	0.71	2.499	.014*
MEM	96	3.15	0.67	2.66	0.69	3.565	.001**
COG	96	3.47	0.76	2.94	0.77	3.352	.001**
MET	96	3.28	0.58	2.72	0.61	3.856	.000**

* significant at 0.05 level

** significant at 0.01 level

4.2.1 A comparison of determination strategies used by high and low vocabulary size groups

As shown in Table 4.9, the high vocabulary size group used the determination strategies frequently ($\bar{X}=3.60$) while the low vocabulary size group used these strategies moderately ($\bar{X}=3.14$). It was noticeable that high and low vocabulary size students reported using the strategy of using English-Thai dictionary at the most frequently used level ($\bar{X}=4.42$, $\bar{X}=4.25$ respectively). In using English-English dictionary and Thai-English dictionary strategies, it was found that high vocabulary size students reported using these strategies at a moderate level ($\bar{X}=3.15$, $\bar{X}=3.10$ respectively). In contrast, their low vocabulary size counterparts reported using Thai-English strategy more frequently ($\bar{X}=3.56$), but they reported using the strategy of English-English dictionary the least ($\bar{X}=2.44$). When looking at deeper mental process, it was found that high and low vocabulary size students reported using the strategies of analyzing affixes and roots to guess the meaning of words and analyzing parts of speech to discover the words' meaning frequently ($\bar{X}=3.83$, $\bar{X}=3.81$ respectively). In contrast, their low vocabulary size counterparts reported using these strategies moderately ($\bar{X}=2.85$, $\bar{X}=2.83$). It was also found that high vocabulary size students reported using the strategies of guessing the meaning of words from context clues ($\bar{X}=3.77$) and using the pictures and gestures to understand the words' meaning ($\bar{X}=3.44$) frequently whereas their counterparts reported using these strategies moderately ($\bar{X}=3.31$, $\bar{X}=3.27$ respectively).

For consideration of determination strategies in order to see whether there were any significant differences between high and low vocabulary size groups in using vocabulary learning strategies, the independent sample t-test was applied. As revealed in Table 4.9, in general, high vocabulary size group reported using determination strategies significantly more often than those in the low vocabulary size group ($p < .01$). Only the strategies of using English-Thai dictionary and using Thai-English dictionary were not statistically significant different in terms of the frequency of use.

Table 4.9: A comparison of determination strategies used by the high and low vocabulary size groups

Determination strategies	N	High		Low		t	Sig
		\bar{X}	SD	\bar{X}	SD		
- Analyze parts of speech (e.g. noun, verb, adjective).	48	3.81	0.93	2.83	1.01	4.903	.000**
- Analyze affixes and roots to guess the meanings of words (e.g. replay – re means do it again).	48	3.83	0.85	2.85	1.14	4.731	.000**
- Use the pictures or gestures to understand the meaning of words	48	3.44	1.12	3.31	0.88	.504	.016*
- Guess the meanings of words form context clue.	48	3.77	1.09	3.27	1.26	2.067	.041*
- Look up a word in English - English dictionary.	48	3.15	1.20	2.44	1.20	2.887	.005*
- Look up a word in English – Thai dictionary.	48	4.42	0.79	4.25	0.83	1.000	.320
-Look up a word in Thai – English dictionary.	48	3.10	1.38	3.56	1.12	-1.776	.079
- List vocabulary and review it.	48	3.29	1.14	2.56	1.18	3.064	.003*
Total	48	3.60	0.58	3.14	0.71	3.457	.001**

** significant at $p < .01$

* significant at $p < .05$

4.2.2 A comparison of social strategies used by high and low vocabulary size groups

As revealed in Table 4.10, the average mean scores of the high and low vocabulary size groups differed in using each social strategy which indicated that the high vocabulary size group used these strategies at a moderate level (\bar{X} =2.80) while their low vocabulary size counterparts reported using these strategies at the lower level (\bar{X} =2.43). When looking by items, it was found that strategy of asking classmates for meaning (\bar{X} =3.60, \bar{X} =3.83) was frequently used by the high and low vocabulary size groups. The strategies of asking in learning English vocabulary, high

vocabulary size group reported using these strategies at a moderate level: asking the teacher to translate the meaning that they do not understand ($\bar{X}=3.06$), asking the teacher for synonyms or similar meaning of words ($\bar{X}=2.98$), asking the teacher to check their word lists for accuracy ($\bar{X}=2.67$), and asking the teacher to make the sentences by using the new words ($\bar{X}=2.54$). In contrast, the low vocabulary size group performed these strategies at a lower level ($\bar{X}=2.42$, $\bar{X}=2.19$, $\bar{X}=2.38$, and $\bar{X}=2.23$ respectively). For discovering the meaning through group work activities, it was found that both high and low vocabulary size groups reported using this strategy at a slightly used level ($\bar{X}=2.29$, $\bar{X}=2.35$). With regard to seeking the opportunity to interact with native speakers in learning English vocabulary, it was very interesting to see that high vocabulary size group slightly used this strategy ($\bar{X}=2.44$) whereas their low vocabulary size counterparts least used this strategy ($\bar{X}=1.58$).

The results of independent t-test revealed a significant difference between the two groups on their frequency of social strategy use ($p<.01$). There were three social strategies that both high and low vocabulary size groups significantly differed in terms of frequency of use. These are asking the teacher to translate the meaning that they do not understand, asking the teacher for synonyms or similar meaning of words, and interacting with native speakers.

Table 4.10: A comparison of social strategies used by the high and low vocabulary size groups

Social strategies	N	High		Low		t	Sig
		\bar{X}	SD	\bar{X}	SD		
- Ask the teacher to translate the meaning of a word that they do not understand	48	3.06	0.83	2.42	1.02	3.378	.001**
- Ask the teacher for synonyms or similar meaning of new words	48	2.98	1.00	2.19	1.10	3.682	.000**
- Ask the teacher to make a sentence by using the new word	48	2.54	1.18	2.23	1.11	1.331	.186
- Ask classmates for meaning	48	3.60	0.98	3.83	0.90	-1.187	.238
- Discover the meaning through group word Activity	48	2.29	1.25	2.35	1.10	-.259	.796
- Ask for the teacher to check your word lists for accuracy	48	2.67	1.17	2.38	1.19	1.206	.231
- Interact with native speaker	48	2.44	1.45	1.58	1.28	3.045	.003**
Total	48	2.80	0.74	2.43	0.70	2.499	.001**

** significant at $p < .01$

* significant at $p < .05$

4.2.3 A comparison of memory strategies used by high and low vocabulary size groups

As indicated in Table 4.11, the students with high and low vocabulary size reported using memory strategies at a moderate level ($\bar{X} = 3.15$, $\bar{X} = 2.66$). As the reading frequency below showed, the strategy of learning the word by translating the words' meaning was frequently used by the students with high and low vocabulary size groups ($\bar{X} = 3.96$, $\bar{X} = 3.75$). Also, the strategies of associating the word with other words they have learned, remembering the word from its strange form, pronunciation or difficult spelling, saying the word aloud when studying in order to easily remember, and learning the word of an idiom together ($\bar{X} = 3.85$, $\bar{X} = 3.75$, \bar{X}

=3.40, \bar{X} =3.33 respectively) were determined at frequently used by high vocabulary size group. Low vocabulary size group, on the other hand, reported using those strategies a bit lower at a moderate level (\bar{X} =3.31, \bar{X} =2.71, \bar{X} =2.85). However, they slightly used the strategy of learning the word of an idiom together (\bar{X} =2.21). It was interesting to note that the strategies of remembering the word by underlining the first letter and using physical action when learning a word were found to be slightly used strategies among both high and low vocabulary size students (high group, \bar{X} 2.08, \bar{X} =2.10; low group, \bar{X} =2.02 \bar{X} =2.17 respectively).

In order to test the significant differences between the students with high and low vocabulary size in using memory strategies, the mean score exposed to inferential statistic. In the independent sample t-test below, there were significant differences emerged among the two groups ($p < .01$) in the following, the strategies of connecting the word to their experience, making a list of vocabulary arranged by topic or group for reviewing, associating the word with other words they have learned, reviewing the word they have learned by spelling it aloud, remembering the word from its strange form, pronunciation or difficult spelling, saying the word aloud when studying in order to easily remember, and learning the word of an idiom together. Noticeably, learning the word by translating the words' meaning was not statistically significant difference in the frequency of use in the two groups and this was the strategy students resorted to most often.

Table 4.11: A comparison of memory strategies used by the high and low vocabulary size groups

Memory strategies	N	High		Low		t	Sig
		\bar{X}	SD	\bar{X}	SD		
- Study the word with picture	48	3.29	1.14	3.08	0.96	0.963	.338
- Connect the word to your experience	48	3.44	1.25	2.73	1.30	2.717	.008**
- Make a list of vocabulary in alphabetical for reviewing	48	2.58	1.20	2.15	1.16	1.811	.073
- Make a list of vocabulary arranged by topic or group for reviewing (e.g. animals, parts of body, flower)	48	3.23	1.03	2.58	1.33	2.649	.009**
-Try to use the new word at once after Learning	48	2.90	1.24	2.44	1.31	1.753	.083
- Associate the word with other words you have learned	48	3.85	1.03	3.31	1.22	2.346	.021*
- Review the word you have learned by spelling it aloud	48	3.08	1.33	2.56	1.05	2.125	.036*
- Remember the word from its strange form, pronunciation or difficult spelling	48	3.75	1.12	2.71	1.16	4.463	.000**
- Say the word aloud when studying in order to easily remember	48	3.40	1.19	2.85	1.22	2.194	.031*
- Remember the word by underline the first Letter	48	2.08	1.47	2.02	1.24	.225	.823
- Learn the word translating the words' Meaning	48	3.96	0.89	3.75	0.95	1.100	.274
- Learn the word of an idiom together	48	3.33	1.13	2.21	1.12	4.866	.000**
- Use physical action when learning a word	48	2.10	1.25	2.17	1.15	-.253	.800
Total	48	3.15	0.66	2.66	0.69	3.565	.001**

** significant at $p < .01$

* significant at $p < .05$

4.2.4 A comparison of cognitive strategies used by high and low vocabulary size groups

As depicted in Table 4.12, the students with high vocabulary size reported using cognitive strategies frequently ($\bar{X}=3.47$) while their low vocabulary size counterparts performed these strategies at the moderate level ($\bar{X}=2.94$). When considering by items, it was observed that the strategies of taking notes of the newly-learned word in class, learning the word through written repetition, learning the word through verbal repetition, and using the vocabulary section in their textbook (high group $\bar{X}=4.06$, $\bar{X}=4.02$, $\bar{X}=4.00$, $\bar{X}=3.56$; low group $\bar{X}=3.67$, $\bar{X}=3.42$, $\bar{X}=3.38$, $\bar{X}=3.34$ respectively) were frequently used by the students with high low vocabulary size. For the strategy that students with low vocabulary size reported using at a slightly low level was the strategy of listening to a tape of word lists ($\bar{X}=2.21$) while their high vocabulary size counterparts reported using this strategy at a moderate level ($\bar{X}=2.60$) and it was also the least used strategy of cognitive strategies.

Concerning the differences in using different types of cognitive strategies between the students with high and low vocabulary size, it was found that three strategies which the students with high vocabulary size used significantly more often than the students with low vocabulary size ($p<.01$). These were the strategies of learning the word through verbal repetition, learning the word through written repetition, and keeping a word notebook wherever they go. Interestingly, it was found that the strategies of taking notes the newly-learned words in class and using the vocabulary section in their textbook were more often used by the two groups though significant differences were not found.

Table 4.12: A comparison of cognitive strategies used by the high and low vocabulary size groups

Cognitive strategies	N	High		Low		T	Sig
		\bar{X}	SD	\bar{X}	SD		
- Learn the word through verbal repetition	48	4.00	0.98	3.38	1.14	2.866	.005**
- Learn the word through written repetition	48	4.02	1.04	3.42	1.00	2.889	.005**
- Take notes the newly-learned words in class	48	4.06	0.83	3.67	1.11	1.966	.052
- Use the vocabulary section in your textbook	48	3.56	1.12	3.34	1.09	1.742	.085
- Listen to a tape of word lists	48	2.60	1.18	2.21	1.25	1.592	.115
- Keep a vocabulary notebook wherever you go	48	2.67	1.17	2.38	1.19	2.573	.012**
Total	48	3.47	0.76	2.94	0.77	3.352	.001**

** significant at $p < .01$

* significant at $p < .05$

4.2.5 A comparison of metacognitive strategies used by high and low vocabulary size groups

As Table 4.13 revealed, students with high and low vocabulary size reported using metacognitive strategies at a moderate level ($\bar{X}=3.28$, $\bar{X}=2.72$ respectively). The frequently used strategies of these two groups was the strategy of using English media ($\bar{X}=4.02$, $\bar{X}=3.75$). When looking by items of the strategies used by high vocabulary size group, it was found that they moderately used the strategies of playing vocabulary games ($\bar{X}=3.29$), testing themselves with word tests ($\bar{X}=3.25$), translating the meaning of word from Thai into English ($\bar{X}=3.19$), trying to speak or describe things in English ($\bar{X}=3.06$), practicing by doing vocabulary exercises ($\bar{X}=2.83$), and continuing to study the word overtime ($x=2.56$). For their low vocabulary size counterparts, while the strategy of translating the meaning of the word from English into Thai was frequently used ($\bar{X}=3.40$), the strategies of translating the meaning of word from Thai into English ($\bar{X}=3.00$), playing vocabulary games ($\bar{X}=2.79$) were moderately used. The strategies of testing themselves with

word test ($\bar{X}=2.40$), trying to speak and describe things in English ($\bar{X}=2.40$), and practicing by doing vocabulary exercises ($\bar{X}=2.10$) were slightly used and the strategy of continuing to study the word over time ($\bar{X}=1.88$) was used the least.

In order to find the significant differences in terms of frequency of use between both high and low vocabulary size students, five cognitive strategies were found to significantly differ at the 0.05 level: testing themselves with their word tests, translating the meaning of word from English into Thai, continuing to study the words over time, practicing by doing vocabulary exercises, and trying to speak or describe things in English.

Table 4.13: A comparison of metacognitive strategies used by the high and low vocabulary size groups

Metacognitive strategies	N	High		Low		t	Sig
		\bar{X}	SD	\bar{X}	SD		
- Use English media (song, movie, newspaper leaflets, the Internet, magazine, etc	48	4.02	1.00	3.75	1.10	1.262	.210
- Test yourself with word tests	48	3.25	1.10	2.40	1.02	3.932	.000**
- Translate the meaning of the word from Thai into English	48	3.19	1.06	3.00	1.16	.822	.413
- Translate the meaning of the word from English into Thai	48	4.04	0.89	3.40	1.21	2.960	.004**
- Continue to study the words over time	48	2.56	0.94	1.88	1.04	3.385	.001**
- Practice by doing vocabulary exercises (e.g. filling words in the spaces)	48	2.83	1.15	2.10	1.11	3.147	.002**
- Play vocabulary games	48	3.29	1.22	2.79	1.27	1.967	.052
- Try to speak or describe things in English	48	3.06	1.21	2.40	1.08	2.840	.006**
Total	48	3.28	0.72	2.72	0.72	3.853	.000**

** significant at $p < .01$

* significant at $p < .05$

4.2.6 Results from the semi-structured interview of the students with high and low vocabulary size

In this present study, the aim of using semi-structured interview was to find out further information in the use of vocabulary learning strategies of high and low vocabulary size groups. Seven students from high vocabulary size group and seven students from low vocabulary size group were randomly recruited to participate in this session. Four strategies emerged as their mostly used strategies which were correlated with the students' overall responses in the questionnaire. Results from the interview of both high and low vocabulary groups are presented in the Table 4.14.

Table 4.14: Interview results of the students with high and low vocabulary size

Strategies	High		Low	
	Freq.	%	Freq.	%
Using English-Thai dictionary	6	85.7	6	85.7
Using English media	6	85.7	5	71.4
Taking notes of the newly-learned words	6	85.7	5	71.4
Asking classmates for meaning of words	4	71.4	4	71.4

Following the summary in Table 4.14, the results from semi-structured interview of students with high and low vocabulary size will now be described, with some quotes (*in italic*) taken from the interview transcripts to further elaborate the results. (H refers to students with high vocabulary size and L refers to students with low vocabulary size)

With regard to the strategy of using English-Thai dictionary, belonging to the determination strategies, most of high and low vocabulary size groups preferred this strategy for learning the English vocabulary (high=85.7%, low=85.7%). One student in the high vocabulary size group said...

“I usually employ this strategy because it is an easy way to find the meaning of a new word and it gives all necessary explanation and information about the meaning of a word (H1).”

However one student in the low vocabulary size group mentioned...

“I always consult an English-Thai dictionary to discover the meaning of the unknown words. However, I sometimes do not know which meaning to choose from because there are many meanings and I cannot decide which one should be the appropriate one (L5).”

Concerning the strategy of using English media under metacognitive strategies, most of high and low vocabulary size groups (high=85.7%, low=71.4%) mentioned that using English media can help them to learn English vocabulary.

“Even though I am not good at English, I prefer watching English movies to other media in learning vocabulary since it is very useful. I know more new words, idioms, and slangs from the movies; however, the subtitle must be in Thai otherwise I can't understand it at all (L2).”

“I always read newspapers, novels, magazines in English, and sing and listen to English songs (H4).”

The results from the interview sessions showed that the students in both groups utilized a variety of English media in learning vocabulary. However, students with high vocabulary size used those English media more extensively than did their low vocabulary size counterparts. As several of high vocabulary size students reported...

“In my opinion, this technique suits me. I don't think I am learning English words when listening to English songs or watching English movies. It seems to me that I am doing some entertaining activities (H6).”

“I get many things from English media, not only entertainment but also many new words, contractions of words, and slangs. I like to watch English soundtrack movies with subtitles in English because I want to know what the characters are saying without Thai scripts (H2).”

“In order to learn English, I try to understand what is going on in the movie by seeing the same movie many times and pause in part of special words and take notes. This technique makes me get what is going on in the movie. I do not try to consult a dictionary. If I don't know the unknown words, I will try to interpret the meaning from the character's gestures, intonation of sounds, etc to understand the word meaning (H5).”

Moving on to the strategy of taking notes of the newly-learned words in class under cognitive strategies, both high and low vocabulary size students were satisfied with this strategy (High=85.7%, low=71.4%). One student in the high vocabulary size group said...

“I always write the newly-learned words in my notebook and review them whenever I have free time because I think taking notes really helps me to remember vocabulary. It seems to me that writing or taking notes allows me to store the word and its meaning longer in my memory. The more I write, the more I remember (H7).”

However the way of they took notes is different. That is most of students with low vocabulary size mentioned...

“I think writing the new words in a notebook is very useful in gaining more vocabulary but I don't often write down the newly learned words because I sometimes don't understand the word meaning clearly enough and I could not follow what the teacher have taught since some teachers go too fast I could not catch how to write the word correctly. Moreover, I hardly review it (L6).

This semi-structured interview results showed that the students with high vocabulary size take notes more often than their low vocabulary size counterparts who hardly take notes and hardly review them.

The last vocabulary learning strategy, asking classmates for word meanings, under social strategies was frequently used by both high and low vocabulary size groups (high=71.4%, low=71.4%). One student in the high and another in the low vocabulary size reported...

“I believe that my classmates can help me to learn the words easier than other sources since we will have many opportunities to exchange ideas or knowledge to each other; however, if my friends cannot give me the right answer, I will ask my teacher since he or she is smarter than me and my friends so he or she can answer any questions (H7).”

“I think my friends are better in English than myself. I can rely on them when I don't know the meaning of a new word. I don't want to ask my teacher because I am afraid that he or she will ask me some further questions. I will feel embarrassed if I cannot answer the questions (L7).”

4.3 The relationship between vocabulary learning strategies and vocabulary size scores

To answer the question number three if there was a relationship between the students' vocabulary learning strategies and their vocabulary knowledge, Pearson correlation coefficient was computed to assess degrees of the correlation of the two variables, the vocabulary learning strategies used by high and low vocabulary size students and their vocabulary size scores. The results of these analyses are described below.

4.3.1 Relationship between all five categories and the vocabulary level test scores of high vocabulary size group

As presented in Table 4.15, weak positive correlations were found. There were significant correlations at a weak level between vocabulary learning strategies of students with high vocabulary size and their vocabulary level test scores. Determination strategies were positively correlated with the knowledge of 3,000 word level ($r=.379$, $p<.05$), 5,000 word level ($r=.353$, $p<.01$), and academic word list ($r=.362$, $p<.01$). Social strategies was positively correlated with (3,000 word level ($r=.282$, $p<.05$), and academic word list ($r=.252$, $p<.01$)). However, memory strategies were positively correlated only with the knowledge of academic word list ($r=.261$, $p<.05$) while cognitive strategies were positively correlated with the knowledge of 5,000 ($r=.283$, $p<.05$) and academic word list ($r=.336$, $p<.01$). Metacognitive strategies were positively correlated with all the knowledge of word levels (total $r=.417$, $p<.05$).

Table 4.15: Correlation between vocabulary learning strategies and vocabulary size of high vocabulary size group

Strategies	Vocabulary Levels Test				
	2000	3000	5000	Academic	Total
DET	.177	.379*	.353**	.362**	.439**
SOC	.176	.141	.282*	.252*	.300*
MEM	.149	.182	.176	.261*	.268*
COG	.162	.226	.283*	.336**	.365**
MET	.241*	.312*	.329*	.298*	.417*

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

4.3.2 Relationship between all five categories and the vocabulary level test scores of low vocabulary size group

As Table 4.16 exhibited, the overview of relationship between the vocabulary learning strategy use of the low vocabulary size group and their vocabulary level test

scores showed no significant relationship. Only cognitive strategies were positively correlated with the vocabulary level test at a weak level ($r=.289$, $p<.05$). When considering each word level test scores, it was found that the test score of 2,000 word level was positively correlated with all five categories at weak and moderate levels. However, the test score of 5,000 word level was negatively correlated with the determination strategies at the .05 level ($r=-.245$, $p<.05$).

Table 4.16: Correlation between vocabulary learning strategies and vocabulary size of low group

Strategies	Vocabulary Levels Test				
	2000	3000	5000	Academic	Total
DET	.516**	.113	-.245*	.018	.147
SOC	.264*	.225	-.027	.119	.204
MEM	.278*	.231	-.228	.206	.222
COG	.397**	.300*	.051	.085	.289*
MET	.379*	.217	.046	.080	.218

*. Correlation is significant at the 0.05 level

** . Correlation is significant at the 0.01 level

4.3.3 Relationship between 40 items of vocabulary learning strategies and the overall vocabulary size scores of high vocabulary size group

In analyzing all 40 items of the five main vocabulary learning strategies (determination, social, memory, cognitive, and metacognitive strategies) and the overall vocabulary size scores of the high vocabulary size students, eighteen strategies were found to significantly correlate with the overall vocabulary size scores.

As exhibited in Table, 4.17, the correlation analysis showed significant correlation but with a rather weak level between vocabulary learning strategies and the overall vocabulary size. These strategies were analyzing parts of speech ($r=.357$, $p<.01$), analyzing affixes and roots to guess the meaning of words ($r=.374$, $p<.01$), using English-English dictionary ($r=.254$, $p<.05$), using Thai-English dictionary

($r=.426$, $p<.05$), listing vocabulary and reviewing it ($r=.422$, $p<.01$), asking the teacher for synonyms or similar meanings of new word ($r=.293$, $p<.05$), asking the teacher to make a sentence by using the new word ($r=.325$, $p<.05$), asking the teacher to check their word lists for accuracy ($r=.252$, $p<.05$), interacting with native speakers ($r=.332$, $p<.05$), connecting the word to their experience ($r=.259$, $p<.05$), learning the words of an idiom together ($r=.351$, $p<.01$), learning the word through verbal repetition ($r=.376$, $p<.01$), learning the word through written repetition ($r=.351$, $p<.01$), taking notes of the newly-words in class ($r=.280$, $p<.05$), testing themselves with word tests ($r=.313$, $p<.05$), continuing to study the word overtime ($r=.458$, $p<.01$), using English media ($r=.293$, $p<.05$), and trying to speak or describe things in English ($r=.338$, $p<.01$).

Table 4.17: Vocabulary learning strategies correlated with vocabulary size scores of students with high vocabulary size

Strategies	N	r	Sig
- Analyze part of speech (e.g. noun, verb, adjective) (DET)	48	.357	.007**
- Analyze affixes and roots to guess the meanings of words (DET)	48	.374	.004**
- Using English-English dictionary (DET)	48	.254	.040*
- Using Thai-English dictionary (DET)	48	.246	.046*
- List vocabulary and review it (DET)	48	.422	.001**
- Ask the teacher for synonyms or similar meanings of new word (SOC)	48	.293	.022*
- Ask the teacher to make a sentence by using the new word (SOC)	48	.325	.012*
- Ask the teacher to check your word lists for accuracy (SOC)	48	.252	.042*
- Interact with native speakers (SOC)	48	.332	.010*
- Connect the word to your experience (MEM)	48	.259	.038*
- Learn the words of an idiom together (MEM)	48	.351	.007**
- Learn the word through verbal repetition (COG)	48	.376	.004**
- Learn the word through written repetition (COG)	48	.351	.007**
- Take note of words in class (COG)	48	.280	.027*
- Test yourself with word tests (MET)	48	.313	.015*
- Continue to study the word over time (MET)	48	.458	.001**
- Use English media (MET)	48	.293	.021*
- Try to speak or describe things in English (MET)	48	.338	.009**

*. Correlation is significant at the 0.05 level

** . Correlation is significant at the 0.01 level

CHAPTER 5

SUMMARY, DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

This chapter summarizes the main findings of the study. It also includes a discussion of the findings, the pedagogical implications, and offers recommendations for further studies.

5.1 Summary of the findings

This study was conducted to answer the three research questions: (1) what vocabulary learning strategies are employed by second year students in the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat Yai Campus, Thailand?; (2) are there any significant differences between students with high and low vocabulary size in their use of vocabulary learning strategies?; and (3) what are the relationships between the students' vocabulary learning strategies and their vocabulary knowledge?

Forty items in the questionnaire written in Thai were used to collect data concerning vocabulary learning strategies. They were classified into five categories of determination, social, memory, cognitive, and metacognitive strategies adapted from the vocabulary learning strategies inventory of Schmitt (1997) Taxonomy. The questionnaire consisted of two parts. The first part asked about the subjects' personal information. The second part contained the strategies the students use in learning vocabulary. Another research instrument was vocabulary level test which were adapted from Schmitt et al (2001), consisting of the tests of word levels from the 2,000, 3,000, 5,000, and The Academic Word List.

The questionnaires were distributed to 192 second year students in the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat Yai Campus, Thailand. The subjects were also asked to complete the vocabulary level test, and were then

divided into two groups using the 27% technique: high and low vocabulary size students based on their vocabulary level test scores. Seven students in the high vocabulary size group and seven in the low vocabulary size students were requested to participate in the interview.

The findings of this study can be summarized as follows:

1. The second year students in the Faculty of Liberal Arts reported using vocabulary learning strategies at a moderate level. In more details, the strategies that were rated at a highest level were using English-Thai dictionary, using English media, taking notes of the newly-learned words in class, learning the words by translating the word meaning, and asking classmates for meaning.

2. The students with high vocabulary size used the strategies significantly ($P < 0.01$) more often than did the low vocabulary size students.

3. Statistically positive correlation existed ($P < .01$) between the students' vocabulary learning strategies and their vocabulary size scores.

5.2 Discussion of the findings

As described in Chapter 4, the main results can be summarized as follows:

5.2.1 The vocabulary learning strategies used by the second year students

In response to research question number one, asking about the vocabulary learning strategies employed by the second year students in the Faculty of Liberal Arts at Prince of Songkla University (PSU), Hat Yai Campus, Thailand, the results indicated that the strategy of using English-Thai dictionary ($\bar{X} = 4.33$) under determination strategies was most frequently employed by all subjects. This finding was in line with that of Schmitt (1997) and Sanaoui (1995), who claim that dictionary

use plays an important role in EFL learning. The next frequently used strategies were using English media (songs, movies, newspapers, leaflets, internet, magazines, etc.) ($\bar{X}=3.89$) in the metacognitive strategies, taking notes of the newly-learned words in class ($\bar{X}=3.86$) under the cognitive strategies, learning the words by translating the word's meaning ($\bar{X}=3.85$) belonging to the memory strategies, and lastly asking classmates for meaning ($\bar{X}=3.72$) under the social strategies. These findings were similar to the findings of Stern (1992), Ellis (1994).

5.2.2 The differences between the students with high and low vocabulary size in using vocabulary learning strategies

With respect to research question number two, asking whether there were any significant differences between students with high and low vocabulary size in their use of vocabulary learning strategies, the students were divided into two groups based on their vocabulary level test scores using the 27% technique.

The results showed that there were significant differences in using vocabulary learning strategies between the students with high and low vocabulary size at the confident level of .01. The students with high vocabulary size used the strategies significantly more often than low vocabulary size students did. This finding was consistent with the finding of several previous studies on L2 vocabulary learning, which found that the students with higher vocabulary knowledge used more vocabulary learning strategies (Ahmed, 1989; Gu & Johnson, 1996; Lawson & Hogben, 1996). When taking a closer look at the individual vocabulary learning strategies in the five main categories of vocabulary learning strategies, it was found that students both with high and low vocabulary size rated the same strategies as the most frequently used. The high vocabulary size students, however, used the strategies significantly more often. The differences of those strategies were discussed in the following sections.

5.2.2.1 Determination strategies

In the determination strategies, using English-Thai dictionary was determined as the most frequently used strategy by both high and low vocabulary size students (high \bar{X} =4.42; low \bar{X} =4.25). This finding was consistent with the findings of Schmitt (1997), Sanaoui (1995) and Kudo, (1999), who found that their subjects utilized a bilingual dictionary as a useful source in learning L2 vocabulary. With regard to dictionary use, Wragg (1990) claimed that dictionary use played an important role in EFL learning. In this current study, some high vocabulary size students said, *“I usually employ this strategy because it is an easy way to find the meaning of a new word and it gives all necessary explanation and information about the meaning of a word.”* (translated script). However, this was not always easy when it came to a word with more than one meaning, as most low vocabulary size students reported, *“I always consult an English-Thai dictionary to discover the meaning of the unknown words, but sometimes I do not know which meaning to choose from because there are many meanings and I cannot decide which one should be the appropriate one.”* (translated script). This could be said that these low vocabulary size students might be unable to analyze other functions of a word such as its collocation and parts of speech that would help them to decide the right meaning of the target words.

According to Nist and Olejnik (1995), dictionary use is an essential skill to most students when they learn words. The effective way to learn from a dictionary is that the students first look at the word in context, so they can decide which word meaning to choose in a bilingual dictionary word entry. Dictionaries are powerful sources that help the students learn words independently. Summer (1988) and Scholfield (1982) concurred that dictionaries have an important role in language learning. However, they noted that students should be careful in choosing the appropriate meaning to fit the context in which the word is used since various meanings of a word are given in an entry of a dictionary. The skills of using dictionary are helpful for the L2 learners in improving their language learning.

The learners can use either a bilingual, i.e. English-Thai or Thai-English, or a monolingual dictionary like English-English. Thompson (1987) demonstrates both advantages and disadvantages of both types of dictionary. In terms of monolingual dictionaries, he states that monolingual dictionaries for foreign language learners tend to be mostly regarded as better than bilingual dictionaries for they give more exposure to the language use from the word entry. However, monolingual dictionaries have serious disadvantages in many language teaching situations, especially when learners do not know which word meaning to choose from, and even they do, the word definitions in the foreign language may not help them very much for comprehension of word if they do not know the meaning of words used in the word definition itself. For these reasons, bilingual dictionaries are potentially more useful and more motivating resources for L2 language learners. However, Thompson (1987) concludes that monolingual dictionaries are very helpful for the more advanced learners. Basically, for the learners below this level, the bilingual dictionary can do all the useful things that the monolingual dictionary cannot. In addition, Summer (1988) suggests a dictionary use as a valid activity for foreign learners of English, as an aid to both comprehension and production of the words.

5.2.2.2 Social strategies

Asking classmates for meaning was determined as the frequently used strategy by the students with high and low vocabulary size (high \bar{X} =3.60: low \bar{X} =3.82). Interestingly, students with low vocabulary size were found to use this strategy more often. According to Ahmed (1989), the learners perceived their friends, other students and lecturers as a good source of vocabulary knowledge. The students usually preferred asking other people who they thought know English better than themselves. In this study, it is probable that classmates have a greater influence on the learners when they learn English vocabulary or discover the meaning of words. As some high vocabulary size students reported, *“I believe that my classmates can help me to learn the words easier than other sources since we will have many opportunities to exchange ideas or knowledge to each other; however, if my friends cannot give me the right answer, I will ask my teacher since he or she is smarter than me and my friends*

so he or she can answer any questions.” (translated script). One low vocabulary size students said, “I think my friends are better in English than myself. I can rely on them when I don’t know the meaning of a new word. I don’t want to ask my teacher because I am afraid that he or she will ask me some further questions. I will feel embarrassed if I cannot answer the questions.” (translated script).

As the interview results of low vocabulary size students showed, they did not frequently ask the teacher to check the word meaning. According to Kramsch (1979), another social strategy which is probably infrequently used involves students asking teachers to check their work for accuracy, especially from using flash cards and word lists since these are commonly used for independent learning outside the class. Additionally, Schmitt (1997) adds that word lists, and flash cards have fallen out of the favor in the communicative period, as many teachers believe that words should only be presented in context. Conversely, according to Nation’s (1990) survey, he concluded that an average learner can master a huge number of words by using word lists or flash cards, and that learning new word this way does not fade away as quickly as many people may think. He proposes that word lists can be very useful for initial exposure to a new word. Moreover, one main advantage of learning words from word lists is that word cards can be taken and studied almost anywhere when the students have a free moment. Also, they can be arranged to create logical groupings of the target words (Gairns & Redman, 1986).

5.2.2.3 Memory Strategies

According to the results concerning memory strategies, the strategy of learning the words by translating the word’s meaning was frequently used by both high and low vocabulary size students (high \bar{X} =3.96: low \bar{X} =3.75.). The students reported that they used this technique because it was potentially useful as a way of consolidating the word meaning in their memory; however, they behaved differently in their responses in the questionnaire. That is, the students with high vocabulary size reported using this strategy more often than their low vocabulary size counterparts that might lead them to get low scores of vocabulary level test. As Scholfield (1982)

suggests translating can be used to teach the meanings of new words and it can be used to compensate for a limited productive vocabulary, especially when a word is temporarily inaccessible.

In addition, Schmitt (1997) supports the idea that translating can also be utilized to improve recall of a word by means of manipulation effort involved in reformulating the word's meaning.

5.2.2.4 Cognitive strategies

The vocabulary learning strategy which was reported being frequently used by students with high and low vocabulary size was taking notes of the newly-learned words in class (high \bar{X} = 4.06: low \bar{X} = 3.67). This finding was congruent with Gu & Johnson's (1996) findings which showed that the strategy of taking notes was found to be positively correlated with the student's English proficiency test and vocabulary size test scores. As Schmitt (1997) points out taking notes in class invites learner to create their own personal structure for newly-learned words, and also affords the opportunity for additional exposure during the review. Moreover, the students have many alternatives to help them study the target words, such as making use of special vocabulary sections in their textbooks. However, MaCarthy (1990) points out that the learners differ in what they do in note-taking, when they take notes, and how they take notes.

As some high vocabulary size students in this study reported, *"I always write the newly-learned words in my notebook and review them whenever I have free time because I think taking notes really helps me to remember vocabulary. It seems to me that writing or taking notes allows me to store the word and its meaning longer in my memory. The more I write, the more I remember."* (translated script). This strategy of taking notes of the newly-learned words in class was also considered very useful for students with low vocabulary size. However, they had some problems in utilizing this strategy, as reported by one student in this low vocabulary size, *"I think writing the new words in a notebook is very useful in gaining more vocabulary but I don't often*

write down the newly learned words because I sometimes don't understand the word meaning clearly enough and I could not follow what the teacher have taught since some teachers go too fast I could not catch how to write the word correctly. Moreover, I hardly review it." (translated script).

This finding indicated that the way of their notes taking is different. Students with high vocabulary size take notes more often than their low vocabulary size counterparts who hardly take notes and hardly review it. In turn, this might be one of the reasons that made them get the low scores in vocabulary size tests. They may need some help and motivation. As Carroll and Mordant (1991) suggest about taking notes on vocabulary learning in class, the teacher should give the opportunity to the students to take notes the newly-learned words. This might involve word definitions, its etymology, the sentences in which the words occur, and part of speech of word during their learning process in order to help them remember words more competently.

5.2.2.5 Metacognitive strategies

With regard to metacognitive strategies, the strategy of using English media was frequently used by both high and low vocabulary size students (high \bar{X} =4.02: low \bar{X} = 3.75). This may be explained by the fact that English media are regarded as an up-to-date strategy that can overwhelmingly centre the students learning of new vocabulary in the present world. It affects Thai teenage students since media itself seem to entertain them and they can simultaneously help them learn a huge amount of new vocabulary. Meara, (1999) asserts that students prefer more motivating sources of vocabulary knowledge than literal sources, such as listening to songs or radios to learn a new word, watching movies to gain more words or expressions, and reading magazines or newspapers to discover the meaning of a word.

According to the interviews of the low vocabulary students, it was revealed that watching English movies was one of their favorite hobbies, *"Even though I am not good at English, I prefer watching English movies to other media in learning*

vocabulary since it is very useful. I know more new words, idioms, and slangs from the movies; however, the subtitle must be in Thai otherwise I can't understand it at all." (translated script). The interviews of this group of students showed an interesting issue as one student said, *"One of the best ways to learn and practice English vocabulary is by reading magazines or newspapers."* (translated scrip).

The results from the questionnaire and interview sessions possibly lead to the conclusion that the two groups utilized a variety of English media in learning vocabulary. However, they behaved differently in both breadth and depth of the strategies used. That is, the students with high vocabulary size used those English media more extensively than did their low vocabulary size counterparts. As several of high vocabulary size students reported, *"In my opinion, this technique suits me. I don't think I am learning English words when listening to English songs or watching English movies. It seems to me that I am doing some entertaining activities. I get many things from English media, not only entertainment but also many new words, contractions of words, and slangs. I like to watch English soundtrack movies with subtitles in English because I want to know what the characters are saying without Thai scripts. In order to learn English, I try to understand what is going on in the movie by seeing the same movie many times and pause in part of special words and take notes. This technique makes me get what is going on in the movie. I do not try to consult a dictionary. If I don't know the unknown word, I will try to interpret the meaning from the character's gestures, intonation of sounds, etc to understand the word meaning."* (translated script). Some high vocabulary size students added, *"I always read newspapers, novels, magazines in English, and sing and listen to English songs."* (translated script).

Nation (2001) stated that the teachers can help learners improve their vocabulary learning by encouraging them to learn through listening materials, such as songs, advertisements, and news. This may allow learners to get more familiar with English vocabulary. Moreover, Schmitt (1997) asserted that respondents in his study felt relaxed when they learned English by listening to English songs.

5.2.3 The relationship between vocabulary learning strategies and the vocabulary size

To answer the research question number three asking if relationship existed between the students' vocabulary learning strategies and their vocabulary size. The overview results showed that there were significant correlations at a weak level between all five categories (determination, social, memory, cognitive, and metacognitive strategies) of the vocabulary learning strategies used by high vocabulary size students and their overall scores of the vocabulary level tests. The use of metacognitive strategies among the high vocabulary size students was positively correlated with all their vocabulary level tests scores of 2,000, 3,000, 5,000 word levels, and Academic word list. Determination strategies were positively correlated with the test scores of 5,000 word level, 3,000 word level and Academic word list. The social strategies were positively correlated with the test scores of 5,000 and Academic word list. The cognitive strategies were positively correlated with the test scores of 5,000 word level and Academic word list. Memory strategies were positively correlated only with the test score of Academic word list.

These findings were in line with Gu and Johnson's (1996) study, which found that vocabulary sizes as well as overall language proficiency of the learners seem to relate to the learners' various vocabulary learning strategies and their willingness to spend extra time to practice newly-learned items. This result indicated an initial evidence of a positive relationship between the two variables which might be said that students with high vocabulary size used the vocabulary learning strategies more efficiently than their low vocabulary size counterparts did. Moreover, the findings of this study are in agreement with those of Sanaoui's (1995) with regard to the relationship between frequent and elaborate strategy use and higher levels of achievement.

With regard to the use of all five categories (determination, social, memory, cognitive, and metacognitive strategies) by the students with low vocabulary size, the overall correlations showed that only cognitive strategies were statically correlated with the overall vocabulary size test scores at a weak level. A closer look at each category revealed that determination, social, memory, and metacognitive strategies were statically correlated with the test score of 2,000 word level at a weak level. The use of cognitive strategies of the low vocabulary size students was statically correlated with the test scores of 2,000 and 3,000 word levels at a weak level.

In addition, a negative correlation existed between vocabulary learning strategy use and vocabulary size score among the low vocabulary size students. In more details, the determination strategies were negatively correlated with the test score of 5,000 word level among these students. The reason that might explain this phenomenon is that their most often used strategy of using English-Thai dictionary to discover the word meanings. It was found that most of the students with low vocabulary size reported, *“If I find a word with more than one meaning, I cannot decide which meaning is appropriate for the word I am looking for”* (translated script). This can be assumed that they were unable to decide which meaning to be used in the appropriate contexts.

Moreover, the frequent 5,000 words are more difficult words which require more lexical competence in learning (Schmitt, 2000). This finding revealed that all five categories were significantly less used by students with low vocabulary size who might not take much time and effort in learning vocabulary or they might lack the abilities to use the dictionary effectively and efficiently. These might lead them to get a lower vocabulary size (Schmitt, 2000). In this case, the teacher must take particular care to show the students the importance of using dictionaries and how to use them effectively.

5.2.4 Relationship between 40 items of vocabulary learning strategies and the overall vocabulary size scores of the high vocabulary size group

In analyzing all 40 items of five main categories of vocabulary learning strategies (determination, social, memory, cognitive, and metacognitive strategies) used by students with high vocabulary size and their overall vocabulary level test scores. Eighteen strategies were found to significantly correlate with the overall vocabulary level test scores. The correlation coefficient showed that the use of these strategies probably could be used to increase the students' bigger vocabulary size and they should be trained to the students with low vocabulary size.

5.2.4.1 Determination strategies

In the determination strategies, the strategies of analyzing parts of speech, analyzing affixes and roots to guess the meaning of words, using English-English dictionary, using Thai-English dictionary, and listing and reviewing the newly-learned words were found to significantly correlate with the student's overall vocabulary size. Based on the questionnaire results, the students with high vocabulary size reported using these strategies at a high level ($\bar{X} = 3.81$, $\bar{X} = 3.83$, $\bar{X} = 3.15$, $\bar{X} = 3.10$, $\bar{X} = 3.29$ respectively) while their low vocabulary size counterparts reported using these strategy at a lower level ($\bar{X} = 2.83$, $\bar{X} = 2.85$, $\bar{X} = 2.44$, $\bar{X} = 2.56$ respectively). Noticeably, only the strategy of using Thai-English dictionary was found to be more frequently used among the students with low vocabulary size ($\bar{X} = 3.56$).

Regarding the strategies of analyzing parts of speech and analyzing affixes and roots to guess the meaning of word, Meara's (1989) study indicates that advanced learners prefer identifying parts of speech when they learn the meaning of a new word, whereas weak learners normally ignore this strategy because they are indifferent to the parts of speech of the difficult words as well as their meanings even if they are introduced and taught in class. Several low vocabulary size students reported during the interview that they rarely identify words into their parts of speech; they said that they did not know which words are adjectives, verbs, nouns, and so on.

They added that they sometimes mistook an adjective as a verb, a noun as an adverb and so on. Schmitt (1997) claims that learners can obtain hints for meanings from word roots or affixes, although not always reliably. Also, if the learners know word roots and affixes as well as word's meanings, this may help them to develop their reading skills more effectively. Moreover, the students can use these strategies both inside and outside classroom. One possible suggestion is that teachers should stimulate the students to guess the word meaning from its affixes and roots so that the students will use this strategy more often in reading activities. Alternatively, teachers may select various kinds of texts focusing on affixes and roots to assign to the students, especially those who have lower vocabulary size in order to train them to use these strategies more effectively.

Regarding to the strategy of using English-Thai dictionary, it was reported as the most frequently used strategy among the students with high and low vocabulary. However, correlational analysis revealed that the strategy of using English-Thai dictionary was not significantly correlated with vocabulary size. In contrast, the strategies of using English-English dictionary, and Thai-English dictionary were found to significantly correlate with vocabulary size. For the strategy of using English-English dictionary, it provides more functions of words and gives more explanations than does the English-Thai dictionary normally used among L2 language learners which gives only the translation of the word meaning or simple sample sentences. Therefore, this strategy of using monolingual dictionary might enable the students to encounter, comprehend, and internalize the unknown words more effectively and lead them to retain more vocabulary. However, this strategy was not a preference for the students with low vocabulary size. This may be due to the fact that these students lack the opportunity to apply this strategy since they are not sure whether they can understand the English definitions in this kind of dictionary. Even if they try to use an English-English dictionary, they may be reluctant to decide which meaning is the most appropriate for the word, or they might not be able to translate the meaning of the word correctly. For these reasons, they need to be sure before using such dictionary that they will get the correct meaning and understand those words clearly. Likewise, Wragg (1990) states that the students must make sure that

the words they use in going to convey their meaning. Taking this into account, the students should be trained to use English-English dictionary when they learn vocabulary since this kind of dictionary does help them learn the correct meanings of English words.

The strategy of using Thai-English dictionary was also found to significantly correlate with students' vocabulary size and was found to be frequently used by the students with high and low vocabulary size. However, the latter group reported using this strategy more often. As they reported in the interview section, they tended to use a Thai-English dictionary when they wanted to express their ideas in English. They usually looked for Thai words they wanted to use in the Thai-English dictionary. It can be concluded that a Thai-English dictionary may be a meaningful and useful source for the students to get the meanings of difficult words when they are working with the writing or speaking tasks. Regarding this finding, teachers should train the students on how to use an English-English dictionary and Thai-English dictionary more appropriately rather than let them use an English-Thai dictionary just for getting word meaning in Thai. Moreover, teacher should raise the students' awareness to realize the benefits of listing vocabulary they have found in dictionary and review it for further use. As Nation (1982) suggests, it is very useful for initial exposure to a new word for either beginner or advanced learners. More importantly, they need to review the words they encounter for further uses.

5.2.4.2 Social strategies

In respect of the correlational results, the strategies of asking the teacher for synonyms or similar meaning of the new word, asking the teacher to make a sentence by using the new word, asking the teacher to check their word lists for accuracy, and interacting with native speakers were found to significantly correlate with the students' vocabulary size. However, these strategies were found to be used less frequently than other group of strategies by both the students with high and low vocabulary size (high \bar{X} =2.98, \bar{X} =2.54, \bar{X} =2.67, \bar{X} = 2.44 respectively; low \bar{X} =2.19, \bar{X} =2.23, \bar{X} =2.38, \bar{X} =1.58 respectively). The results from the interview

session revealed that the students did not want to ask their teacher because they were afraid that he or she may ask them some further questions that they could not answer, and that would make them feel embarrassed and they would be discouraged if they made some mistakes, so they did not dare to ask the teacher. According to Schmitt (1997) when students encounter vocabulary problems, teachers should be in the position to help them in a variety of ways such as giving the sources for language translation to the students. The source language translations have the advantage of being fast, easily understood by the students, and make possible the transfer of the source language onto the equivalent target language. For this reason, teachers should try to reduce the student's anxiety, and instead stimulate the students to have courage to effectively acquire English vocabulary knowledge. Nation (2001) states that teachers often have influence on learner's vocabulary knowledge. He claims that teachers do help students understand meaning of unfamiliar words faster and better if they give the students opportunities to discuss the meaning of words. Other social strategies such as Interacting with native speakers is a helpful and useful technique to learn English since the students can not only obtain English vocabulary, but also learn its pronunciation, intonation, and stress from native people.

5.2.4.3 Memory strategies

The strategies of connecting the words to their experience and learning the words of an idiom together were found to significantly correlate with the student's vocabulary scores. The students with high vocabulary size reported using these strategies at a higher level ($\bar{X}=3.44$, $\bar{X}=3.33$ respectively) while low vocabulary size students reported using these strategies at a lower level ($\bar{X}=2.73$, $\bar{X}=2.21$ respectively). As Thompson (1987) explains, the newly-learned words can be integrated into many kinds of existing knowledge. Furthermore, new words can also be related to a particular personal experience of the significant concept. For example, learners mentally connect the word "snow" to a memory of playing in the snow when they were children. Learners can also create their own mental image of word meaning. Schmitt's (1997) supports that the students can get vocabulary knowledge when learning through idioms. From this finding, teacher should arrange group

activities or tasks that the students are able to create their imagination and teacher should train these strategies to the students with low vocabulary size more.

5.2.4.4 Cognitive strategies

For cognitive strategies, the strategies of learning the word through verbal repetition, learning the word through written repetition, and taking notes of the newly-learned words in class were found to significantly correlate with the student's vocabulary size. It was interesting to see that both students with high and low vocabulary size reported using these strategies at a high level (high $\bar{X}=4.00$, $\bar{X}=4.02$, $\bar{X}=4.06$ respectively; low $\bar{X}=3.28$, $\bar{X}=3.42$, $\bar{X}=3.67$ respectively). Both groups reported that the strategies of learning the word through verbal and written repetition helped them to remember words more effectively. On this, several researchers such as O'malley and Chamot (1990), Rubin and Wenden (1987), and Sanaoui (1995), found that these strategies has been used by foreign language learners to commit new foreign words to their memory and they have been considered as the first and easiest strategies that learners pick up and use. In addition, Oxford (1990) points out that the particular form of rehearsal could be a reading or writing of the words, the repetition of the words and the meaning, or repetition may engage some forms of structuring. Also, this can be found in Lawson and Hogben's (1990) work in which they noted that the strategies most frequently used by Italian language learners involve some forms of repetition. Not only do they use repetition in almost two-thirds of opportunities, but repetition is utilized on most of the words by most of them.

In addition, the note-taking strategy was significantly correlated with the students' vocabulary size scores and was the most frequently used by students with high and low vocabulary size. It can be assumed that the students may prefer taking notes after acquiring information about new words, but they were varied in the way they did and how they took their notes. They may write what the teacher is teaching on different forms such as word lists, vocabulary notebooks. According to Schmitt's (1997) study concerning weak and advanced learners' vocabulary learning, more advanced learners could transfer their knowledge to new application better than the

weak learners. Schmitt' study may corroborate the idea that some students with high vocabulary size can apply and transfer their knowledge to new application, such as taking notes strategy, so they can listen to and write down what the teacher is teaching at the same time.

5.2.4.5 Metacognitive strategies

In metacognitive strategies, the strategies of testing themselves with word tests, continuing to study the word overtime, using English media, and trying to speak or describe things in English were found to significantly correlate with the overall vocabulary size. The students with high vocabulary size reported using these strategies more frequently (high $\bar{X}=3.25$, $\bar{X}=2.56$, $\bar{X}=4.02$, $\bar{X}=3.06$ respectively) than their low vocabulary counterparts (low $\bar{X}=2.40$, $\bar{X}=1.88$, $\bar{X}=3.75$, $\bar{X}=2.40$ respectively). According to Schmitt (1997), doing tests can be one strategy that maximizes the effectiveness of learner's vocabulary learning if it is scheduled and organized rather than random. He supports using this strategy since he can prove that most forgetting words occur as soon as learning session ends. If the students always test themselves after finishing class, it will help them remember words longer and the rate of forgetting will slow down. Moreover, if the students continue testing word or try a variety of ways to improve their English vocabulary leaning, they will not forget and gain a number of words. To this consideration, teacher should at times prepare various vocabulary tests for the students to further their learning of words, and to enhance their rehearsal, or alternatively teachers may encourage the students to do the tests by themselves at home.

Using English media was one of the most frequently used strategies among the students with high and low vocabulary size and it was found to significantly correlate with the overall vocabulary size. This implies that materials selected for learning and teaching in classroom should be varied. Moreover, it could be suggested that teachers should not focus only on textbooks but other English media such as songs, posters, brochures, advertisements, Internet, movies, newspapers, and a lot more authentic materials. Moreover, attempting to speak or describe things in English is a useful way

to improve their vocabulary knowledge including their speaking skill by means of pronunciation, intonation, stress and accent. Additionally, the students may recognize words more easily and utilize them more fluently if they try to speak English often as they can associate the source language with the target language, in this case, teacher should try to arrange group works or pair works to discuss interesting topics in their daily life.

5.3 Pedagogical implications

The results of this study were consistent with the previous studies in terms of types and frequency of vocabulary learning strategies employed by university students. The strategies used by the students were similar to those research studies of Schmitt, (1997), Oxford, (1990), Gu and Johnson, (1996).

The implication derived from the results of this study is that training the students for vocabulary learning strategies should be regarded as a needed aspect of lexical learning and it deserves more consideration. Understanding the students' natural learning patterns contributes to a better understanding of how they can learn the words of the target language, particularly English. From this study, it is hoped that university teachers will better understand the vocabulary learning trends of students so that they can train and lead students more effectively to greater achievement in learning vocabulary.

Certainly, the findings offer great benefits to English language teachers and students. As the results showed that the strategies of using English-Thai dictionary, asking classmates for word meaning, learning the words by translating the words' meaning, taking notes of the newly-learned words in class, and using English media were found to be the most frequently used strategies among the students with high and low vocabulary size. Therefore, the students should be encouraged to make extensive use of those strategies. The teachers can design tasks for the students in order to improve their skills in using those most frequently used strategies.

Another implication is that the teachers should try to make the learners aware of the strategies that were found to significantly correlate to their vocabulary size. These were the strategies of analyzing parts of speech, analyzing affixes and roots to guess the meaning of words, using English-English dictionary, using Thai-English dictionary, listing vocabulary and reviewing it, asking the teacher for synonyms or similar meanings of the new word, asking the teacher to make a sentence by using the new words, asking the teacher to check their word lists for accuracy, interacting with native speakers, connecting the word to learners' experience, learning the word through verbal repetition, learning the word through writing repetition, taking notes of the newly-learned words in class, testing themselves with word tests, continuing to study the word over time, using English media, and trying to speak or describe things in English. The teacher should teach the students how to use these strategies whenever necessary and try to include these strategies in class activities and assignments, etc, in order to encourage the learners to internalize these strategies. Oxford (1990) states that making the students aware of the strategies they use in learning are one of the best ways to enhance their learning. When students are aware of the strategies which help them to learn better, they are motivated to use them more frequently in their learning.

5.4 Recommendations for further studies

Based on the findings of this study, the following recommendations are made for further research.

5.4.1 The vocabulary learning strategies used by the subjects in this study were obtained from the questionnaire and interview. Other methods such as observation and think-aloud protocol should be included. This may enable the researcher to discover other aspects, for example, students' attitudes or beliefs toward vocabulary learning in English.

5.4.2 Further investigations on vocabulary learning strategies of high and low English proficiency students should be conducted on other subject groups in other

universities for a better understanding of the use of vocabulary learning strategies in Thailand and for language learning improvement.

5.4.3 Further research should include other factors of the subjects to investigate the relationship between language learning outcome and vocabulary learning strategies they use.

5.4.4 Further research should be done on how learning resources or self-access learning centers or the online learning programs, which are actively promoted in almost all universities and language institutes, can help motivate L2 learners to acquire more vocabulary. It is also worthwhile to examine what types of services should be provided for these learners to be active and independent learners in their vocabulary knowledge.

References

- Ahmed, M.O. (1989). Vocabulary learning strategies. *Beyond words*. London: CILT.
- Carroll, M. C. & Mordaunt, O. G. (1991). The frontier method of vocabulary practice. *TESOL*, 1, 23-26.
- Alderson, J.C., & Urquhart, A.H. (1985). The effect of students' academic discipline on their performance on ESP reading tests. *Language Testing*, 2(2), 192-204.
- Avila, E., & Sadoski, M. (1996). Exploring new applications of the keyword method to acquire English vocabulary. *Language Learning*, 46(3), 379-395.
- Baddeley, A. (1990). *Human memory: Theory and Practice*. Needham Height.
- Brown, D. (1987). *Principles of language learning and teaching*. NJ: Prentice Hall.
- Cameron, L. (2001). *Teaching languages to young learner*. Cambridge University Press.
- _____. (2002). Measuring vocabulary size in English as an additional language. *Language Teaching Research*, 6(2), 145-173.
- Carrel, P., & Eisterhold, J. (1983). Schema theory and ESL reading pedagogy. *TESOL Quarterly*, 17, 553-573.
- Carroll, J. B. (1997). Characteristic of successful second language learners. In M., Burt, H., Dulay & M., Finocchiaro (Eds.), *Viewpoints on English as a second language in honour of J.E. Alatis* (pp.1-7) NY: Regents.
- Carter, R., & McCarthy, M. (1988). *Vocabulary and language teaching*. London: Longman.

- Carroll, M. C. & Mordaut, O, G. (1991). The frontier method of vocabulary practice. *TESOL Quarterly*, 1, 23-26.
- Catalan, R. (2003). Sex differences in L2 vocabulary learning strategies. *Applied Linguistics*, 13(1), 54-77.
- Chamot, A. U. (2004). Issues in language learning strategy research and teaching. *Electronic Journal of Foreign Language Teaching*, 1 (1), 14-26.
- Coady, J. (1993). Research on ESL/EFL vocabulary acquisition: putting it in context. In T. Huckin, M. Haynes., & J. Coady (Eds), *Second language reading and vocabulary learning* (pp. 3-23). Norwood, NJ: Ablex.
- Coady, J., & Huckin, T. (1997). *Second language vocabulary acquisition: A rationale for pedagogy*. Cambridge University Press.
- Cook, V. (2001). *Second language learning and learning teaching*. Oxford University Press.
- Cunningsworth, A. (1995). *Choosing your course book*. Oxford: Heinemann.
- Davies, P., & Pearse, E. (2000). *Success in English teaching*. Oxford University Press.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford University Press.
- _____. (1997). *Second language acquisition*. Oxford University Press.
- Fan, Y. M. (2003). Frequency of use, perceived usefulness, and actual usefulness of second language vocabulary strategies: A study of Hong Kong learners. *The Modern Language Journal*, 87(2), 222-241.

- Gairns, R., & Redman, S. (1986). *Working with words*. Cambridge University Press.
- Gu, Y., & Johnson, R. K. (1996). Vocabulary learning strategies and language learning outcomes. *Language Learning*, 46(4), 643-679.
- Harmer, J. (1991). *The practice of English language teaching*. London: Longman.
- Hatch, E., & Brown, C. (1995). *Vocabulary, semantics, and language education*. Cambridge University Press.
- Hazenberg, S., & Hulstijn, J.H. (1996). Defining a minimal receptive second language vocabulary for non-native university students: An empirical investigation. *Applied Linguistics*, 17(2), 145-163.
- Hedge, T. (2000). *Teaching and learning in the language classroom*. Oxford University Press.
- Hulstijn, J. H. (1993). When do the foreign language readers look up the meanings of unfamiliar words? The influence of task and learner variables. *Modern Language Journal*, (77), 139-147.
- Intaraprasert, C. (2004). *EST students and vocabulary learning strategies: A preliminary investigation*. Retrieved on April, 12, 2010, from [www.http://sutlib2.sut.ac/th](http://sutlib2.sut.ac/th).
- Intaraprasert, C. (2005). A preliminary investigation of vocabulary learning strategies employed by EST students. *Suranaree Journal of Science and Technology*, 12(2), 163-171.

- Isaac, S., & Michael, W.B. (1973). *Handbook in research and evaluation*. San Diego, Ed ITS.
- Jenkins, J. (2006). Current perspectives on teaching World Englishes and English as a lingua franca. *TESOL Quarterly*, 40(1), 157-181.
- Johnson, C., & Johnson, D. (2005). *The importance of vocabulary development*. Educators Publisheing Service.
- Kachru, B.B., & Nelson, C.L. (1996). World Englishes. In S.L. MaKay & N.H. Hornberger (Eds.), *Sociolinguistics and language teaching* (pp. 71-102). Cambridge University Press.
- Kitajima, R. (2001). The effect of instructional conditions on students' vocabulary retention. *Foreign Language Annals*, 34 (5), 482-492.
- Krajangsirisin, W. (2001). *An investigation of English vocabulary learning strategies used by fist year students at Prince of Songkla University*. Unpublished Master's thesis, Prince of Songkhla University, Songkla, Thailand.
- Kramersch, C.L. (1979). Word watching: learning vocabulary becomes a hobby. *Foreign Languauge Annals*, 12(2), 153-158.
- Krashen, S. D., & Terrell, T. D. (2000). *The natural approach: Language acquisition in the classroom*. NY: Longman.
- Kudo, Y. (1999). *L2 vocabulary learning strategies*. Retrieved on May, 12, 10, from [www.http://call4all.us/home/_all.php?fi=1](http://call4all.us/home/_all.php?fi=1)
- Laufer, B. (1998). The development of passive and active vocabulary in a second language: same or different? *Applied Linguistics*, 12, 255-271.

- Lawson, M J., & Hogben, D. (1996). The vocabulary learning strategies of foreign language students. *Language Learning*, 46(1), 101-135.
- Laufer, B., & Hulstijn, J. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. *Applied Linguistics*, 22(1), 1-26.
- Leki, I., & Carson, J. G. (1994). Student's perception of EAP writing instruction and writing needs across the discipline. *TESOL Quarterly*, 28, 81-101.
- Lewis, M. (1993). *The lexical approach: The state of ELT and a way forward*. Hove: Language Teaching.
- Meara, P. (1980). Vocabulary acquisition: A neglected aspect of language learning. *Language Teaching and Linguistics*, 13 (4), 221-246.
- Meara, P., & Fitzpatrick, T. (1999). Lex: 30 an improved method of assessing productive vocabulary in an L2. *System*, 28(1), 19-30.
- McCarthy, M. (1988). *Vocabulary and Language Teaching*. NY: Longman.
- McCarthy, M. (1990). *Vocabulary*. Oxford University Press.
- McComish, J. (1990). The word spider: a technique for academic vocabulary learning in curriculum area. *Guideline*, 12, 26-36.
- McIntyre, P., & Noels, K. A. (1996). Using social-psychological variables to predict the use of language learning strategies: *Foreign Language Annals*, 29(3), 373-386.

- Miller, K. E., & Gildea, D. (1987). *The foreign language syllabus and communicative approaches to teaching*: Special issue of studies in second language acquisition. Oxford University Press.
- Mingsakoon, P. (2003). *A comparative study of vocabulary learning strategies between Mattayom suksa six students in Science and Arts Programs at Hunkhapittayakom School, Chainat Province*. Master of Science Thesis in Applied Linguistics, Mahidol University.
- Muensorn, A. (2007). *Study of vocabulary learning strategies used by the Bangkok Metropolitan Administration (BMA) Primary School Students*. Unpublished Master's thesis, King Mongkut's University of Technology, Thonburi.
- Nagy, W.E., & Anderson, R.C. (1984). How many words are there in printed school English? *Reading Research Quarterly*, 19, 233-253.
- Nation, I, S, P. (1982). Beginning to learn foreign vocabulary: A review of the research.
ELC Journal, 13 (1), 14-36.
- _____. (1990). *Teaching and learning vocabulary*. NY: Newbury House/Harper & Row.
- _____. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- Nist, S. L., & Olejnik, S. (1995). The role of context and dictionary definition on varying levels of word knowledge. *Reading Research. TESOL Quarterly*, 30, 172-193.
- O'Malley, J., & Chamot, A. (1990). *Learning strategies in second language acquisition*. Cambridge University Press.

- Oxford, R.L., & Scarcella, R.C. (1994). Second language vocabulary learning among adults: State of the art in vocabulary instruction. *System*, 22(2), 231-243.
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Boston: Newbury House.
- Pakir, A. (2000). The development of English as a 'glocal' language: New concerns in the old saga of language teaching. In H.W. Kam & C.Ward (Eds.), *Language in the global context: Implications for the language classroom*. Singapore: SEAMEO Regional Language Centre.
- Pressley, M., Levin, J.R., & Miller, G.E. (1982). The keyword method compared to alternative vocabulary learning strategies. *Contemporary Educational Psychology*. 7.
- Purpura, J.E. (1994). *The role of learner strategies in language learning and testing*. Paper presented at the Thai TESOL Conference, Bangkok.
- Qian, D.D. (1999) Assessing the roles of depth and breadth of vocabulary knowledge in reading comprehension. *Canadian Modern Language Review*. 56(2), 282-308.
- Qian, D.D. (2002). Investigating relationship between vocabulary knowledge and academic reading performance: an assessment perspective. *Language Learning*. 52(3), 513-536.
- Qian, D.D., & Schedle, M. (2004). Evaluation of an in-depth vocabulary knowledge measure for assessing reading performance. *Language Testing*, 21(1), 28-52.

- Read, J. (1997). Vocabulary and testing. In N Schmitt, & M. McCarthy (Eds), *Vocabulary: Description, acquisition and pedagogy* (pp. 303-320). Cambridge University Press.
- Read, R. (2000). *Assessing vocabulary*. Cambridge University Press.
- Richek, M. A., Caldwell, J. S., Jennings, J. H., & Lerner, J. W. (1996). *Reading problems: Assessment and teaching strategies*. Boston: Allyn and Bacon.
- Rubin, J. (1987). Study of cognitive processes in second language learning. *Applied Linguistics, 11*, 117-131.
- Rubin, J., & Wenden, A. (1987). *Learner strategies in language learning*. NY: Prentice Hall.
- Rubin, J., & Thompson, I. (1994). *How to be a more successful language learner: Toward learner autonomous*. Boston, MA: Heinle & Heinle.
- Sanaoui, R. (1995). Adult learners approaches learning vocabulary in second language. *The Modern Language Journal, 79*(1), 15-28.
- Schmit, N. & Mccarthy, M. (1997). *Vocabulary descriptive, acquisition and pedagogy*. Cambridge University Press.
- Schmitt, N., & Schmitt, D. (1995). Vocabulary notebook: theoretical underpinning and practical suggestion. *ELT Journal, 49*, 133-143.
- Schmitt, N. (2000). *Vocabulary in language teaching*. NY: Cambridge University Press.

- Schmitt, N., Schmitt, D., & Clapham, C. (2001). Developing and exploring the behavior of two new versions of the vocabulary levels test. *Language Testing*, 16, 55-88.
- Scholifield, P. (1982). Explaining meaning by paraphrase: problems and principles. *Guidelines*, 3, 24-37.
- Singleton, D. (1999). *Exploring the second language mental lexicon*. Cambridge University Press.
- Siriwan, M. (2007). *English vocabulary learning strategies employed by Rajabhat University students*. Unpublished Ph.D., Suranaree University of Technology Nakhorachasima, Thailand.
- Sokmen, A. (1997). Current trends in teaching second language vocabulary. In N. Schmitt & M. McCarthy (eds.), *Vocabulary: Description, acquisition and pedagogy*. (pp.237-257). Cambridge University Press.
- Spolsky, B. (1998). *Sociolinguistics*. Oxford University Press.
- Sripetpun, W. (2000). *The influence of vocabulary size on vocabulary learning strategies and vocabulary learning strategies*. Unpublished Doctorial Dissertation. Victoria: La Trobe University, Australia.
- Stern, H.H. (1992). *Issues and options in language teaching*. Oxford University Press.
- Sternberg, R. J. (1987). Most vocabulary is learned from context. In M.G. McKeown & M.E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 89-105). Hillsdale, NJ: Erlbaum.

- Summer, S. D. (1988). The role of dictionary in language learning. In R. Carter and M. McCarty(Eds.). *Vocabulary and Learning Teaching*. London: Longman, 111-125.
- Thompson, G. (1987). Using bilingual dictionaries. *ELT Journal*. 41(4), 182-286.
- Wragg, M.E. (1990). *What do you want a dictionary for?* Paper presented at the APPI Congress, Figueira da Foz, Portugal.
- Wu, W.S. (2005). Use and helpfulness rankings of vocabulary learning strategies employed by EFL learners in Taiwan. *Journal of Humanities and Social Sciences*, 1(2), 7-13.
- Waemusa, Z. (1993). *An investigation of strategies for learning English vocabulary employed by Mathayom suksa six students in an Islamic Private School*. Unpublished Master's thesis. Mahidol University.
- Zareva, A., Schwanenflugel, P., & Nikolova, Y. (2005). Relationship between lexical competence and language proficiency: Variable Sensitivity. *Studies in Second Language Acquisition*, 27, 567-595.
- Zimmerman, C.B. (1997). *Psychology for language teacher: A social constructivist approach*. Cambridge University Press.

Appendices

Appendix A

Vocabulary learning strategies questionnaire

Part I: Personal information

Instruction: Please fill the spaces provided or put ✓ in the bracket with true information.

General information

1. Age.....
2. Sex () Male () Female

Part II: Vocabulary learning strategies of the participants

Instruction: Please put he make ✓ on the number of each item concerning vocabulary learning strategies that you frequently use. The scales of numbers mean as follows:

- 5: always
- 4: usually
- 3: often
- 2: occasionally
- 1: seldom
- 0: never

Strategies	Scales					
Determination strategies (DET)	5	4	3	2	1	0
1. Analyze parts of speech (e.g. noun, verb, adjective).						
2. Analyze affixes and roots to guess the meanings of words (e.g. replay – re means do it again).						
3. Use the pictures or gestures to understand the meaning of Words.						
4. Guess the meanings of words form textual context.						
5. Look up a word in:						
5.1 English - English dictionary.						
5.2 English – Thai dictionary.						
5.3 Thai – English dictionary.						
6. List vocabulary and review it.						
Social strategies (SOC)	5	4	3	2	1	0
7. Ask the teacher to translate the meaning of a word that you do not understand.						
8. Ask the teacher for synonyms or similar meanings of new Word.						
9. Ask the teacher to make a sentence by using the new word						
10. Ask classmates for meaning.						
11. Discover the meaning through group work activity.						
12. Ask for the teacher to check your word lists for accuracy.						
13 Interact with native speakers.						
Memory strategies (MEM)						
14. Study the word with pictures.						
15. Connect the word to your experience.						
16. Make a list of vocabulary in alphabetical for reviewing						
17. Make a list of vocabulary arranged by topic or group for reviewing (e.g. animal, parts of body, flower)						

Strategies	Scales					
	5	4	3	2	1	0
18. Try to use the new word at once after learning.						
19. Associate the word with other words you have learned.						
20. Review the word you have learned by spelling it aloud						
21. Remember a word from its strange form, pronunciation or difficult spelling.						
22. Say the new word aloud when studying in order to easily remember.						
23. Remember the word by underlining the first letter.						
24. Learn the words by paraphrasing the word's meaning.						
25. Learn the words of an idiom together.						
26. Use physical action when learning a word (Ex. You will dance to remember the meaning of the word "dance").						
Cognitive strategies (COG)	5	4	3	2	1	0
27. Learn the word through verbal repetition.						
28. Learn the word through written repetition.						
29. Take notes of the newly-learned words in class.						
30. Use the vocabulary section in your textbook.						
31. Listen to a tape of word lists.						
32. Keep a vocabulary notebook wherever you go.						
Metacognitive strategies (MET)	5	4	3	2	1	0
33. Use English media (songs, movies, newspapers, leaflets, the internet, magazines, etc.						
34. Test yourself with word tests.						
35. Translate the meaning of the word from Thai into English.						
36. Translate the meaning of the word from English into Thai.						
37. Continue to study the word over time.						

Strategies	Scales					
	5	4	3	2	1	0
38. Practice by doing vocabulary exercises (e.g. filling words in the spaces)						
39. Play vocabulary games.						
40. Try to speak or describe things in English						

Thank you very much

แบบสอบถามเกี่ยวกับกลวิธีในการเรียนรู้คำศัพท์ภาษาอังกฤษ

คำอธิบาย

วัตถุประสงค์ในการสร้างแบบสอบถามนี้ เพื่อรวบรวมข้อมูลเกี่ยวกับกลวิธีหรือเทคนิคในการเรียนรู้คำศัพท์ภาษาอังกฤษของนักศึกษาที่กำลังศึกษาในระดับปริญญาตรี แบบสอบถามนี้แบ่งออกเป็น 2 ตอน ดังนี้

ตอนที่ 1 คำถามเกี่ยวกับข้อมูลของผู้ตอบแบบสอบถาม

ตอนที่ 2 คำถามเกี่ยวกับกลวิธีในการเรียนคำศัพท์ที่นักศึกษาใช้เพื่อหาความหมาย

ข้อมูลของท่านที่ตอบในแบบสอบถามนี้ถือเป็นความลับ และใช้ในการศึกษาครั้งนี้เท่านั้น ผู้วิจัยหวังเป็นอย่างยิ่งว่าจะได้รับความร่วมมือจากท่าน และขอขอบคุณที่ท่านได้ให้ความร่วมมือในการตอบแบบสอบถามฉบับนี้เป็นอย่างยิ่ง

นางสาว ชินัฐดา โกมล

นักศึกษาปริญญาโท

สาขาการสอนภาษาอังกฤษเป็นภาษานานาชาติ
มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตหาดใหญ่

แบบสอบถาม
กลวิธีในการเรียนรู้คำศัพท์ภาษาอังกฤษ

ตอนที่ 1 ข้อมูลของผู้ตอบแบบสอบถาม

คำชี้แจง กรุณาเติมคำในช่องว่าง หรือใส่เครื่องหมาย ✓ ในวงเล็บ โดยให้ข้อมูลตามความเป็นจริง

ก ข้อมูลทั่วไป

1. เพศ () ชาย () หญิง
2. อายุ ปี

ตอนที่ 2 ข้อมูลเกี่ยวกับกลวิธีหรือเทคนิคในการเรียนคำศัพท์ภาษาอังกฤษ

คำชี้แจง ท่านใช้กลวิธีเหล่านี้มากน้อยเพียงใด กรุณาทำเครื่องหมาย ✓ ในช่องที่ตรงกับความเป็นจริง ดังนี้

- 5 = บ่อยมากที่สุด
- 4 = บ่อยมาก
- 3 = บ่อย
- 2 = ค่อนข้างน้อย
- 1 = นาน ๆ ครั้ง
- 0 = ไม่เคยเลย

กลวิธีในการเรียนคำศัพท์ภาษาอังกฤษ	ระดับการใช้					
	5	4	3	2	1	0
1. สังเกตและวิเคราะห์ความหมายของคำศัพท์จากหน้าที่ของคำนั้น ๆ เช่น relate เป็นกริยา relative เป็นคำคุณศัพท์ relation เป็นคำนาม						
2. วิเคราะห์รากศัพท์ (roots) และการเติมหน่วยคำหน้า, หลัง (prefix, suffix) ในการหาความหมายของคำ เช่น คำว่า inability รากศัพท์คือ ability แปลว่า ความสามารถ in - คือ คำเสริมหน้า แปลว่าไม่ ดังนั้น ความหมายคำนี้คือ ไร้ความสามารถ						
3. ใช้รูปภาพหรือการแสดงท่าทางประกอบการพูด เพื่อทราบความหมายของคำศัพท์						
4. เรียนรู้และเดาความหมายของคำศัพท์จากข้อความข้างเคียง (Context clues)						
5. ใช้พจนานุกรมดังต่อไปนี้ในการหาความหมายของคำศัพท์						
5.1 พจนานุกรม อังกฤษ – อังกฤษ						
5.2 พจนานุกรม อังกฤษ – ไทย						
5.3 พจนานุกรม ไทย – อังกฤษ						
6. จดรายการคำศัพท์ที่ใหม่และแปลก พร้อมระบุความหมายเพื่อท่องจำหรือทบทวน						
7. ถามความหมายของคำศัพท์ที่ไม่เข้าใจจากครู โดยที่ครูแปลความหมายเป็นภาษาไทย						
8. ถามความหมายของคำศัพท์ที่ไม่เข้าใจจากครู โดยที่ครูบอกคำภาษาอังกฤษที่มีความหมายเหมือนกับคำนั้น ๆ						
9. ถามความหมายของคำศัพท์ที่ไม่เข้าใจจากครู โดยที่ครูแต่งตัวอย่างประโยคที่มีคำศัพท์คำนั้นอยู่ด้วย เพื่อที่จะได้เดาความหมายจากข้อความในประโยคนั้น						
10. ถามคำที่ไม่รู้ความหมายจากเพื่อน						
11. หาความหมายของคำโดยการจับกลุ่มกับเพื่อนทำกิจกรรมร่วมกัน						
12. เรียนรู้จากสมุดคำศัพท์หรือบัตรคำที่ครูมอบหมายให้ทำ						
13. เรียนรู้โดยการถามความหมายของคำศัพท์จากชาวต่างชาติ						
14. จำความหมายของคำศัพท์จากรูปภาพ						
15. จำความหมายของคำศัพท์จากประสบการณ์การเรียนรู้ส่วนตัว เช่น เมื่ออาจารย์ถามนักเรียนว่า “คำว่า inability แปลว่าอะไร” นักศึกษาสามารถตอบอาจารย์ได้ว่า คำนี้แปลว่า “ไร้ความสามารถ” แล้วนักศึกษาได้รับรางวัล ทำให้จำคำศัพท์นั้น ได้ตลอดมา						

กลวิธีในการเรียนคำศัพท์ภาษาอังกฤษ	ระดับการใช้					
	5	4	3	2	1	0
16. จัดกลุ่มคำศัพท์เป็นหมวดหมู่ตามพยัญชนะเพื่อการท่องจำที่ง่ายขึ้น เช่น คำที่ขึ้นต้นด้วย A ก็จัดอยู่ในกลุ่มเดียวกัน						
17. จัดกลุ่มคำศัพท์เป็นหมวดหมู่ตามชนิดของคำหรือคำประเภทเดียวกัน เช่น จดคำคุณศัพท์, คำกริยา ให้อยู่ในกลุ่มเดียวกันเพื่อท่องจำ หรือ พวกสัตว์, พวกดอกไม้, ส่วนต่าง ๆ ของร่างกาย จดแยกไว้เป็นพวก ๆ เพื่อแยกการท่องจำ						
18. ใช้คำศัพท์ที่เพิ่งเรียนมาทันทีหลังจากที่เรียนเสร็จ เช่น เรียนคำว่า camera แล้วหันไปพูดกับเพื่อนว่า I will buy a new camera.						
19. จดจำคำศัพท์ใหม่โดยเชื่อมโยงความหมายของคำนั้นกับความหมายของคำอื่น ๆ ที่เคยเรียนมาแล้ว เช่น คำว่า secondhand นักศึกษาทราบว่าเป็นมือสองเพราะจำคำว่า second และ hand ได้ เป็นต้น						
20. ทบทวนคำศัพท์ด้วยตัวเองโดยวิธีฝึกสะกดคำนั้น ๆ โดยการออกเสียงดัง ๆ หลายครั้ง						
21. จำคำศัพท์ที่เขียนหรือออกเสียง แปลก ๆ หรือสะกดยาก						
22. อ่านออกเสียงคำศัพท์นั้นดังๆ เพื่อให้จำได้						
23. จดจำความหมายของคำศัพท์โดยใช้วิธีขีดเส้นใต้ที่ตัวอักษรแรกของคำศัพท์						
24. เรียนรู้และจดจำความหมายของคำศัพท์โดยการแปล						
25. เรียนคำศัพท์โดยการศึกษาและจำสำนวนภาษาอังกฤษ เช่น This work is a piece of cake. ซึ่งแปลว่า งานนี้ง่ายมาก ๆ หรือ Don't beat around the bush แปลว่า อย่าพูดวกวน เป็นต้น						
26. จำคำศัพท์โดยการแสดงท่าทางประกอบไปด้วย นักเรียนจะจำคำว่า dance นักเรียนก็เดินไปด้วยท่องไปด้วย เป็นต้น						
27. เรียนรู้คำศัพท์โดยการพูดซ้ำ ๆ						
28. เรียนรู้คำศัพท์โดยการเขียนซ้ำ ๆ						
29. เรียนรู้คำศัพท์โดยการจดบันทึกไว้ในขณะที่เรียนอยู่ในชั้น						
30. เปิดดูส่วนอธิบายคำศัพท์ในหนังสือเรียน						
31. เรียนรู้คำศัพท์โดยการฟังเทปที่เกี่ยวกับคำศัพท์						
32. บันทึกคำศัพท์ลงในสมุดพก ที่นำติดตัวไว้ตลอด						
33. เรียนคำศัพท์จากสื่อภาษาอังกฤษต่าง ๆ เช่น เพลง, ภาพยนตร์, ข่าว, โฆษณา						
34. ฝึกทดสอบความรู้ของตนเองเกี่ยวกับคำศัพท์ภาษาอังกฤษ เช่น ทดสอบโดยให้เพื่อนถามว่า คำนี้ คำนั้น แปลว่าอะไร หรืออาจเล่นทาย ความหมายของคำ						

กลวิธีในการเรียนคำศัพท์ภาษาอังกฤษ	ระดับการใช้					
	5	4	3	2	1	0
35. เรียนคำศัพท์โดยการแปลคำศัพท์จากภาษาไทยเป็นภาษาอังกฤษ						
36. เรียนคำศัพท์โดยการแปลคำศัพท์จากอังกฤษเป็นภาษาไทย						
37. ทบทวนคำศัพท์ตลอดเวลา เช่น ทบทวนทุกวัน หรือ ทุกๆ 2 วัน หรือ ทุกๆ อาทิตย์ อย่างสม่ำเสมอ						
38. เรียนรู้คำศัพท์โดยฝึกทำแบบฝึกหัด เช่น การเติมคำศัพท์ลงในช่องว่าง						
39. ฝึกคำศัพท์จากการเล่นเกม						
40. ฝึกพูดหรืออธิบายสิ่งที่พบเห็นในชีวิตประจำวันเป็นภาษาอังกฤษ						

Appendix B

Semi-structured Interview on Vocabulary Learning Strategies

Sex: Male Female

Age:

Questions:

1. What vocabulary learning strategies do you like to use the most, according to the strategies listed in the questionnaire?

.....

2. Do you use others strategies to help you in learning vocabulary? What are they?

.....

3. Why do you use those vocabulary learning strategies?

.....

4. When do you use those vocabulary learning strategies?

.....

5. How often do you use those strategies in learning vocabulary?

.....

แบบสัมภาษณ์เกี่ยวกับกลวิธีการเรียนรู้คำศัพท์ภาษาอังกฤษ

คำอธิบาย

วัตถุประสงค์ในการสร้างแบบสัมภาษณ์นี้ คือ เพื่อรวบรวมข้อมูลเกี่ยวกับกลวิธีหรือเทคนิคการเรียนรู้คำศัพท์ภาษาอังกฤษของนักศึกษาในระดับปริญญาตรี ซึ่งนักศึกษาได้ให้รายละเอียดนอกเหนือไปจากข้อมูลในแบบสอบถาม แบบสัมภาษณ์แบ่งออกเป็น 2 ตอน คือ

ตอนที่ 1 คำถามเกี่ยวกับข้อมูลของผู้ให้สัมภาษณ์

ตอนที่ 2 คำถามเกี่ยวกับกลวิธีที่ผู้ให้สัมภาษณ์ใช้ในการเรียนคำศัพท์ภาษาอังกฤษ

ข้อมูลของท่านที่ตอบในแบบสอบถามนี้ถือเป็นความลับ และใช้ในการศึกษาครั้งนี้เท่านั้น ผู้วิจัยหวังเป็นอย่างยิ่งว่าจะได้รับความร่วมมือจากท่าน และขอขอบคุณที่ท่านได้ให้ความร่วมมือในการตอบแบบสอบถามฉบับนี้เป็นอย่างยิ่ง

นางสาว ชินัฐดา โกมล

นักศึกษาปริญญาโท

สาขาการสอนภาษาอังกฤษเป็นภาษานานาชาติ
มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตหาดใหญ่

แบบสัมภาษณ์เกี่ยวกับกลวิธีหรือเทคนิคในการเรียนรู้คำศัพท์ภาษาอังกฤษ

เพศ () ชาย () หญิง

อายุ.....

คำถามในการสัมภาษณ์:

1. ท่านชอบกลวิธีในการเรียนคำศัพท์ภาษาอังกฤษกลวิธีใดมากที่สุด ตามแบบสอบถามที่นักเรียนได้ทำมาแล้ว

.....

2. ท่านมีกลวิธีในการเรียนคำศัพท์ภาษาอังกฤษอื่น ๆ หรือไม่ นอกเหนือจากข้อมูลในแบบสอบถาม โปรดระบุ

.....

3. เหตุใดท่านใช้กลวิธีดังกล่าวในการเรียนคำศัพท์ภาษาอังกฤษ

.....

4. ท่านใช้กลวิธีในการเรียนคำศัพท์ภาษาอังกฤษดังกล่าวเมื่อไหร่

.....

5. ท่านใช้กลวิธีในการเรียนคำศัพท์ภาษาอังกฤษดังกล่าวบ่อยแค่ไหน

.....

Appendix C The vocabulary level test

ชื่อ..... นามสกุล.....

อายุ..... ปี

เพศ () ชาย () หญิง

คำชี้แจง ข้อสอบนี้ใช้เพื่อทดสอบคำศัพท์ให้นักเรียนเลือกคำตอบที่ตรงกับความหมายทางขวามือ หลังจากนั้นเขียนหมายเลขคำตอบลงในช่องว่างหน้าความหมายที่ตรงกัน หากนักเรียนไม่ทราบความหมายของ คำศัพท์ กรุณาอย่าเดา ให้ข้ามคำถามนั้น

ตัวอย่าง

- | | |
|-------------|------------------------|
| 1. business | |
| 2. clock | _____ ส่วนหนึ่งของบ้าน |
| 3. horse | _____ ม้า |
| 4. pencil | _____ สิ่งที่ใช้เขียน |
| 5. shoe | |
| 6. wall | |

นักเรียนจะได้คำตอบดังนี้

- | | |
|-------------|--------------------------------|
| 1. business | |
| 2. clock | _____ 6 _____ ส่วนหนึ่งของบ้าน |
| 3. horse | _____ 3 _____ ม้า |
| 4. pencil | _____ 4 _____ สิ่งที่ใช้เขียน |
| 5. shoe | |
| 6. wall | |

The 2,000 word level

1. birth		1. adopt	
2. dust	_____ กิฬา	2. climb	_____ ปีน
3. operation	_____ ชัยชนะ	3. examine	_____ ตรวจสอบ
4. row	_____ การเกิด	4. pour	_____ ล้อมรอบ
5. sport		5. satisfy	
6. victory		6. surround	
1. choice		1. bake	
2. crop	_____ อุณหภูมิ	2. connect	_____ เชื่อมโยง
3. flesh	_____ เนื้อ(คน สัตว์ ผลไม้)	3. inquire	_____ เตรียเตร่
4. salary	_____ เงินเดือน	4. limit	_____ จำกัด
5. secret		5. recognize	
6. temperature		6. wander	
1. cap		1. burst	
2. education	_____ การศึกษา	2. concern	_____ ระเบิด
3. journey	_____ หน่วย มาตราส่วน	3. deliver	_____ ปรับปรุง
4. parent	_____ การเดินทาง	4. fold	_____ ส่ง
5. scale		5. improve	
6. trick		6. urge	
1. attack		1. original	
2. charm	_____ ทรัพย์สินสมบัติ	2. private	_____ แรก ดั้งเดิม
3. lack	_____ เสน่ห์	3. royal	_____ ส่วนตัว ส่วน บุคคล
4. pen	_____ ความขาดแคลน	4. slow	_____ ทั้งหมด ทั้งสิ้น
5. shadow		5. sorry	
6. treasure		6. total	
1. cream		1. brave	
2. factory	_____ ส่วนที่เข้มข้นที่สุดของนม	2. electric	_____ ปกติ
	_____ มีลักษณะมันและเหลว	3. firm	_____ หิว
3. nail	_____ ความมั่งคั่ง	4. hungry	_____ กล้าหาญ
4. pupil	_____ นักเรียน	5. local	
5. sacrifice		6. usual	
6. wealth			

The 3,000 word level

1. belt		1. betray	
2. climate	_____ ความคิด	2. dispose	_____ ทำให้กลัว
3. executive	_____ ฝ่ามือ	3. embrace	_____ แดงอย่างเป็น ทางการ
4. notion	_____ เข็มขัด	4. injure	_____ บาดเจ็บ
5. palm		5. proclaim	
6. victim		6. scare	
1. acid		1. counter	
2. bishop	_____ หนาวเข็น	2. illustrate	_____ ดลใจ ทำให้เกิด
3. chill	_____ วิวัดผู้	3. inspire	_____ ขอความช่วยเหลือ
4. ox	_____ โครงสร้าง	4. plead	_____ ผนัง
5. ridge		5. seal	
6. structure		6. shift	
1. bench		1. assist	
2. charity	_____ ม้านั่ง	2. bother	_____ ช่วยเหลือ
3. jar	_____ การกุกศล	3. condemn	_____ เลื่อม
4. mate	_____ จังหวัด	4. erect	_____ หมุนอย่างรวดเร็ว
5. mirror		5. trim	
6. province		6. whirl	
1. boot		1. annual	
2. device	_____ ร้อยโท	2. concealed	_____ ป่าเถื่อน
3. lieutenant	_____ หินอ่อน	3. definite	_____ แน่นนอน
4. marble	_____ เส้นเลือด	4. mental	_____ รายปี
5. phrase		5. previous	
6. vein		6. savage	
1. apartment		1. dim	
2. candle	_____ ห้องเช่า	2. junior	_____ แปลก
3. draft	_____ โอกาสความหวัง	3. magnificent	_____ วิเศษ มหัศจรรย์
4. horror	_____ ฉบับร่าง	4. maternal	_____ สลัว
5. prospect		5. odd	
6. timber		6. weary	

Academic Vocabulary

1. benefit		1. achieve	
2. labor	_____ การทำงาน	2. conceive	_____ เปลี่ยนแปลง
3. percent	_____ ร้อยละ	3. grant	_____ เชื่อมโยง
4. principle	_____ หลักการ	4. link	_____ สำเร็จเสร็จสิ้น
5. source		5. modify	
6. survey		6. offset	
1. element		1. convert	
2. fund	_____ เงินที่มีไว้เพื่อวัตถุประสงค์	2. design	_____ แยกออกไป
3. layer	_____ ประสงค์เฉพาะ	3. exclude	_____ มีชีวิตรอด
4. philosophy	_____ ทักษะและความสามารถ	4. facilitate	_____ เปลี่ยน
5. proportion	_____ ในการทำสิ่งใดสิ่งหนึ่ง	5. indicate	
6. technique	_____ ปรัชญา	6. survive	
1. consent		1. anticipate	
2. enforcement	_____ ยอครวม	2. compile	_____ โน้มน้ำ
3. investigation	_____ การเห็นชอบ	3. convince	_____ คาดหมาย
4. parameter	_____ การสืบสวน	4. denote	_____ ตีพิมพ์
5. sum	_____ การได้สวน	5. manipulate	
6. tread		6. publish	
1. equivalent		1. decade	
2. financial	_____ สำคัญที่สุด	2. fee	_____ ทศวรรษ
3. forthcoming	_____ เกี่ยวกับการมองเห็น	3. file	_____ หัวเรื่อง หัวข้อ
4. primary	_____ เกี่ยวกับการเงิน	4. incidence	_____ ค่าธรรมเนียม
5. random		5. perspective	
6. visual		6. topic	
1. colleague		1. alternative	
2. erosion	_____ การกระทำที่ ฝ่าฝืนกฎหมาย	2. ambiguous	_____ สำคัญเหนือสิ่ง อื่นใด
3. format		3. empirical	_____ ตัวเลือกทางเลือก
4. inclination	_____ การกีดกร้อน	4. ethnic	_____ เกี่ยวกับชนชาติ
5. panel	_____ รูปแบบ	5. mutual	
6. violation		6. ultimate	

The 5,000 word level

1. balloon		1. blend	
2. federation	_____ ถัง	2. devise	_____ ผสมผสาน
3. novelty	_____ ของแปลกของใหม่	3. hug	_____ ประคิษฐ์ กัดกัน
4. pail	_____ ลูกโป่ง	4. lease	_____ กอด รัด
5. veteran		5. plague	
6. ward		6. reject	
1. alcohol		1. abolish	
2. apron	_____ ระบาย ช่วง	2. drip	_____ ลืมเล็ก
3. hip	_____ ความยุ่งเหยิง	3. insert	_____ ทำนาย
4. lure	_____ ฟ้ากั้นเป็อน	4. predict	_____ ปลอดภัย ระวัง
5. mess		5. soothe	
6. phase		6. thrive	
1. apparatus		1. bleed	
2. compliment	_____ คำชม	2. collapse	_____ นำหน้า เกิดขึ้น ก่อน
3. ledge	_____ เครื่องมือ	3. precede	_____ ยูลง พังทลาย
4. revenue	_____ รายได้ของรัฐ	4. reject	_____ กระโดด โดด เดิน กระโดดข้าม
5. scrap	_____ หรือองค์กร	5. skip	
6. tile		6. tease	
1. bulb		1. casual	
2. document	_____ มีตัวเมีย	2. desolate	_____ มีกลิ่นหอม
3. legion	_____ กองทหาร	3. fragrant	_____ มีเอกลักษณ์ ไม่ เหมือนใคร
4. mare	_____ เอกสาร	4. radical	_____ ดีต่อสุขภาพ
5. pulse		5. unique	
6. tub		6. wholesome	
1. concrete		1. gloomy	
2. era	_____ วง ห่วง	2. gross	_____ ว่าง
3. fiber	_____ ระดับสูงสุด	3. infinite	_____ สลัว เสรี
4. loop	_____ สักราช ยุค สมัย	4. limp	_____ ไม่สิ้นสุด
5. plank		5. slim	
6. summit		6. vacant	

VITAE

Name Miss Tinutda Komol

Student ID 5211120023

Educational Attainment

Degree	Name of Institution	Year of Graduation
Bachelor of Arts (English)	Rattana Bundit University	2006