



**INVESTIGATION OF RECEPTIVE VOCABULARY SIZE
OF THAI EFL GRADUATE STUDENTS**

BY

MS. SUJIKHA THANGAROONSIN

**AN INDEPENDENT STUDY PAPER SUBMITTED IN PARTIAL
FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN CAREER ENGLISH FOR
INTERNATIONAL COMMUNICATION
LANGUAGE INSTITUTE, THAMMASAT UNIVERSITY
ACADEMIC YEAR 2016
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ENTITLED

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was approved as partial fulfillment of the requirements for
the degree of Master of Arts in Career English for International Communication

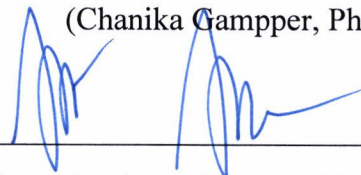
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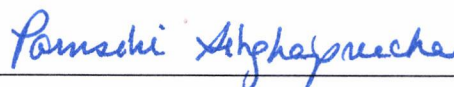
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ABSTRACT

Lack of vocabulary knowledge is still one of the problems Thai EFL graduate students encounter when reading English materials. The current study measured receptive vocabulary size of Thai EFL graduate students which can assist them to gain a general understanding about their breadth of word knowledge and how much more vocabulary they should acquire to reach the threshold level where they can read and adequately understand English academic texts. The Bilingual English-Thai Version developed by Nation and Beglar (2007) and an open-ended questionnaire was employed to collect data from twenty-seven participants. The results showed that they had a mean receptive vocabulary size of approximately 8,100 word families which indicates that students are able to read English novels or newspapers adequately, however, it is advised that students should know at least 10,000 word families if they wish to have sufficient vocabulary knowledge for reading academic texts in a specific field of study. The study also found that Thai EFL graduate students believe that a larger vocabulary size has a positive effect on their four language skills, especially reading and speaking. Students who have a larger vocabulary size reported to employ more types of vocabulary learning strategies and used them more frequently than students who have a smaller vocabulary size.

Keywords: *vocabulary size, receptive vocabulary knowledge, Thai EFL graduate students*

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CHAPTER 1

INTRODUCTION

1.1 Background

English language is widely used around the world and it has “appeared to be the universal language of communication” (Nunan, 2003, p. 590). In Thailand, English language is very important. Thai students start to learn English in primary school. It is included as a basic compulsory subject in the curriculum. Furthermore, undergraduate students are required to learn English as a foreign language (The Office of the Higher Education Commission (OHEC), 2016). English is also considered to be the main language for business purposes in Asian countries (Nickerson & Camiciottoli, 2013), therefore, many Thai people also continue to study English at the graduate level.

One of the most vital parts in English language learning is vocabulary acquisition (Milton, 2009; Schmitt, 2008). Vocabulary knowledge helps learners understand the language and be able to communicate with others more than grammar knowledge (Thornbury, 2002). Wilkins (1972) highlighted the importance of vocabulary that “without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (Wilkins, 1972, cited in Milton, 2009, p. 12). According to Nation and Waring (1997), vocabulary knowledge leads to language usage and language usage leads to the increase of vocabulary knowledge. Vocabulary knowledge is also essential for second language (L2) learners when reading, speaking, listening, and writing (Folse, 2006). Furthermore, vocabulary size can improve learners’ language ability (Gu, 1994), for example, reading comprehension and quality of writing (Lee & Muncie, 2006).

Because vocabulary plays an essential role in language use, a large vocabulary size is necessary. Research studies found that when reading written texts, for example, newspapers, novels or academic texts, readers should know at least 8,000–10,000 word families (Nation, 2006; Nation, 2012; Laufer & Ravenhorst-Kalovski, 2010). For watching English TV programs or movies, 6,000-7,000 words are needed (Nation, 2006; Webb & Rodgers, 2009). Moreover, a learner also needs to know many aspects of each word in order to use it productively (Schmitt, 2008).

However, for most English as Foreign Language (EFL) learners, the above goals are quite difficult to accomplish (Ozturk, 2015; Schmitt, 2008). Many EFL learners are likely to have less than sufficient vocabulary knowledge when using English (Hunt & Beglar, 2005). They struggle to comprehend the spoken language, especially when there is no visual form provided (Chang & Read, 2006). When they read in English, there are a large number of unknown words that makes it difficult to comprehend the main idea or specific information from the text (Ying-Hsueh & Good, 2009). Therefore, many researchers have conducted research studies about EFL learners' vocabulary knowledge and how to help these learners gain more vocabulary effectively (Hamzah, Kafipour & Abdullah, 2009; McLean, Hogg, & Kramer, 2014; Ozturk, 2015, Shin, Chon, & Kim, 2011).

1.2 Statement of problem

Thai researchers have addressed the issue that Thai EFL learners have a reading problem and one of the factors that cause this problem is limited vocabulary knowledge (Chawwang, 2008; Subphadoongchone, 2000; Ward, 2009). Research studies focusing on young students and undergraduate students have been conducted to investigate further. Kotchana and Tongpoon-Patanasorn (2015) found that Thai Grade 6 students in the Northeastern region had a small vocabulary size, both receptive and productive. More importantly, their vocabulary size was lower than the Ministry of Education's requirement which expects that students at this level should know 1,050-1,200 high frequency words. Yunus, Mohamed, and Waelateh (2016) found that the mean receptive vocabulary size of Thai first year undergraduate students was about 2000 word families which was lower than the vocabulary size of Malaysian students. Furthermore, Nirattisai and Chiramanee (2014) found that third-year undergraduate students' mean receptive vocabulary size was around 5751.58 word families. This indicated that students' vocabulary size is not enough according to previous research studies which suggested that undergraduate students should know at least 8,000 word families to know 98% of the words in texts (Laufer & Ravenhorst-Kalovski, 2010).

Not only undergraduate students have reading problems as mentioned above, but research studies on Thai EFL graduate students also found that lack of vocabulary

knowledge is still one of the problems these students encounter when reading English materials (Chaisuriya, 2006; Chuenta, 2002, cited in Chawwang, 2008; Meckhayai & Puthong, 2004). However, previous research studies focusing on graduate students' vocabulary knowledge are scarcely seen. Graduate students are usually required to read many English course books and related academic texts both inside and outside the classroom. To assist Thai EFL graduate students gain a general understanding of their current vocabulary knowledge which can help them estimate how much more vocabulary they should learn in order to reach the threshold level required for reading academic texts, the current research study further investigates Thai graduate students' receptive vocabulary size. Moreover, the present study also explores the effect of vocabulary size on their study in the hope that the perspective of students could provide better insight into students' learning performance and their vocabulary learning.

1.3 Research question

1.3.1 What is the mean receptive vocabulary size of Thai EFL graduate students and how does vocabulary size affect their study at the graduate level?

1.4 Objective of the study

1.4.1 To identify the mean receptive vocabulary size of Thai EFL graduate students and explore the effects of vocabulary size on their study at the graduate level from students' perspective.

1.5 Definition of terms

1.5.1 General definitions of terms

1.5.1.1 Receptive vocabulary knowledge refers to “the knowledge that is needed to link an L2 form to the concept or meaning” (Llach & Espinosa, 2013, p.61).

1.5.1.2 Productive vocabulary knowledge refers to “the knowledge that is needed to link the meaning or concept to its form in the L2” (Llach & Espinosa, 2013, p.61).

1.5.1.3 Vocabulary size refers to the number of words known by learners (Schmitt, 2008).

1.5.1.4 Text coverage refers to “the proportion of a text which is covered by certain numbers of high frequency words” (Nation & Waring, 1997, p.8).

1.5.2 Operational definition of terms

1.5.2.1 Thai EFL graduate learners in the current study means students who study in Master of Arts program in Career English for International Communication, Thammasat University.

1.6 Scope of the study

The scope of the current study is presented as follows:

1.6.1 A receptive vocabulary size test developed by Nation and Beglar (2007) was employed in the current study.

1.6.2 Twenty-seven students including males and females participated in the current study. Their age range was between 22-54 years old.

1.6.3 Six participants were invited to answer open-ended questions on a voluntary basis.

1.7 Limitation of the study

1.7.1 A vocabulary size test was employed only one time which can only indicate the vocabulary knowledge of students at the time they take the test.

1.7.2 The tests aim to measure written receptive vocabulary size. Receptive vocabulary knowledge for listening and productive vocabulary knowledge are not included in the current study.

1.7.3 Convenience sampling is used for the present study because it requires willingness and a considerable amount of time from participants to take the test.

1.8 Significance of the study

The current study aims to measure receptive vocabulary size of Thai EFL graduate students. The result can help them gain more understanding about their breadth of word knowledge and how much more vocabulary should they acquire to reach the level where they can adequately understand English academic texts when reading them independently. In addition to that, the current study also explores the effect of vocabulary size on the study of Thai EFL graduate students. The present study hopes that the perspective of students could provide better insight into students' learning performance. The findings may raise students' awareness of increasing their vocabulary knowledge and encourage students who have problems when studying English at the graduate level to spend more time on vocabulary learning and employ vocabulary learning strategies more frequently.

.1.9 Organization of the study

This research study consists of five main chapters. The first chapter presents the background of the study, research question, objectives of the study, definitions of terms, significance of the study, and limitations of the study. The next chapter presents previous research studies, focusing on vocabulary acquisition, receptive and productive knowledge, word knowledge, word frequency, vocabulary size, and relevant previous research studies. The third chapter explains the research methodology which includes research design, participants, research context, research instruments, data collection and data analysis. The fourth chapter reveals the results and discussion of the study. The fifth chapter includes a summary of the findings, conclusions, and recommendation for further research.

CHAPTER 2

REVIEW OF LITERATURE

This chapter reviews the literature in several main areas as follows:

(1) vocabulary acquisition, (2) receptive and productive vocabulary knowledge, (3) word knowledge, (4) word frequency, (5) vocabulary size, and (6) related previous research studies.

2.1 Vocabulary acquisition

In this section, several aspects of vocabulary acquisition are discussed.

2.1.1 The definition of vocabulary

According to Hatch and Brown (1995, as cited in Rohmatillah, 2017), vocabulary means words for a particular language that users of language might apply. Another definition of vocabulary is “the collection of words a particular person, group of people, socioeconomic group, profession, and so on, knows and uses” (Williamson, 2014, para.1.)

2.1.2 The process of acquiring new words

The process of acquiring new L1 words and L2 word is different. Thornbury (2002) described that first language learners use labeling and categorizing skills and eventually make a network of words. On the other hand, second language learners already have their own first language system and may just draw the words directly to their L1 equivalents. However, he believes that the better way of acquiring new L2 words is building a new vocabulary network. Each individual has different second language processing behavior.

Theories about the process of learning vocabulary have been proposed by several researchers. According to Grauberg (1997, as cited in Rohmatillah, 2017), the process of vocabulary acquisition can be divided into four stages. The first stage is discrimination. In this stage, learners need to be able to distinguish sounds and forms of words from those next to them, and from the sounds and forms of similar words when they listen or read. The second stage is understanding the meaning. During this stage, learners comprehend the concept of the L2 word or phrase. The third stage is remembering. Learners need to remember the word that they understand. The fourth

stage is consolidation and extension of meaning. To achieve this stage, requires time because words are collected over time, and become part of the learner's network of words (Grauberg 1997, as cited in Rohmatillah, 2017).

Another theory was proposed by Jiang (2004) which stated that the process of acquiring an L2 word can be distinguished into two stages. The first stage is the comprehension stage. The second stage is the development stage. During the comprehension stage, a person would make a link between L2 words and meanings or concepts in their mind, which may be a new concept or a concept that already exist (L1 equivalents). At the development stage, learners would "form new concepts or reorganize semantic elements to form new meanings for L2 words" (Jiang, 2004, p.105).

2.1.3 Difficulties in vocabulary learning

There are some factors that make second language learners have difficulties acquiring some words. The section below will discuss these factors in detail.

Pronunciation

Words that are difficult to pronounce or having a strange sound for learners are less likely to be learned (Thornbury, 2002).

Spelling

If the sound and the spelling do not match, they are less likely to be learned. For example, words with silent letters (Thornbury, 2002).

Length and complexity

Short words are more likely to be learned. Moreover, high frequency words are usually short in English (Thornbury, 2002).

Grammar

If the grammar related to the word differs from its L1 equivalent, learners may be confused. Phrasal verbs also trouble learners, and some of them can be separated which make learners more confused (Thornbury, 2002).

Meaning

When two words have a similar meaning, it is more difficult for learners to distinguish between them. Also, words that can refer to several meanings may confuse learners. Moreover, words related to culture or some specific concept are also hard to

understand if learners do not have a prior knowledge of the concept (Thornbury, 2002).

Range

Words that can be used in various kinds of contexts are easier to be learned than their synonyms which can be used only in a specific context (Thornbury, 2002).

Connotation

Because there are positive and negative connotations, learners may not know the connotation of the words (Gower, Philips and Walter, 1995, as cited in Rohmatillah, 2017). For example, propaganda and publicity have the same meaning. However, propaganda implies negative meaning (Thornbury, 2002).

Collocation

Some words are usually presented together with only some specific words, and are less likely to appear with other words. These may confuse learners regarding which words should be used with which words. For example, people are injured but objects are damaged (Gower, Philips and Walter, 1995, as cited in Rohmatillah, 2017).

2.1.4 Factors leading to vocabulary learning

Schmitt (2008) summarized that there are nine factors which can lead to vocabulary learning. These factors are frequency of exposure, attention focused on the target words, noticing of words, intention to study unknown words, a demand to learn words by teachers or exams, a need to apply words (for tasks or for a personal purpose), manipulation of words and their properties, amount of time involving the words, and amount of interaction with the words (Schmitt, 2008).

2.1.5 Types of vocabulary in texts

Nation (2001) divided vocabulary in texts into four categories. The first one is high-frequency words. These words include function words, such as “in”, “a”, “for”, and “the”. They are the most frequently found words in texts. The second one is academic words which usually can be found in textbooks and academic texts. The third one is technical words. They often appear in texts related to a specific topic only, but they do not appeared in texts related to other topics. The fourth one is low

frequency words. These words cover about 5% of academic text which are not high frequency words or academic words. Most words belong in this group. They are technical words, proper nouns, and words that are hardly found in language use.

2.1.6 Vocabulary learning strategies

Schmitt (1997) conducted a survey study in Japan and he divided vocabulary learning strategies into 5 categories as below

Determination Strategies

Students may find the meaning of unknown words by guessing. For example, guessing from context, checking the part of speech, or using reference materials. Learners also use a bilingual dictionary or monolingual dictionary to acquire the meaning of new words. According to Schmitt's survey study, using a bilingual dictionary was the most employed strategy by EFL students and they also ranked it as the most useful vocabulary learning strategy (Schmitt, 1997).

Social Strategies

Another way to acquire the meaning of new words is asking someone who knows the meaning. Teachers and classmates are usually the ones who learners ask. They may be asked to give the L1 translation, give a synonym, or provide an example as a sentence. Many learners think that asking other people for translation is convenient. However, some people may provide a wrong translation and sometimes make learners confused (Schmitt, 1997).

Memory Strategies

A mnemonic is a device that we can use to remember things. It can be a group of words, a song, or other things that are easily remembered. This technique is used to remember something that is hard to remember. Keyword technique is also used to remember the definition of a word. A keyword is chosen which is acoustically similar to the new word. Students can also memorize words with the picture that represents the word's meaning (Schmitt, 1997).

Cognitive Strategies

This category includes written repetition and verbal repetition such as saying a new word when reading, studying vocabulary lists and flash cards, or taking notes

during classes. They are almost the same as memory strategies but they do not concentrate on mental processing (Schmitt, 1997).

Metacognitive Strategies

Learners use this strategy to control and evaluate their own learning. Increasing the exposure to the language is required to acquire the words efficiently, for example, watching English television programs or listening to English songs, realizing which new words should be skipped, or learning new words continually over time (Schmitt, 1997).

2.2 Receptive and productive vocabulary knowledge

Vocabulary knowledge can be divided into two broad categories: receptive and productive knowledge. Receptive vocabulary knowledge refers to the ability to interpret the meaning of an L2, and productive vocabulary knowledge refers to the ability to link a concept to an L2 (Mondria, & Wiersma, 2004). The two terms can be replaced with passive knowledge which is needed for recognizing words when reading or listening, and active knowledge which is needed for producing words when writing or speaking (Milton, 2009)

Webb (2008) conducted a research study on the relationship between receptive and productive vocabulary size of L2 learners and found that students who own a larger receptive vocabulary probably know more productive knowledge of those words than students who have limited receptive vocabulary knowledge.

2.3 Word knowledge

Word knowledge is about the capability to use a word effectively and appropriately. Milton (2009) reviews the types of word knowledge and how researchers divided it. He points out the shortcomings of dividing knowledge into two types: breadth and depth of word knowledge, and supports Nation's model which divides word knowledge into three types: knowledge of form; knowledge of meaning and knowledge of use. The types of word knowledge will be discussed as follows:

2.3.1 Breadth and depth of word knowledge

According to Read (2004), the idea that divided word knowledge into two aspects was popularized by Anderson and Freebody (1981). They described the definition of the terms as

The first may be called 'breadth' of knowledge, by which we mean the number of words for which the person knows at least some of the significant aspects of meaning. ... [There] is a second dimension of vocabulary knowledge, namely the quality or 'depth' of understanding. We shall assume that, for most purposes, a person has a sufficiently deep understanding of a word if it conveys to him or her all of the distinctions that would be understood by an ordinary adult under normal circumstances (Anderson & Freebody, 1981, p. 92–93, as cited in Read, 2004).

Greidanus et al (2004) summarized that researchers attempted to measure the depth of word knowledge. Unfortunately, only a few tests were developed, for example, Read's (1998) Word Associates Test, and Wesche and Paribakht's (1996) vocabulary knowledge scale (VKS). These tests aim to evaluate "the extent to which a given word is known" (Greidanus et al, 2004, p.191-192).

Regarding the breadth of knowledge, Read (2004) stated that a vocabulary size test can measure it. The important thing is a huge sample of words needs to be included and the learners only identify whether words are unknown to them or not.

2.3.2 Knowledge of word form, word meaning, and word use

Milton and Fitzpatrick (2013) summarized Nation's categories of word knowledge and concluded that this model is the most completed one, as follows:

Knowledge of word form refers to knowing the form of a word or the sound of it including its prefixes and suffixes (Milton, 2009).

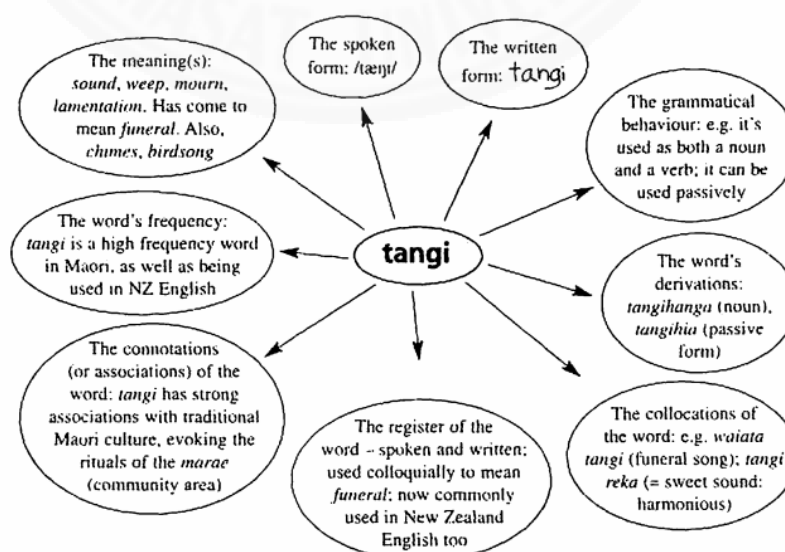
Knowledge of word meaning is divided into three categories. The first one is form and meaning which means link the form to meaning. The second one is their concepts and referents and the third one is association which is "a word in one language might require several translations or carries subtly different meanings and association in another language" (Milton, 2009, p.23).

Knowledge of word use includes a grammatical function which involves knowing parts of speech, collocations which refer to what words are usually found with it, and limitations which means in what kind of situation the word appears or can be used (Milton, 2009).

Form:	Spoken	R	What does the word sound like?
		P	How is the word pronounced?
	Written	R	What does the word look like?
		P	How is the word written and spelled?
Word parts		R	What parts are recognizable in this word?
		P	What word parts are needed to express this meaning?
	Meaning:	R	What meaning does this word form signal?
		P	What word form can be used to express this meaning?
Concept and referents		R	What is included in the concept?
		P	What items can the concept refer to?
	Associations	R	What other words does this make us think of?
		P	What other words could we use instead of this one?
Use:	Grammatical functions	R	In what patterns does the word occur?
	Collocations	P	In what patterns must we use this word?
		R	What words or types of words occur with this one?
	P	What words or types of words must we use with this one?	
Constraints on use (register, frequency...)		R	Where, when and how often would we expect to meet this word?
		P	Where, when and how often can we use this word?

Categories of word knowledge (Nation, 2001, p. 27, cited in Milton & Fitzpatrick, 2013)

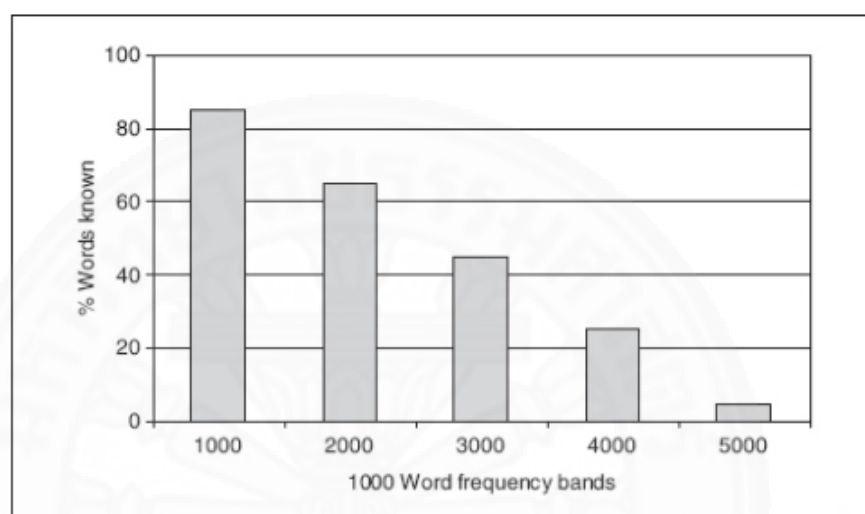
In addition to that, Thornbury (2002) also proposed a model of word knowledge which is quite similar to Nation's model as in the diagram below. His model also contains nine types of word knowledge.



Word knowledge for the word "tangi" (Thornbury, 2002, p. 16)

2.4 Word Frequency

According to Milton (2009), Meara's theory (1992) which stated that learners are more likely to know the high frequency words more than the lower frequency ones is believed to be reliable and many researchers support it (Milton, 2006; Richard & Malvern, 2007; Aizawa, 2006)



Vocabulary profile of a typical learner (Meara, 1992, p.4, cited in Milton, 2009)

2.5 Vocabulary size

Vocabulary size refers to the number of words that learners know (Greidanus et al, 2004; Schmitt, 2008; Nation, 2012) and it also “forms a part of language proficiency” (Laufer & Nation, 1999, p.38). Gu and Johnson (1996) found a high correlation between vocabulary size and general English proficiency which indicate that vocabulary size is important in language proficiency. In the next section, several aspects about vocabulary size are reviewed as follows.

2.5.1 Vocabulary size test

A vocabulary size test can benefit learners and teachers. “There is considerable value in gaining knowledge about specific parts of language learners’ proficiency because it can be used effectively for diagnostic, placement and curriculum-design purposes” (Laufer & Nation, 1999, p.33-34)

According to Nation (2012), frequency-based sampling is more suitable to design a vocabulary size test than the traditional method, dictionary-based sampling.

In addition to that, he also pointed out that the test creators need to determine what kind of vocabulary knowledge they want to measure, for example, receptive vocabulary knowledge or productive vocabulary knowledge, written or spoken.

The vocabulary size test can be designed with different test item types, such as multiple choice items (Nation & Beglar, 2007), Yes/No items (Meara & Miralpeix, 2015; Harrington, 2006) or fill in the blank items (Laufer & Nation, 1999).

The format of the vocabulary size test usually presents the words orderly in groups according to their frequency of occurrence (Laufer & Nation, 1999). Nation (2012) considered the first 2,000 word families as high frequency vocabulary. However, Schmitt and Schmitt (2014) argued that up to 3,000 word families should be considered as high-frequency and more than 9,000 word families as low-frequency vocabulary.

2.5.2 Vocabulary size and reading

Hirsh and Nation (1992) found that it people require a vocabulary size of around 5,000 word families to read unsimplified texts for pleasure.

% text coverage	Number of unknown words per 100words	Number of text lines per 1 unfamiliar word
99	1	10
98	2	5
97	3	3.3
96	4	2.5
95	5	2
94	6	1.6

The number of unfamiliar words per 100 words and the number of lines of text containing one unfamiliar word (adapted from Hirsh and Nation, 1992)

According to Liu and Nation (1985), at least 95% coverage of texts is required to guess an unknown word from context. Moreover, Hu and Nation (2000, as cited in Schmitt, 2008, p. 330), Laufer and Ravenhorst-Kalovski (2010) and Schmitt, Jiang, & Grabe (2011) found that it is required to know 98% of the words in the text in order to comprehend the written text well enough.

Nation and Waring (1997) suggested that learners are required to know at least 3,000 high frequency words, and after that the learners and their teachers should focus on vocabulary learning strategies which would help them learn low frequency words through other learning activities in the future.

Nation (2006) conducted a research study on vocabulary size required for reading various types of text based on the theory proposed by Liu and Nation (1985) that 98% coverage is needed to comprehend the text. The word lists in his study were generated from British National Corpus (BNC). He found that it is required to have a vocabulary size of 8,000 - 9,000 words in order to read and understand written text such as novels and newspapers without any assistance.

Word list	<i>Lord Jim</i> (%)	<i>Lady Ch.</i> (%)	<i>Screw</i> (%)	<i>Gatsby</i> (%)	<i>Tono-Bungay</i> (%)
2,000	87.29	88.09	91.71	87.71	86.95
4,000 + proper nouns	94.24	95.06	96.08	95.02	94.36
9,000 + proper nouns	98.06	98.22	98.52	98.47	98.00
Proper nouns	1.04	2.05	0.50	2.12	1.55

Text coverage in several novels (Nation, 2006, p.71)

Word list	LOB (%)	FLOB (%)	Brown (%)	Frown (%)	Kolaphur (%)
2,000	84.33	83.07	81.54	81.79	84.15
4,000 + proper nouns	95.39	95.10	94.14	93.93	94.64
8,000 + proper nouns	98.31	98.03	97.60	97.28	98.05
Proper nouns	5.29	5.66	6.12	5.43	4.55

Text coverage of five newspaper corpora by the BNC word-family lists (Nation, 2006, p.71)

Nation (2012) summarized the minimum vocabulary size needed for comprehending various kinds of discourse as below. He advised that students should know more than 10,000 word families to read English texts for a specific field of study.

Level	1000 word family lists	Learning procedures
High frequency	1000-2000	Reading graded readers Deliberate teaching and learning
Mid-frequency	3000-9000	Reading mid-frequency readers Deliberate learning
Low frequency	10,000 on	Wide reading Specialised study of a subject area

(Nation, 2012, p.6)

Schmitt (2000, cited in Folse, 2004) suggested that EFL learners need to know 3,000 words to read authentic materials and approximately 10,000 word families to understand academic texts.

Laufer and Ravenhorst-Kalovski (2010) did a similar research study about vocabulary size required for sufficient reading comprehension skill on undergraduate students in Israel. They suggested that 8,000 word families are required to gain 98% text coverage which is the goal for adequate comprehension. A minimum level is 5,000 word families which can gain only 95% text coverage.

2.6 Related previous research studies

Many researchers conducted a number of studies about vocabulary knowledge of EFL learners and its relationship with vocabulary learning. The main research instruments are usually a vocabulary size test and a questionnaire. Relevant research studies on this topic conducted in Asian countries and in Thailand are discussed as follows.

2.6.1 Research studies in Asian countries

McLean, Hogg, and Kramer, (2014) measured vocabulary size of 3,449 Japanese university students with Nation and Beglar's vocabulary size test. In addition to that, questionnaires were also used in the study to collect students' TOEIC scores, TOEFL scores, and previous hensachi data which refers to the scores calculated from students' performance on a national standard test. The subjects in the study were divided into three groups according to their hensachi data. The study found that the receptive vocabulary size of Japanese undergraduate students was 3,715.20 word families. The students who were in higher hensachi groups also had a larger vocabulary size. The results indicate that their teachers can estimate students'

vocabulary size from their hensachi score. Moreover, it was suggested that high frequency vocabulary still need to be emphasized when teaching university students

Hamzah, Kafipour and Abdullah (2009) investigated vocabulary learning strategies of EFL students and its relationship to their vocabulary size in Iran. A total number of 125 Iranian undergraduate students participated in this study. The research instruments employed in the study were questionnaires adopted from Bennet (2006) and a vocabulary size test which includes 140 items developed by Nation and Beglar (2007). The study found that using a monolingual dictionary was the most used strategy and Iranian students use vocabulary learning strategies at a medium level. The researchers also concluded that there are nine vocabulary learning strategies which can contribute to increased vocabulary size. These strategies include using physical action when learning an unknown word, communicating with native speakers, taking notes, repeatedly learning unknown words, looking up unknown word in a bilingual dictionary, exposure to English language media, learning with friends, learning the sound of the unknown words, and verbally repeating the words.

Nguyen and Nation (2011) measured the receptive vocabulary size of Vietnamese EFL learners. The bilingual version of the vocabulary size test previously developed by Nation and Beglar (2007) was employed for this study. All 62 participants were Vietnamese third-year undergraduate students majoring in English. The study concluded that the Vietnamese bilingual version of the vocabulary size test is effective and can be a convenient alternative to a monolingual test. It was also found that the high proficiency learners gained higher scores than the middle and low proficiency learners. The mean scores of lower, middle, and high proficiency students were 6060.00, 6509.52, and 7385.71 respectively. They also noted that the test includes some loan words in Vietnamese. However, the researchers believe that loan words should be included in the test because they are a part of a student's English vocabulary.

Shin, Chon, and Kim (2011) measured receptive and productive vocabulary sizes of high school students in Korea. A total number of 402 students participated in the study including males and females. The researchers ranked the proficiency level of the students as intermediate-high according to their scores from the English section of the College Scholastic Ability Test (CSAT). The bilingual version of the

vocabulary size test in the study was adapted from the test developed by Nation and Beglar (2007). The researchers also developed a new productive vocabulary level test including the 1st-10th 1,000 levels. The target words were drawn from the first 14 British National Corpus lists. The study found that the mean receptive vocabulary size of Korean high school students was 6,000 word families (raw score 59.69), and the mean productive vocabulary size of the students was 2,400 word families. The research also indicated that words from low frequency levels are rarely developed into a part of one's productive vocabulary knowledge and vocabulary knowledge is an essential factor of second language proficiency of Korean students. Moreover, the study suggested that Korean curriculum should create word lists for students up to 12th grade and add more words that need to be learned.

Ozturk (2015) carried out one cross-sectional and one longitudinal research study about vocabulary growth on Turkish EFL learners. A total of 55 first-year and 45 fourth-year university students agreed to participate. In this study, the receptive and adapted productive Vocabulary Level Test developed by Nation (2001) were employed. The study found that there was no evidence that shows significant growth in receptive vocabulary knowledge. However, the growth in written productive vocabulary was found to be statistically significant in the longitudinal study. The researcher concluded that the results can indicate two things. The first one was that the participants already knew high frequency words, and, since mid and low frequency word are hardly required incidentally, it is assumed that when these learners encounter unknown words, they would just guess the meaning from context and may not think that learning new words or a using dictionary is necessary. The second one was that vocabulary that these learners gained may be words used in some specific field which may not be included in the test.

2.6.2 Research studies in Thailand

Kotchana and Tongpoon-Patanasorn (2015) measured both receptive and productive vocabulary size of 453 Thai Grade 6 students in the Northeastern region and found that students had a small vocabulary size, both receptive and productive. The research instruments in this study were a vocabulary size test created by the researchers based on the formats proposed by Nation (2008) and Read (2000). The

target words in this study were generated from first 1,000 words of the General Service List. The receptive vocabulary test was 20 multiple-choices items, while the productive vocabulary test was 20 fill in the blank items. The participants were allowed to finish the test within 50 minutes. The study found that the mean receptive vocabulary size of students was 462.91 words, while their productive vocabulary size was 292.05 words. These findings indicate that Grade 6 students', in the Northern region of Thailand, vocabulary sizes have not yet reached a 1000 word level. More importantly, their vocabulary size is lower than the Ministry of Education's requirement which established that Grade 6 students should have a vocabulary size of around 1,050-1,200 high frequency words. The researchers advised that learning materials and activities should be created to improve students' vocabulary learning and, for each grade, a students' minimum vocabulary size should be established.

Yunus, Mohamed, and Waelateh (2016) conducted a comparative study measuring receptive vocabulary knowledge of students from two countries. A total number of 80 first year undergraduate students from Universiti Sultan Zainal Abidin, Malaysia and 89 students from Prince Songkla University, Thailand who studied in the first semester of an English major program participated in the study. The vocabulary size test used in this study was adapted from the receptive vocabulary size test (14,000 version) developed by Nation and Beglar (2007). The test included only the first 10,000 high frequency words. It was administered in two different countries at two different times. They found that Malaysian students' raw mean score was 44.6 from 100, which is higher than Thai students whose average raw score was 20.92 from 100. The vocabulary level of Malaysian students ranged from the 3,000 to 8,000 levels, while the vocabulary level of Thai students ranged from the 1,000 to 7,000 levels. The researchers noted that the reasons why Malaysian students have a higher vocabulary size is due to the fact that Malaysian government support English language as a main second language for Malaysian people and students also speak English on a daily basis. Moreover, it is advised that undergraduate students both in Thailand and in Malaysia should be taught academic vocabulary since the first semester of their program.

Zhiying (2005) also investigated vocabulary size of university students from two countries. The participants in this study were Thai undergraduate students at

Prince of Songkla University and Chinese undergraduate students at South China Agricultural University. All of them studied in the finance field. A total number of 142 students participated in this study. The research instruments employed in the study were vocabulary levels tests adapted from the test developed by Schmitt et al (2001) which included words from 2000, 3000, and 5000 word levels and academic word levels. The study found that Thai students' and Chinese students' average receptive vocabulary size were 3,021 word families, and 3,348 word families respectively. In addition to that, the productive vocabulary size of the students was also investigated by adopting the vocabulary level test developed by Schmitt et al (2001). The mean productive vocabulary size of Thai students was 1,118 word families, which was lower than Chinese students whose mean score was 1,456 word families. Moreover, the researcher noted that the National Curriculum of China specifies words that Chinese students at this level need to be taught. Because Chinese students in the study were not in an English program, they were required to acquire passive vocabulary of 4,200 words and active vocabulary of 2,500 words in order to pass the National College Test and receive the certificates necessary for graduation. The study also suggested that it is useful to let students know the goals of their vocabulary learning, word lists that can guide vocabulary learning and teaching for undergraduate students in Thailand should be developed.

Nirattisai and Chiramanee (2014) also conducted a similar research study about vocabulary learning strategies and vocabulary size of students in Prince of Songkla University. There were 257 third year undergraduate students from 6 programs who participated in this study. The vocabulary learning strategies questionnaire was adapted from the studies conducted by Schmitt (1997) and Siriwan (2007). The bilingual version of the vocabulary size test created by Nation and Beglar (2007) was employed to determine the vocabulary size of students. The results showed that the students' mean receptive vocabulary size around was 5751.58 word families and productive vocabulary size was 1609.56 word families. The study found that vocabulary learning strategies were used at a low level and students who have larger vocabulary sizes employed vocabulary learning strategies more often.

Komol and Sripetpun (2011) investigated vocabulary learning strategies and vocabulary size of university students at Prince of Songkla University. A total number

of 192 students majoring in Language for Development and Chinese for Communication participated in this study. The research instruments employed in the study were a questionnaire and a vocabulary levels test adapted from the test developed by Schmitt et al (2000) which included words from 2000, 3000 and 5000 word levels and Academic Word List. The participants were divided into two groups according to their vocabulary size test scores. Vocabulary learning strategies presented in the questionnaire were proposed by Schmitt (1997). The study found that determination strategy (using a dictionary) was used the most often used and students who have a high vocabulary size use the vocabulary learning strategies more often.

Meckhayai and Puthong (2004) conducted a research study on Thai graduate students at Maejo University about their needs and problems in using English for reading, listening, speaking, and writing. There were 273 students who participated in the study. A questionnaire was employed to collect the data. The results illustrated that incapability to understand the meaning of words was ranked as the most encountered problem of these students when reading in English. Unable to produce words for ideas that they want to convey was ranked as the most encountered problem when writing. Using the wrong words was ranked as the most encountered problem when speaking English and being unable to understand the meaning of the words and idioms was ranked as the most encountered problem when listening. This study indicated that limited English vocabulary knowledge is the main problem of Thai graduate students.

Chaisuriya (2006) conducted a survey research study on Thai graduate students at Burapha University about their English reading needs and problems. There were 154 students who participated in the study. The research study found that limited vocabulary was ranked as the number 1 problem that graduate students encounter and the level of the problem was evaluated as high. The researcher suggested that teachers should advise these students how to expand their vocabulary knowledge.

As discussed above, there are many research studies about vocabulary size of EFL students in Asian countries and in Thailand. Many research studies found a similar result, that Thai students have a small vocabulary size. Moreover, the vocabulary size of Thai students is lower than EFL students in other Asian countries. Some suggestions have been made in order to help Thai EFL learners improve their

vocabulary knowledge, for example, academic English language classes should be provided to undergraduate students at the beginning of the program (Yunus, Mohamed, & Waelateh, 2016), an achievable vocabulary size goal should be set for students at each grade (Kotchana & Tongpoon-Patanasorn, 2015), and undergraduate students should be encouraged to employ vocabulary learning strategies (Nirattisai & Chiramanee, 2014).

Also, there are some research studies which found that Thai graduate learners still have a reading problem caused by limited vocabulary knowledge (Chaisuriya, 2006; Meckhayai & Puthong, 2004). However, previous research studies did not focus on their vocabulary size. To help students gain a general understanding about their vocabulary knowledge and how much more vocabulary they should acquire in order to adequately understand English academic texts when reading them without any assistance, the present study investigates further on their vocabulary size and its effect on the studies of Thai EFL graduate students. The next chapter will present the research methodology.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes (1) research design, (2) participants, (3) research context, (4) research instruments, (5) data collection, and (6) data analysis.

3.1 Research design

Both quantitative and qualitative research methods were employed for the current study. The vocabulary size test developed by Nation and Beglar (2007) was adopted to investigate the vocabulary size of students. This quantitative method is practically quick, even though the research preparation period is quite long. It also can be done with a small budget because it only requires a computer program for data analysis. Most importantly, “quantitative findings tend to enjoy a universally high reputation with almost any audience or stakeholder group” (Dörnyei, 2007, p.34). Open-ended questions were also employed as one of the research instruments. It aims to explore students’ opinions and discover more data which can widen our understanding.

3.2 Participants

Convenience sampling was used for the present study because it requires a considerable amount of time from participants to take the test. Second-year graduate students who study in Career English for International Communication program (CEIC), Language institute, Thammasat University were invited to participate. Males and females were included. There are 27 graduate students participated in the current study. Their ages were between 22-54 years old. Most of them hold a bachelor’s degree in English, accounting, business, economics or marketing.

3.3 Research Context

The Language Institute of Thammasat University (LITU) offers many international graduate degree programs. One of them is Career English for International Communication (CEIC). The classes for graduate programs take place at Tha Prachan Campus, Bangkok, Thailand. The majority of students in the programs

are Thai. Graduate students in CEIC program are taught in English. The students are also required to use English during their classes.

3.4 Research instruments

There were two research instruments in the current study. The first one was the test and the second one was an open-ended questionnaire.

3.4.1 The test

The test in the present study was divided into 2 sections. The first section was participants' profile, the second section was the written receptive vocabulary size test.

Participant's profile

This section aimed to collect each participant's demographic data such as age, gender, and their educational background.

Receptive vocabulary size test

Nation and Beglar's (2007) fourteen thousand word vocabulary size test was used in the present study. The bilingual English-Thai Version was chosen since the participants of the current study were Thai. The test was translated by Supika Nirattisai and Assoc. Prof. Dr. Thanyapa Palanukulwong. It aims to measure English receptive vocabulary size with 140 multiple-choice items. Many researchers employed this test in their research studies (Elgort, 2013; McLean, Hogg, & Kramer, 2014; Yunus, Mohamed and Waelateh, 2016). The target words in the test were selected from British National Corpus which covers 14,000 word levels including high-frequency, mid-frequency, and low frequency words. Ten items would represent 1000 words of each frequency level. To make participants maintain their engagement with the test, the items from each frequency level were not presented orderly from high frequency level to low frequency level.

Examples

drive: He drives fast.

a. ว่ายน้ำ b. เรียนรู้ c. ขวางลูกบอล d. ขับรถยนต์ e. ไม่ทราบคำตอบ

3.4.2 Open-ended questionnaire

There were 3 open-ended questions in this questionnaire. These questions were adapted from the study by Nirattisai and Chiramanee (2014) and Saengpakdeejit (2014). The questions aimed to explore the effects of vocabulary size on the study of

Thai EFL graduate students. The questions were examined by an expert in the field for validity purposes.

Open-ended questions

1. Do you think that acquiring more vocabulary could improve your learning performance? Why?
2. How often do you spend your time exclusively on learning new vocabulary?
3. What do you do or will you do to acquiring new vocabulary?

3.5 Data collection

The researcher went to the Language Institute of Thammasat University where graduate students study for their master's degree. The researcher then waited for them to finish their classes and asked them to participate in the study. Some graduate students who had time agreed to participate. The researcher explained the objective of the study to the participants first and then provided them the test in hard copy. To make sure that subjects clearly understood the instructions and tried with their best efforts to take the test, which will indicate their vocabulary size more precisely, the researcher instructed the participants in Thai. Subjects only took the test one time. Participants were asked to provide their demographic data such as, age, gender, and their educational background. They were told that they have to choose only one correct answer for each item in the receptive vocabulary size test. They were recommended to choose the meaning based on their previous knowledge first. If they really did not have any partial knowledge about the target words, they were advised to choose the "I don't know" choice. Consulting with other sources was not allowed during the test. The participants were allowed to take approximately 60 minutes to finish their test, however, some participants only took 30-45 minutes. After they completed the test, they were asked to return the test paper.

After the test session, six participants were invited to answer the open-ended questionnaire on a voluntary basis. The test and the questionnaire were employed on a separate day. They were provided with the questionnaire in hard copy. The researcher then explained the objective of collecting the data by using open-ended questions to participants and allowed them to take as much time as they needed to write their

answers on the questionnaire. All six volunteers took approximately 15-20 minutes to complete the questionnaire and then returned the paper to the researcher.

3.6 Data analysis

Participants' gender, ages and educational background were converted to statistics in order to reflect the characteristics of subjects. According to Dörnyei (2007), before analyzing the data, the participants' answers need to be converted to numbers. In this study, the test scores were coded. Each item was manually scored as correct and incorrect. A correct answer was given 1 point.

To answer the research question, scores from the receptive vocabulary size test of each participant needed to be multiplied by 100 in order to identify their total receptive vocabulary size. For example, for a participant who scored 80 out of 140, his/her receptive vocabulary size was 8000 word families. Descriptive statistics including minimum, maximum, means and standard deviations from subjects' performance were employed. Means score indicate the overall English receptive vocabulary size of the subjects.

Content analysis was also adopted focusing on students' opinions which were collected from open-ended questions. The frequency of particular responses was also counted.

The above methods and procedures were designed to answer the research question and explore any significant details from the participants.

CHAPTER 4

RESULTS AND DISCUSSION

The results and discussions of investigating vocabulary size and its effect on the study of Thai EFL graduate students which were obtained from the vocabulary size test and open-ended questionnaire are presented in statistical and descriptive forms as follows:

- 4.1 General background information
- 4.2 Receptive vocabulary size of Thai EFL graduate students
- 4.3 The effect of vocabulary size on the study of Thai EFL graduate students.
- 4.4 Discussion

4.1 General background information

There were 27 graduate students in CEIC program who participated in the current study. Their ages were between 22-54 years old. There were 5 male and 22 female participants in the present study. More than half of them (55.55%) hold a bachelor's degree in English.

Table 1: Age and educational background of participants

Age			Major at the undergraduate level		Educational level	
22-28 years old	29-35 years old	35 years old up	English major	Non- English major	Bachelor's degree	Master's degree
12 (44.45%)	10 (37.03%)	5 (18.52%)	15 (55.55%)	12 (44.45%)	22 (81.48%)	5 (18.52%)
n= 27			n= 27		n=27	

Table 1 shows that the largest group of participants or 44.45% of them were 22-28 years old. The smallest group of participants or 18.52% of them were more than 35 years old. Some participants (18.52%) already hold a master's degree in another field before studying for a Master's Degree in Career English for International Communication.

4.2 Receptive vocabulary size of Thai EFL graduate students

Receptive vocabulary size of Thai EFL graduate students was collected from the vocabulary size test developed by Nation and Beglar (2007). The data is presented in minimum, maximum, means and standard deviations (S.D.)

Table 2: Receptive vocabulary size of participants

Vocabulary level	Mean	Max	Min	S.D.
First 1,000 level	937	1000	800	79.17
Second 1,000 level	881	1000	500	130.20
Third 1,000 level	774	1000	400	174.52
Fourth 1,000 level	796	1000	300	145.39
Fifth 1,000 level	704	900	300	212.10
Sixth 1,000 level	470	900	100	195.75
Seventh 1,000 level	481	900	100	186.12
Eighth 1,000 level	656	1000	200	186.74
Ninth 1,000 level	463	1000	200	204.09
Tenth 1,000 level	396	800	0	212.10
Eleventh 1,000 level	459	1000	200	243.78
Twelfth 1,000 level	437	1000	200	205.96
Thirteenth 1,000 level	359	1000	0	240.60
Fourteenth 1,000 level	307	800	0	207.41
Total vocabulary size	8152	12500	5000	1906.14

According to Table 2, the mean receptive vocabulary size of the 27 participants was 8,152 word families. The maximum receptive vocabulary size was 12,500 word families, and the minimum receptive vocabulary size was 5,000 word families. Mean scores from test items in high frequency words level was usually higher than low frequency words level.

Table 3: *Number of participants and their receptive vocabulary size at different levels*

Vocabulary size	No. of students.
	N =27
1,000 - 1,999 word families	0
2,000 - 2,999 word families	0
3,000 - 3,999 word families	0
4,000 - 4,999 word families	0
5,000 - 5,999 word families	4 (14.81%)
6,000 - 6,999 word families	3 (11.11%)
7,000 - 7,999 word families	6 (22.22%)
8,000 - 8,999 word families	6 (22.22%)
9,000 - 9,999 word families	3 (11.11%)
10,000 - 10,999 word families	3 (11.11%)
11,000 - 11,999 word families	1 (3.7%)
12,000 - 12,999 word families	1 (3.7%)
13,000 - 13,999 word families	0

According to Table 3, the highest receptive vocabulary size of the subjects was between 12,000-12,999 word families, and only 3.7 percent of subjects scored at this level. The lowest receptive vocabulary level was between 5,000-5,999 word families word families, and 14.81 percent of the subjects scored at this level.

4.3 The effect of vocabulary size on the study of Thai EFL graduate students.

The effect of vocabulary size on the study of Thai EFL graduate students was obtained from the open-ended questionnaire which was answered by six participants in the present study. There were three students who scored more than 10,000 word families, and there were three students who scored below 6,500 word families who agreed to provide information.

All students think that acquiring more vocabulary has positive effects on their performance. Although students answered that acquiring more vocabulary could improve their four language skills, reading and speaking skills were mentioned the

most. One of students replied that “If I have a large size of vocabulary, it is easier for me when I have to read academic or medical text”. They also think that limited vocabulary obstruct them to communicate and produce assignments, as one student answered that “limited vocabulary will block my opportunity to search for information (to do homework or research)”. One student also answered that having a larger vocabulary size could help him learn unknown words easier.

Students who scored more than 10,000 word families reported to spend their time on vocabulary learning almost every day or every day. Students who had a vocabulary size below 6,500 word families answered that they only focus on vocabulary learning once or twice a week, however one student in this group replied that she reads English newspapers every day. The most employed vocabulary learning strategy by graduate students is using a dictionary. More than half of students reported that they use this strategy (66.66%). It is worth mentioning that there was one student who has a vocabulary size of more than 10,000 word families who answered that he rarely uses a dictionary but prefers to learn vocabulary by using English, such as reading news or watching TV programs.

Beside using a dictionary and watching English movies, students also reported to apply other vocabulary learning strategies such as guessing a word from context, using English websites, using flashcards and listen to English songs. It is also observed that students whose vocabulary size was more than 10,000 word families reported to use various kinds of vocabulary learning strategies more than students who have less vocabulary size. For example, student A described that “I always use monolingual dictionaries to look up for pronunciation, meaning, and sample sentences of difficult words. Besides, using flash cards or pictures that describe meaning of definition is the effective way for me to remember new vocabularies”, student B answered that “I usually open dictionary: both online and paper, and search how to use such word on google or look around context that the word is mostly used”.

4.4 Discussions

The following section discusses the important points of the research studies related to the results as follows

4.4.1 Receptive vocabulary size of Thai EFL graduate students

Previous research studies suggested that to read written text and adequately understand the text, readers need to know 98% of words in the text (Hu and Nation, 2000, as cited in Schmitt, 2008; Laufer & Ravenhorst-Kalovski, 2010; Schmitt, Jiang, & Grabe, 2011). Many research studies have been conducted to determine how much vocabulary is needed to achieve this goal. Nation (2006) found that it required a vocabulary size of 8,000 - 9,000 words in order to read and understand novels and newspapers without any assistance. Laufer and Ravenhorst-Kalovski (2010) conducted a research study on EFL undergraduate students in Israel who take classes in English for Academic Purposes and concluded that around 8,000 word families are needed to reach 98% text coverage which is believed to be the level that makes students understand the texts well enough. In addition to that, Schmitt (2000, cited in Folse, 2004) and Nation (2012) suggested that students should know more than 10,000 word families to read challenging academic materials specialized for studying in a specific field.

The current study aims to determine the mean receptive vocabulary size of Thai EFL graduate learners by adopting a bilingual Thai-English version of the vocabulary size test developed by Nation and Beglar's (2007). Some of the target words on the test are loan words, for example, standard, microphone, pro, olives, yoghurt, and yoga. However, the current study still included these words in the test because previous research study in Vietnam by Nguyen & Nation (2011) also included loan words. They believed that "they are an important part of a learner's English vocabulary. Getting them correct on the test reflects their transparency or low learning burden when meeting them in reading" (Nguyen & Nation, 2011, p. 98)

The results of the current study indicate that Thai EFL graduate students' mean receptive vocabulary size is 8,152 word families. The finding indicates that generally Thai EFL graduate students are able to read novels, newspapers, and various kinds of English materials and gain adequate comprehension (Laufer & Ravenhorst-Kalovski; 2010; Nation, 2006; Nation, 2012). However, it is not enough to read and adequately understand academic materials for a specific area of study which contain many low frequency words and technical words. These words sometimes are the

keywords of academic texts and may be vital for comprehension (Laufer & Ravenhorst-Kalovski, 2010). Therefore, it is advised that Thai EFL graduate students still need to spend more of their time on vocabulary acquisition to gain vocabulary of approximately 10,000 word families or more, especially words relating to their field of study.

4.4.2 The effect of vocabulary size on the study of Thai EFL graduate students.

The effects of vocabulary size on the study of Thai EFL graduate learners from students' perspective were collected from open-ended questions. The findings reveal that students think that gaining more vocabulary has a positive effect on their four language skills. However, that vocabulary could improve their reading and speaking skills was mentioned the most which suggests that graduate students are more likely to spend most of their time reading a large number of English textbooks and related materials and discussing or presenting them in classes more than listening or writing in English. Students also answered that limited vocabulary knowledge obstructs them to communicate with others or efficiently complete their assignments, such as their homework or research. They also believe that a larger vocabulary size helps learning new unknown words. In conclusion, students agreed with Gu and Johnson (1996), Milton (2009), and Schmitt, Grabe, and Jiang (2011) who concluded that a large vocabulary size is required to be good at using the language.

The study also found that using a dictionary was mentioned the most as a vocabulary learning strategy (66.66% of students). It is categorized as a determination strategy by Schmitt (1997). The result is consistent with previous research studies by Schmitt (1997) in Japan and Komol and Sripetpun (2011) in Thailand. They found that EFL students employ determination strategies (look at a dictionary) the most. Although most students replied that they use a dictionary, one student who has a vocabulary size of more than 10,000 word families reported that he rarely uses a dictionary but prefers listening, speaking and reading in English to gain new vocabulary knowledge. This finding is consistent with Nation and Waring's (1997) opinions. They stated that "language use enables the increase of vocabulary knowledge" (Nation & Waring, 1997, p.6). It also supports Ozturk's (2015) assumption. She believed that advanced learners can guess the meaning of unknown

words from context because they know a considerable amount of words to support them and may ignore using a dictionary.

In terms of frequency, the findings illustrate that students who have a larger vocabulary size apply vocabulary learning strategies more often than students who have a smaller vocabulary size. The result is consistent with previous research studies in Thailand by Komol and Sripetpun (2011) and Nirattisai and Chiramanee (2014). They found a significant correlation between the frequency of employing vocabulary learning strategies and vocabulary size. They concluded that higher frequent use of vocabulary learning strategies leads to the larger vocabulary size. However, there was one student in this study whose score, although she answered that she reads newspaper every day to acquire new vocabulary, was below 6,500 word families. This indicates that frequency of exposure is not the only factor leading to vocabulary acquisition. This finding is consistent with Schmitt's (2008) theory which proposed that there are nine factors that lead to vocabulary learning, for example, the attention focused on the target words, the intention to learn the word, or a demand to learn words by teachers or tests (Schmitt, 2008).

In addition to that, the current study also found that students who have a larger vocabulary size reported using various types of vocabulary learning strategies, for example, using a dictionary, guessing words from context, using English websites, using flashcards, watching TV programs and learning words with pictures. This indicates that using many strategies may be more effective than using one or two strategies. Because there are many types of word knowledge (Nation, 2001; Thornbury, 2002), using only one strategy may provide only some types of word knowledge. For example, students who listen to English songs may not learn the written forms of words or students who memorize the meaning of words from a glossary may not know the collocations of such words.

As seen in the results and discussion presented above, Thai EFL graduate students realize the importance of vocabulary learning and they also employ many vocabulary learning strategies, however, their receptive vocabulary size should be expanded further if they wish to gain better comprehension when reading academic text relating to their field of study. A summary of the study and findings, conclusions, and recommendations for further research will be presented in the next chapter.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

This final chapter contains four main topics, including a summary of the study, a summary of the findings, conclusions and recommendations for further research.

5.1 Summary of the study

5.1.1 Objectives of the study

The present study aimed to identify the mean receptive vocabulary size of Thai EFL graduate students. In addition to that, it also explored the effects of vocabulary size on their study at graduate level from students' perspective.

5.1.2 Participants, research instruments and procedures

Participants in the current study were males and females studying in Career English for International Communication program (CEIC), Language Institute, Thammasat University. Their ages were between 22-54 years old. Most of them hold a bachelor's degree in English, accounting, business, economics and marketing. The total number of participants was 27. There were two research instruments in the current study. The first one was the bilingual English-Thai version of vocabulary size test developed by Nation and Beglar (2007) and translated by Supika Nirattisai and Assoc. Prof. Dr. Thanyapa Palanukulwong. The test covers 14,000 word levels including high-frequency, mid-frequency, and low frequency words. The second one was an open-ended questionnaire which was adapted from the study by Nirattisai and Chiramanee (2014) and Saengpakdeejit (2014). The vocabulary size test and open-ended questionnaire were each administered on a separate day. Six participants volunteered to answer the open-ended questions. After data collection was completed, the test scores were coded manually. The descriptive statistics including minimum, maximum, means and standard deviations from subjects' performance were employed to illustrate the findings. Content analysis was adopted and the frequency of particular responses was also counted to explore significant data related to the objectives of the study.

5.2 Summary of the findings

The findings of this study can be summarized as follows:

1. All 27 participants in the current study were Thai EFL graduate students. Their ages were between 22-54 years old, including males and females. 55.55% of the subjects hold a bachelor's degree in English, while 44.45% of the subjects hold a bachelor's degree in accounting, business, economics, marketing and others.

2. The mean receptive vocabulary size of participants was 8,152 word families. The maximum receptive vocabulary size was 12,500 word families, and the minimum was 5,000 word families. The majority of the participants scored between 7,000-9,000 word families

3. All students think that acquiring more vocabulary have a positive effect on their performance. They believe that it would help them improve their four language skills, especially reading and speaking. A larger vocabulary size can also support them more when learning new unknown words. Limited vocabulary knowledge obstructs them to communicate and finish their assignments efficiently.

4. Some participants who earned higher scores reported to use vocabulary learning strategies more often than participants who scored lower.

5. The most used vocabulary learning strategy by graduate students (66.66%) is using a dictionary.

8. There is one student who scored more than 10,000 word families who rarely uses a dictionary but rather spends time on using English to gain new vocabulary knowledge.

9. Students whose vocabulary size was more than 10,000 word families reported to use various types of vocabulary learning strategy more than students whose vocabulary size was below 6,500 word families.

5.3 Conclusions

It is suggested that knowing more than 10,000 word families is a goal for learners who wish to read and understand English academic texts for a specific field of study (Nation, 2012; Schmitt, 2000, cited in Folse, 2004). Therefore, it is beneficial to know how close Thai EFL graduate students are to this goal. The current study

found that the receptive vocabulary size of Thai EFL graduate students was around 8,100 word families which is not enough for reading academic text. It is advised that they should focus more on vocabulary acquisition especially low frequency words or technical words related to their field of study.

Students also believe that vocabulary knowledge affects their performance at the graduate level. Students think that it can help them improve their language skills, especially reading and speaking. Limited vocabulary knowledge will obstruct them to efficiently produce their assignments. Larger vocabulary size is also a strong foundation to help them learn new words easier. It is also suggested that students who have a small vocabulary size should spend their time on vocabulary learning more frequently and give more attention when encountering unknown words. Because there are many types of word knowledge, only one or two learning strategies cannot provide all types of knowledge to students. Therefore, using various types of vocabulary learning strategies is also advised.

5.4 Recommendations for further research

Based on the findings and conclusions of this study, the following recommendations are made for future research.

First, the vocabulary size test in the present study aims to measure written receptive vocabulary size only. Since there are many types of vocabulary knowledge, it is recommended that receptive vocabulary knowledge for listening and productive vocabulary knowledge should be further examined to gain more understanding about all aspects of vocabulary knowledge of students related to all four language skills.

Second, the number of participants in the current study was quite small and convenience sampling was employed in the current study. Further research studies should be done with a larger number of graduate students from other universities. Adopting stratified sampling is recommended to improve the accuracy and efficiency of the vocabulary size estimation.

Third, although the current study could show the receptive vocabulary knowledge of the graduate students, it only measures the breadth of vocabulary knowledge. The research instrument employed in the study was a multiple-choice test. It is possible that students who know the words in the test and were able to choose the

correct answer may not know all types of word knowledge of the target words. It is suggested that future research studies should employ vocabulary knowledge scale (VKS) to evaluate students' depth of vocabulary knowledge.

Fourth, the present study used an open-ended questionnaire to explore the effect of vocabulary size on the study of Thai EFL graduate students, however, more data and significant details could be discovered if further in-depth interviews could be administered.



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APPENDICES



APPENDIX A

The Bilingual English-Thai Version of Vocabulary Size Test

Name.....

Student ID.....

Gender Female Male

Age.....

Educational background

Bachelor's degree..... (major).....

Master's degree..... (major).....

TU-GET score

Reading section.....

Vocabulary section.....

******You are not allowed to consult other sources during the test******

******You have 60 minutes to finish the test******

Thank you for your participation

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 1 maintain: Can they **maintain** it? 2 nil: His mark for that question was **nil**.
- a. รักษาไว้ในสภาพเดิม a. แ่่มากๆ
b. ทำให้ใหญ่ขึ้น b. ไม่มีอะไร
c. เอาอันที่คิดกว่าอันนี้ c. คีมากๆ
d. ได้มา, ได้รับ d. กลางๆ
e. ไม่ทราบคำตอบ e. ไม่ทราบคำตอบ
- 3 stone: He sat on a **stone**. 4 pub: They went to the **pub**.
- a. ลึ่งที่แข็ง a. สถานที่ที่ผู้คนดื่มและพูดคุยกัน
b. แก้วประเภทหนึ่ง b. สถานที่สำหรับเก็บรักษาเงิน
c. วัสดุบุบนพื้น c. อาคารขนาดใหญ่ที่มีร้านค้ามากมาย
d. ส่วนหนึ่งของคันไม้ d. อาคารที่ใช้สำหรับการว่ายน้ำ
e. ไม่ทราบคำตอบ e. ไม่ทราบคำตอบ
- 5 upset: I am **upset**. 6 circle: Make a **circle**.
- a. เหนื่อย a. ภาพร่างหายๆ
b. มีชื่อเสียง b. หินที่ว่าง
c. รวย c. รูปวงกลม
d. ไม่มีความสุข d. รูขนาดใหญ่
e. ไม่ทราบคำตอบ e. ไม่ทราบคำตอบ
- 7 drawer: The **drawer** was empty. 8 microphone: Please use the **microphone**.
- a. กล่องที่สามารถเลื่อนไป-มาได้ a. เครื่องสำหรับทำให้อาหารร้อน
b. สถานที่ใช้จอดเก็บรถยนต์ b. เครื่องที่ใช้เพิ่มความดังของเสียง
c. ตู้ที่ใช้สำหรับเก็บรักษาสิ่งของให้เย็น c. เครื่องที่ทำให้สิ่งของดูมีขนาดใหญ่ขึ้น
d. ที่ของผู้ของตัว d. โทรศัพท์ขนาดเล็กสำหรับพกพา
e. ไม่ทราบคำตอบ e. ไม่ทราบคำตอบ
- 9 patience: He has no **patience**. 10 pro: He's a **pro**.
- a. รอคอยอย่างไม่มีความสุข a. บุคคลผู้ถูกจ้างมาเพื่อสืบความลับสำคัญ
b. ไม่มีเวลาว่าง b. คนใจเขลา
c. ไม่มีความรักธา c. คนเขียนข่าวหรือบทความต่างๆในหนังสือพิมพ์
d. ไม่รู้ว่าอะไรคือความยุติธรรม d. คนที่ได้รับคำตอบแทนจากการเล่นเกมกีฬา
e. ไม่ทราบคำตอบ e. ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 11 see: They **saw** it.
 a. ตัด
 b. รอ
 c. ดู / มอง
 d. เริ่มต้น
 e. ไม่ทราบคำตอบ
- 12 drive: He **drives** fast.
 a. ว่ายน้ำ
 b. เรียนรู้
 c. ขว้างลูกบอล
 d. ขับรถยนต์
 e. ไม่ทราบคำตอบ
- 13 time: They have a lot of **time**.
 a. เงิน
 b. อาหาร
 c. ชั่วโมง
 d. เพื่อน
 e. ไม่ทราบคำตอบ
- 14 jump: She tried to **jump**.
 a. ลอยตัวเหนือพื้นน้ำ
 b. พุ่งตัวจากพื้นอย่างรวดเร็ว
 c. หยุดรถยนต์ตรงขอบถนน
 d. เคลื่อนที่อย่างรวดเร็ว
 e. ไม่ทราบคำตอบ
- 15 period: It was a **difficult period**.
 a. คำถาม
 b. ช่วงเวลา
 c. สิ่งที่ต้องทำ
 d. หนังสือ
 e. ไม่ทราบคำตอบ
- 16 shoe: Where is your **shoe**?
 a. ผู้ที่ดูแลคุณ
 b. สิ่งที่คุณใช้ใส่เงิน
 c. สิ่งที่คุณใช้เขียน
 d. สิ่งที่คุณสวมใส่ที่เท้า
 e. ไม่ทราบคำตอบ
- 17 figure: Is this the **right figure**?
 a. คำตอบ
 b. สถานที่
 c. เวลา
 d. จำนวน
 e. ไม่ทราบคำตอบ
- 18 standard: Her **standards** are very high.
 a. เศษของที่ดินที่อยู่ใต้รองเท้าทางด้านหลัง
 b. คะแนนสอบ
 c. จำนวนเงินที่ขอ
 d. ระดับต่างๆที่ได้รับหรือทำได้
 e. ไม่ทราบคำตอบ
- 19 poor: We are **poor**.
 a. ไม่มีเงิน
 b. รู้สึกมีความสุข
 c. รู้สึกสนใจอย่างมาก
 d. ไม่ชอบทำงานหนัก
 e. ไม่ทราบคำตอบ
- 20 basis: This was used as the **basis**.
 a. คำตอบ
 b. สถานที่สำหรับพักผ่อน
 c. ชั้นคอนกรีต
 d. ส่วนประกอบหลัก
 e. ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 21 hallmark: Does it have a **hallmark**?
- การประทับตราเพื่อระบุเวลาการใช้งานของสิ่งๆนั้น
 - การประทับตราเพื่อแสดงถึงคุณภาพของสิ่งๆนั้น
 - เครื่องหมายที่ใช้แสดงว่าสิ่งนั้นได้รับการรับรองโดยราชวงศ์
 - เครื่องหมายหรือร่องรอยที่ลบออกไม่ได้ ใช้เพื่อป้องกันการเลียนแบบ
 - ไม่ทราบคำตอบ
- 22 perturb: I was **perturbed**.
- ถูกบังคับให้ยอมรับหรือตกลงยินยอม
 - กลัวใจ, กังวลใจ
 - ประหลาดใจอย่างมาก
 - เพิกเฉย
 - ไม่ทราบคำตอบ
- 23 puritan: He is a **puritan**.
- ผู้ที่ชอบให้ผู้อื่นสนใจ
 - ผู้ที่เคร่งครัดในศีลธรรมจรรยา
 - ผู้ที่อาศัยอยู่ในบ้านที่สามารถเคลื่อนย้ายได้
 - บุคคลที่ไม่ชอบใช้จ่ายเงิน
 - ไม่ทราบคำตอบ
- 24 regent: They chose a **regent**.
- บุคคลซึ่งขาดความรับผิดชอบ
 - ผู้ดูแลการจัดการประชุมเป็นครั้งๆไป
 - ผู้สำเร็จราชการแทนพระมหากษัตริย์
 - บุคคลผู้เป็นตัวแทนกลุ่ม
 - ไม่ทราบคำตอบ
- 25 monologue: Now he has a **monologue**.
- เล่นสตัคเคียวใช้สองเพื่อให้เห็นชัดเจน
 - การพูดโดยคนเดียวเป็นระยะเวลายาวนาน โดยไม่มีการขัดจังหวะ
 - ตำแหน่งที่มีอำนาจเบ็ดเสร็จ
 - ภาพที่สร้างขึ้นโดยใช้ตัวอักษรต่อกัน ด้วยวิธีที่น่าสนใจ
 - ไม่ทราบคำตอบ
- 26 octopus: They saw an **octopus**.
- นกขนาดใหญ่ ที่หากินในเวลากลางวัน
 - เรือที่สามารถเคลื่อนตัวภายใต้ท้องน้ำได้
 - เครื่องจักรซึ่งมีน โดยการทำงานของใบพัด
 - สิ่งมีชีวิตใต้ท้องน้ำ ที่มี 8 ขา
 - ไม่ทราบคำตอบ
- 27 weir: We looked at the **weir**.
- ผู้ที่มีพฤติกรรมแปลกๆ
 - พื้นที่เต็มไปด้วยโคลน, เปียกชื้น และมีพืชน้ำขึ้น
 - เครื่องคนตรีทำจากโลหะโบราณ เล่นโดยการเป่า
 - สิ่งที่สร้างขวางแม่น้ำ เพื่อควบคุม
 - ไม่ทราบคำตอบ
- 28 fen: The story is set in the **fens**.
- พื้นที่ต่ำ ที่บางส่วนปกคลุมด้วยน้ำ
 - พื้นที่สูง ที่มีต้นไม้ไม่มาก
 - กลุ่มบ้านคุณภาพต่ำในเขตเมือง
 - เมื่อนานมาแล้ว
 - ไม่ทราบคำตอบ
- 29 whim: He had lots of **whims**.
- เหรียญทองโบราณ
 - ม้าเทศเมย์
 - ความคิดที่แปลก โดยไม่มีสาเหตุหรือแรงจูงใจ
 - ก้อนเนื้อที่บวมแดงและเจ็บ
 - ไม่ทราบคำตอบ
- 30 lintel: He painted the **lintel**.
- คานซึ่งอยู่เหนือประตูหรือหน้าต่าง
 - เรือขนาดเล็กใช้สำหรับเดินทางจากเรือใหญ่ขึ้นฝั่ง
 - ต้นไม้สวยงาม ที่มีกิ่งก้านสาขาและผลสีเขียว
 - ฉากแสดงในโรงละคร
 - ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 31 soldier: He is a **soldier**.
- ผู้ทำงานในแวดวงธุรกิจ
 - นักเรียน, นักศึกษา
 - ผู้ใช้โลหะ
 - ผู้ทำงานในกองทัพ, ทหาร
 - ไม่ทราบคำตอบ
- 32 strap: He broke the **strap**.
- ค้ำมันส์ัญญา
 - ฝาปิดด้านบน
 - จานกันคลื่น ใช้ใส่อาหาร
 - วัสดุที่เป็นเส้นยาว ใช้รัดสิ่งของเข้าด้วยกัน
 - ไม่ทราบคำตอบ
- 33 restore: It has been **restored**.
- พูดถึงอีกครั้ง
 - ให้กับอีกคนหนึ่ง
 - ขายถูกกว่า/ให้ในราคาที่ต่ำกว่า
 - ทำให้เหมือนใหม่อีกครั้ง
 - ไม่ทราบคำตอบ
- 34 pave: It was **paved**.
- ห้ามผ่าน
 - แบ่งออกเป็นส่วนๆ
 - มีกรอบทองคำ
 - ปูด้วยวัสดุที่มีพื้นผิวแข็ง
 - ไม่ทราบคำตอบ
- 35 jug: He was holding a **jug**.
- ภาชนะสำหรับเทของเหลว
 - การอภิปรายแบบไม่เป็นทางการ
 - หมวกนุ่มๆ
 - อาวุธที่ใช้ระเบิด
 - ไม่ทราบคำตอบ
- 36 dash: They **dashed** over it.
- เคลื่อนที่อย่างรวดเร็ว
 - เคลื่อนที่อย่างช้าๆ
 - ต่อสู้
 - มองอย่างรวดเร็ว
 - ไม่ทราบคำตอบ
- 37 scrub: He is **scrubbing** it.
- ทำให้เกิดร่องตื้นๆ
 - ซ่อมแซม
 - ขัดถูอย่างแรงเพื่อทำความสะอาด
 - วาดภาพมันอย่างง่าย
 - ไม่ทราบคำตอบ
- 38 rove: He couldn't stop **roving**.
- เมาเหล้า
 - เคลื่อนไหวไป-มา
 - การผิวปาก
 - ทำงานหนัก
 - ไม่ทราบคำตอบ
- 39 dinosaur: The children were pretending to be **dinosaurs**.
- โจรสลัดสันตะคมในทะเล
 - สิ่งมีชีวิตขนาดเล็กที่มีร่างกายเป็นคนแต่มีปีก
 - สิ่งมีชีวิตขนาดใหญ่ ที่มีปีกและฟันไฟ
 - สัตว์ซึ่งมีชีวิตอยู่เมื่อนานมาแล้ว
 - ไม่ทราบคำตอบ
- 40 lonesome: He felt **lonesome**.
- ไม่สำนึกในบุญคุณ
 - เหนื่อมาก
 - เหงา
 - เต็มไปด้วยพลัง
 - ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 41 awe: They looked at the mountain with **awe**. 42 cranny: We found it in the **cranny**!
- a. ความกังวล
b. ความสนใจ
c. ความแปลกใจ
d. ความเคารพ
e. ไม่ทราบคำตอบ
- a. การขายสินค้าที่ไม่ต้องการแล้ว
b. ซอกเล็กซอกน้อย
c. ที่เก็บของใต้หลังคาบ้าน
d. กล่องไม้ขนาดใหญ่
e. ไม่ทราบคำตอบ
- 43 peasantry: He did a lot for the **peasantry**. 44 pigtail: Does she have a **pigtail**?
- a. คนท้องถิ่น
b. สถานที่ที่ใช้เคารพบูชา
c. สมาคมนักธุรกิจ
d. ชาวไร่ ชาวนาผู้มีรายได้น้อย
e. ไม่ทราบคำตอบ
- a. ทรงผมที่เกิดจากการถักเกลียวผมเข้าด้วยกัน
b. ผ้าจำนวนมากที่แขวนอยู่ด้านหลังเสื้อชุด
c. ต้นไม้ที่มีช่อดอกสั้นสีชมพูอ่อน
d. คนรัก
e. ไม่ทราบคำตอบ
- 45 egalitarian: This organization is **egalitarian**. 46 crowbar: He used a **crowbar**.
- a. ไม่เปิดเผยข้อมูลของบริษัทส่วนใหญ่ต่อสาธารณชน
b. ไม่ชอบการเปลี่ยนแปลง
c. มักร้องขอให้ศาลช่วยตัดสินความ
d. ปฏิบัติต่อทุกคนในที่ทำงานราวกับว่าเท่าเทียมกัน
e. ไม่ทราบคำตอบ
- a. แท่งเหล็กที่มีน้ำหนักมากมีส่วนปลายโค้ง
b. ช้อนปอคม
c. เครื่องมือสำหรับเจาะผนัง
d. ไม้เท้าทำจากโลหะน้ำหนักเบา
e. ไม่ทราบคำตอบ
- 47 mystique: He has lost his **mystique**. 48 ruck: He got hurt in the **ruck**.
- a. ร่างกายที่มีสุขภาพแข็งแรง
b. วิธีกลับซึ่งทำให้ผู้อื่นเชื่อว่าบุคคลผู้นั้นมีพลังวิเศษ
c. หญิงที่เป็นคนรักของเขา ขณะที่เขามักหย่าแล้ว
d. ขนหนวดเหนือริมฝีปากบน
e. ไม่ทราบคำตอบ
- a. ที่ว่างระหว่างกระเพาะอาหารและโคนขา
b. การผลึกและการคืน
c. กลุ่มผู้เล่นซึ่งรวมล้อมลูกบอลในเกมส์กีฬาที่เล่นโดยใช้ลูกบอล
d. การแข่งขันข้ามลานหิมะ
e. ไม่ทราบคำตอบ
- 49 upbeat: I'm feeling really **upbeat** about it. 50 lectern: He stood at the **lectern**.
- a. ไม่สบายใจ
b. รู้สึกดี
c. รู้สึกเจ็บปวด
d. รู้สึกสับสน
e. ไม่ทราบคำตอบ
- a. แท่นวางหนังสือในระดับสำหรับการอ่าน
b. โต๊ะหรือแท่นใช้สำหรับการทำพิธีบูชาในโบสถ์
c. สถานที่สำหรับซื้อเครื่องดื่ม
d. ชุดขอบ, ริมชุด
e. ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 51 compound: They made a new **compound**.
- การคอง, ข้อคอง
 - สิ่งที่ประกอบด้วย 2 ส่วน หรือมากกว่า
 - กลุ่มคนที่ร่วมทำธุรกิจ
 - การคาดเดาโดยอาศัยประสบการณ์ในอดีต
 - ไม่ทราบคำตอบ
- 52 input: We need more **input**.
- ข้อมูล, พลังงาน และอื่นๆ ที่ใส่หรือป้อนเข้าไป
 - คนงาน
 - วัสดุประคินผู้ใส่เข้าไปเพื่ออุดช่องโหว่ในเนื้อไม้
 - เงิน
 - ไม่ทราบคำตอบ
- 53 latter: I agree with the **latter**.
- ผู้ที่ทำงานในโบสถ์หรือศาสนจักร
 - เหตุผลที่ให้
 - อันหลัง, อันสุดท้าย
 - คำตอบ
 - ไม่ทราบคำตอบ
- 54 crab: Do you like **crabs**?
- สัตว์ทะเลซึ่งเคลื่อนตัวไปทางด้านข้าง
 - เด็กชั้นบางขนาดเล็ก
 - ปลอกคอแข็งคิงแน่น
 - แมลงสีตัวใหญ่ที่ส่งเสียงร้องในเวลาค่ำคืน
 - ไม่ทราบคำตอบ
- 55 candid: Please be **candid**.
- ระมัดระวัง
 - แสดงความเห็นอกเห็นใจ
 - ให้ความยุติธรรมกับทั้งสองฝ่าย
 - พูดในสิ่งที่คุณคิดจริงๆ
 - ไม่ทราบคำตอบ
- 56 vocabulary: You will need more **vocabulary**.
- คำศัพท์
 - ทักษะ
 - เงิน
 - ปืน
 - ไม่ทราบคำตอบ
- 57 tummy: Look at my **tummy**.
- ผ้าที่ใช้คลุมศีรษะ
 - ท้อง
 - ตัวมีขนขนาดเล็ก
 - นิ้วหัวแม่มือ
 - ไม่ทราบคำตอบ
- 58 remedy: We found a good **remedy**.
- วิธีการแก้ปัญหา
 - สถานที่รับประทานอาหารเช้าในภัตตาคาร
 - วิธีการเตรียมอาหาร
 - กฎที่ใช้สำหรับจำนวน, ตัวเลข
 - ไม่ทราบคำตอบ
- 59 quiz: We made a **quiz**.
- สิ่งที่ใช้เก็บ/ใส่ลูกศร
 - ผิดพลาดร้ายแรง
 - ชุดคำถาม
 - กล่องสำหรับให้นักทำรัง
 - ไม่ทราบคำตอบ
- 60 allege: They **alleged** it.
- อ้างความเป็นเจ้าของโดยไม่ได้มีการพิสูจน์
 - ขโมยความคิดคนอื่น
 - ให้ข้อเท็จจริงเพื่อพิสูจน์
 - โต้แย้งข้อเท็จจริงที่สนับสนุนมัน
 - ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 61 excreted: This was excreted recently.
- ผลึก หรือ ส่งออก
 - ทำให้สะอาด, ชัดเจน
 - ถูกค้นพบด้วยวิธีทดลองทางวิทยาศาสตร์
 - รวบรวมรายชื่อสิ่งผิดกฎหมาย
 - ไม่ทราบคำตอบ
- 62 pallor: His pallor caused them concern.
- อุณหภูมิร่างกายที่สูงกว่าปกติ
 - การขาดความสนใจในทุกสิ่งทุกอย่าง
 - กลุ่มเพื่อน
 - ความขาวซีดของผิวหนัง
 - ไม่ทราบคำตอบ
- 63 mussel: They bought mussels.
- ลูกบอลแก้วขนาดเล็ก ใช้ในการเล่นเกมส์
 - สัตว์น้ำจำพวกที่มีเปลือก
 - ผลไม้มีวงขนาดใหญ่
 - กระดาษนุ่มใช้สำหรับป้องกันการเลอะระหว่างรับประทานอาหาร
 - ไม่ทราบคำตอบ
- 64 aperitif: She had an aperitif.
- แก๊ซยาวสำหรับนอนอน มีที่พักแขนหนึ่งด้าน
 - ครูสอนร้องเพลงส่วนตัว
 - หมวกขนาดใหญ่ ปีกขนนกยาว
 - เครื่องดื่มซึ่งดื่มก่อนมื้ออาหาร
 - ไม่ทราบคำตอบ
- 65 yoga: She has started yoga.
- งานฝีมือทำโดยการดักเส้นใย
 - การออกกำลังกายชนิดหนึ่ง เพื่อพัฒนาร่างกายและจิตใจ
 - เกมส์การเล่นโดยเคาะลูกขงไถ่ระหว่างผู้เล่นสองคน
 - การเดินทางประเภทหนึ่ง ที่มาจากประเทศทางตะวันออก
 - ไม่ทราบคำตอบ
- 66 hutch: Please clean the hutch.
- แท่นโลหะซึ่งใช้กันสิ่งสกปรกลงไปในท่อ
 - พื้นที่ท้ายรถยนต์สำหรับวางกระเป๋า
 - ชั้นส่วนโลหะ ตรงส่วนกลางของล้อจักรยาน
 - กรงสำหรับสัตว์ขนาดเล็ก
 - ไม่ทราบคำตอบ
- 67 counterclaim: They made a counterclaim.
- ข้อเรียกร้องของคู่ความฝ่ายหนึ่งให้สอดคล้องกับข้อเรียกร้องของอีกฝ่ายหนึ่ง
 - การขอคืนสินค้าซึ่งมีค่าหนี
 - ข้อตกลงระหว่าง 2 บริษัทในการแลกเปลี่ยนงาน
 - ศาลอุทธรณ์
 - ไม่ทราบคำตอบ
- 68 emir: We saw the emir.
- นักที่มีขนหางโค้งยาว
 - ผู้หญิงผู้ดูแลเด็กเล็กในประเทศทางตะวันออก
 - ผู้ครองนครในประเทศตะวันออกกลาง
 - บ้านที่สร้างจากก้อนน้ำแข็ง
 - ไม่ทราบคำตอบ
- 69 puma: They saw a puma.
- บ้านขนาดเล็ก สร้างจากอิฐซึ่งทำจากโคลน
 - ต้นไม้จากประเทศเขตร้อนและแล้ง
 - ลมที่มีพลังสูง ซึ่งพัดทุกสิ่งอย่างที่อยู่บนเส้นทางที่มันผ่าน
 - แมวป่าขนาดใหญ่
 - ไม่ทราบคำตอบ
- 70 hessian: She bought some hessian.
- ปลาซึ่งมีน้ำมันมาก ที่ตัวค่อนข้างชมพู
 - วัตถุที่สร้างความสุขใจ
 - ผ้าเนื้อหยาบ
 - รากพืชชราชาติ ใช้ปรุงแต่งรสชาติอาหาร
 - ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 71 deficit: The company had a large **deficit**. 72 cube: I need one more **cube**.
- a. ใช้จ่ายมากกว่ารายรับอย่างมาก
b. ราคาตกลงอย่างมาก
c. มีแผนการใช้จ่ายที่ต้องใช้เงินจำนวนมาก
d. มีเงินจำนวนมากในธนาคาร
e. ไม่ทราบคำตอบ
- a. สิ่งของมีคมใช้เชื่อมสิ่งของเข้าด้วยกัน
b. ก้อนของแข็งรูปสี่เหลี่ยม
c. ด้วยลักษณะสูง ไม่มีจานรอง
d. กระดาษแข็งพับครึ่ง
e. ไม่ทราบคำตอบ
- 73 weep: He **wept**. 74 miniature: It is a **miniature**.
- a. ขบหลักสูตร
b. ร้องไห้
c. ตาย
d. กังวล
e. ไม่ทราบคำตอบ
- a. สิ่งที่มีขนาดเล็กมากเมื่อเทียบกับของของ
อย่างเดียวกับชิ้นอื่นๆ
b. อุปกรณ์สำหรับเด็กของขนาดเล็ก
c. สิ่งมีชีวิตขนาดเล็กมากๆ
d. เส้นขนาดเล็กที่เชื่อมต่อตัวอักษรที่เขียนเป็นลายมือ
e. ไม่ทราบคำตอบ
- 75 nun: We saw a **nun**. 76 peel: Shall I **peel** it?
- a. สิ่งมีชีวิตมีลักษณะพอมะพร้าว ที่อาศัยอยู่ในดิน
b. อุบัติเหตุร้ายแรง
c. ศัตรูซึ่งปฏิบัติตามหลักศาสนาอย่างเคร่งครัด
d. แสงสว่างประหลาดที่เกิดขึ้นบนท้องฟ้า
e. ไม่ทราบคำตอบ
- a. แะในน้ำไว้เป็นเวลานาน
b. ปอกเปลือกออก
c. ทำให้เป็นสีขาว
d. ตัดเป็นชิ้นบางๆ
e. ไม่ทราบคำตอบ
- 77 huant: The house is **haunted**. 78 fracture: They found a **fracture**.
- a. เต็มไปด้วยเครื่องตกแต่ง
b. มีคนเช่าแล้ว
c. ว่าง
d. เต็มไปด้วยผี
e. ไม่ทราบคำตอบ
- a. การแตก, รอยแตก
b. ชิ้นขนาดเล็ก
c. เสื้อคลุมสั้นๆ
d. เพชรพลอยหายาก
e. ไม่ทราบคำตอบ
- 79 compost: We need some **compost**. 80 bacterium: They didn't find a single **bacterium**.
- a. การสนับสนุนช่วยเหลืออย่างเต็มที่
b. ช่วยให้ความรู้ที่ลึกซึ้ง
c. วัสดุแข็งทำขึ้นจากหินและดินทรายผสมกัน
d. สิ่งที่เกิดจากการเน่าเปื่อยของพืช
e. ไม่ทราบคำตอบ
- a. สิ่งมีชีวิตขนาดเล็กซึ่งทำให้เกิดโรค
b. พืชซึ่งมีดอกสีแดงหรือสีส้ม
c. สัตว์ซึ่งบรรทุกน้ำไว้บนหลัง
d. สิ่งที่ถูกขโมยและนำไปขายต่อให้กับร้านค้า
e. ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 81 erratic: He was **erratic**.
- ไม่มีข้อบกพร่อง
 - แย่มาก
 - สุขภาพมาก
 - ไม่มั่นคง เปลี่ยนแปลงง่าย
 - ไม่ทราบคำตอบ
- 82 marrow: This is the **marrow**.
- สัญลักษณ์นำโชคของทีม
 - ส่วนนุ่มๆตรงกลางของกระดูก
 - เครื่อง/แผงควบคุมเครื่องบิน
 - การขึ้นเงินเดือน
 - ไม่ทราบคำตอบ
- 83 palette: He lost his **palette**.
- ตะกร้าสำหรับใส่ปลา
 - ความอยากอาหาร
 - ผู้ที่เป็นเพื่อนที่เป็นผู้หญิงสาว
 - งานผสมสีของศิลปิน
 - ไม่ทราบคำตอบ
- 84 locust: There were hundreds of **locusts**.
- แมลงมีปีก
 - ผู้ช่วยซึ่งไม่ได้รับคำตอบแทน
 - ผู้ที่ไม่กินเนื้อสัตว์
 - ดอกไม้ป่า ที่มีสีส้มสวยงามสดใส
 - ไม่ทราบคำตอบ
- 85 null: His influence was **null**.
- ได้ผลลัพธ์ที่ดี
 - ไม่มีประโยชน์
 - ไม่มีผลใดๆ
 - ยาวนาน, ชื่นยาว
 - ไม่ทราบคำตอบ
- 86 authentic: It is **authentic**.
- จริง
 - เสียงดังมาก
 - แก่, เก่า
 - เหมือนทะเลทราย
 - ไม่ทราบคำตอบ
- 87 kindergarten: This is a good **kindergarten**.
- กิจกรรมที่ทำให้คุณเต็มความกังวล
 - สถานที่เรียนรู้สำหรับเด็กที่อยู่ไม่ถึงเกณฑ์เข้าโรงเรียน
 - กระเป๋าทรงสูงแข็งแรง ใช้สะพายหลัง
 - สถานที่ที่คุณยืมหนังสือได้
 - ไม่ทราบคำตอบ
- 88 cabaret: We saw the **cabaret**.
- ภาพวาดที่ใหญ่ปิดผนังทั้งหมด
 - การแสดงการร้องเพลงและการเต้น
 - แมลงคานขนาดเล็ก
 - คนที่มีลักษณะครึ่งปลา ครึ่งหญิงสาว
 - ไม่ทราบคำตอบ
- 89 eclipse: There was an **eclipse**.
- ลมแรง
 - เสียงดังที่เกิดจากการที่บางสิ่งกระทบน้ำ
 - การฆ่าผู้คนจำนวนมาก
 - ดวงอาทิตย์ถูกดาวเคราะห์บัง
 - ไม่ทราบคำตอบ
- 90 mumble: He started to **mumble**.
- คิดอย่างใคร่ครวญ
 - สั้นอย่างควบคุมไม่อยู่
 - อยู่ด้านหลังผู้อื่นอย่างมาก
 - พูดไม่ชัดถ้อยชัดคำ
 - ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 91 haze: We looked through the **haze**.
- หน้าต่างรูปทรงกลม ขนาดเล็กบนเรือ
 - อากาศขมุกขมัว
 - แผ่นไม้หรือแผ่นพลาสติกยาว ใช้บังหน้าต่าง
 - บัญชีรายชื่อ
 - ไม่ทราบคำตอบ
- 92 refectory: We met in the **refectory**.
- ห้องรับประทานอาหาร
 - สำนักงานสำหรับกรลงนามในเอกสารทางกฎหมาย
 - ห้องนอนรวม
 - เรือนกระจกสำหรับปลูกพืช
 - ไม่ทราบคำตอบ
- 93 spleen: His **spleen** was damaged.
- กระดูกเข้า
 - อวัยวะที่อยู่ใกล้กระเพาะอาหาร
 - ท่อระบายน้ำเสียออกจากตัวบ้าน
 - นิ้วถือคิ้วอง
 - ไม่ทราบคำตอบ
- 94 caffeine: This contains a lot of **caffeine**.
- สารซึ่งทำให้มีอาการง่วงนอน
 - เส้นใยจากใบพืชที่แข็ง
 - ความคิดซึ่งไม่ถูกต้อง
 - สารซึ่งทำให้มีอาการตื่นตัวและกระตุ้นกระเจง
 - ไม่ทราบคำตอบ
- 95 soliloquy: That was an excellent **soliloquy**!
- เพลงสำหรับร้องโดย 6 คน
 - คำคมสั้นๆ ที่มีความหมายลึกซึ้ง
 - ความบันเทิง ที่ใช้แสงสีและเสียงดนตรีประกอบ
 - การพูดของนักแสดงที่แสดงคนเดียวฉากในโรงละคร
 - ไม่ทราบคำตอบ
- 96 impale: He nearly got **impaled**.
- ถูกคานินคตีด้วยข้อหารุนแรง
 - ติดคุก
 - แพงด้วยของมีคม
 - มีส่วนร่วมในความขัดแย้ง
 - ไม่ทราบคำตอบ
- 97 reptile: She looked at the **reptile**.
- หนังสือเขียนมือ ซึ่งมีอายุเก่าแก่
 - สัตว์เลื้อยคลาน มีผิวหนังแข็งหุ้มร่างกาย
 - ผู้ชายอินทรี ที่เคาะประตูตามบ้าน
 - รูปภาพ ที่ทำขึ้นโดยการปะติดปะต่อชิ้นส่วนขนาดเล็กๆซึ่งมีสีต่างๆเข้าด้วยกัน
 - ไม่ทราบคำตอบ
- 98 coven: She is the leader of a **coven**.
- นักร้องกลุ่มเล็กๆ
 - ธุรกิจซึ่งคนงานหรือผู้ปฏิบัติเป็นเจ้าของกิจการ
 - สมาคมลับ
 - กลุ่มผู้หญิงผู้ปฏิบัติตามหลักศาสนาอย่างเคร่งครัด
 - ไม่ทราบคำตอบ
- 99 alum: This contains **alum**.
- สิ่งมีพิษจากพืชที่พบได้ทั่วไปชนิดหนึ่ง
 - วัสดุนุ่ม ทำขึ้นจากเส้นใยสังเคราะห์
 - ผงยาเส้นที่เมื่อก่อนใช้สำหรับอุดเข้าไปในจมูก
 - สสารประกอบทางเคมีในกลุ่มออลูมิเนียม
 - ไม่ทราบคำตอบ
- 100 trill: He practised the **trill**.
- ส่วนเสริมโนดนตรี
 - ชนิดของเครื่องดนตรีประเภทสาย
 - วิธีการขึงลูกบอล
 - การเดิน โดยใช้การหมุนคว้ออย่างรวดเร็วนปลายนิ้วเท้า
 - ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 101 ubiquitous: Many weeds are **ubiquitous**. 102 plankton: We saw a lot of **plankton**.
- a. กำจัดยาก
b. มีรากยาวและแข็งแรง
c. พบได้ในประเทศส่วนใหญ่
d. คายในช่วงฤดูหนาว
e. ไม่ทราบคำตอบ
- a. วัชพืชมีพิษซึ่งขยายพันธุ์อย่างรวดเร็ว
b. พืชหรือสัตว์น้ำขนาดเล็กมาก
c. ต้นไม้ซึ่งให้เนื้อไม้แข็ง
d. ดินเหนียวสีเทาซึ่งเป็นสาเหตุของดินถล่ม
e. ไม่ทราบคำตอบ
- 103 talon: Just look at those **talons**! 104 skylark: We watched a **skylark**.
- a. จุดสูงของภูเขา
b. กรงเล็บที่แหลมคมของนกนักล่า
c. เสื้อคลุมทำจากโลหะหนักใช้เพื่อป้องกันอาวุธ
d. บุคคลซึ่งทำอะไรก็ทำโดยไม่รู้ตัว
e. ไม่ทราบคำตอบ
- a. การแสดงการบินผาดโผนของเครื่องบิน
b. วัตถุที่มีมนุษย์สร้างขึ้น ซึ่งเคลื่อนที่รอบโลก
c. ผู้เล่นกลเพื่อสร้างความสนุกสนาน
d. นกขนาดเล็กซึ่งบินสูงขณะร้องเพลง
e. ไม่ทราบคำตอบ
- 105 rouble: He had a lot of **roubles**. 106 beagle: He owns two **beagles**.
- a. หินสีแดง ที่มีค่ามาก
b. ญาติห่างๆ
c. เงินตราของประเทศรัสเซีย
d. ความรู้สึกผิดชอบหรือความยากลำบากอื่นๆที่เกิดขึ้นในใจ
e. ไม่ทราบคำตอบ
- a. รถยนต์เคลื่อนที่เร็ว มีหลังคาพับได้
b. เป็นขนาดใหญ่ซึ่งใช้ยิงคนหลายคนได้อย่างรวดเร็ว
c. หมาขนาดเล็ก มีหูยาว
d. บ้านซึ่งสร้างในสถานที่ที่ทึบร้อน
e. ไม่ทราบคำตอบ
- 107 jovial: He was very **jovial**. 108 atoll: The **atoll** was beautiful.
- a. มีสถานะต่ำในสังคม
b. ชอบวิจารณ์หรือจับผิดผู้อื่น
c. เต็มไปด้วยความสุขสนุกสนาน
d. เป็นมิตร
e. ไม่ทราบคำตอบ
- a. เกาะที่เกิดจากการก่อตัวของปะการังมีรูปร่างเหมือนวงแหวนโดยมีทะเลน้ำเค็มอยู่ตรงกลาง
b. งานศิลปะที่เกิดจากถักทอภาพด้วยเส้นด้าย
c. มงกุฎขนาดเล็กประดับด้วยอัญมณีมีค่า ซึ่งสตรีสวมใส่ในเวลากลางคืน
d. สถานที่ที่แม่น้ำไหลผ่านช่วงที่แคบๆ ซึ่งเต็มไปด้วยก้อนหินขนาดใหญ่
e. ไม่ทราบคำตอบ
- 109 communiqué: I saw their **communiqué**. 110 didactic: The story is very **didactic**.
- a. รายงานสำคัญเกี่ยวกับองค์กร
b. ส่วนซึ่งสมาชิกหลายคนในชุมชนเป็นเจ้าของ
c. สิ่งพิมพ์ที่ใช้สำหรับการโฆษณา
d. การประกาศของทางการ
e. ไม่ทราบคำตอบ
- a. มีความพยายามอย่างมากที่จะให้ข้อคิด
b. ยากที่จะเชื่อ
c. เกี่ยวข้องกับการกระทำที่น่าตื่นเต้น
d. เขียนในลักษณะที่ทำให้คนอ่านไม่แน่ใจว่าหมายความว่าอย่างไร
e. ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 111 canonical: These are **canonical** examples. 112 gauche: He was **gauche**.
- a. ตัวอย่างที่แหกกฎระเบียบ
b. ตัวอย่างที่ได้จากหนังสือทางศาสนาหรือคัมภีร์
c. ตัวอย่างซึ่งเป็นที่ยอมรับกันอย่างกว้างขวาง
d. ตัวอย่างที่ค้นพบเมื่อเร็วๆ นี้
e. ไม่ทราบคำตอบ
- a. หูตมก
b. ซีดหุ่่นได้
c. รุ่มง่าม
d. คัดสินใจแน่วแน่
e. ไม่ทราบคำตอบ
- 113 atop: He was **atop** the hill. 114 thesaurus: She used a **thesaurus**.
- a. ด้านล่างของ
b. ด้านบนของ
c. ด้านข้างของ
d. ด้านที่อยู่ไกลของ
e. ไม่ทราบคำตอบ
- a. พจนานุกรมประเภทหนึ่ง
b. สารประกอบทางสารเคมี
c. วิธีการพูดแบบพิเศษ
d. การจดเข้าไปได้ผิวหนัง
e. ไม่ทราบคำตอบ
- 115 marsupial: It is a **marsupial**. 116 erythrocyte: It is an **erythrocyte**.
- a. สัตว์ซึ่งมีก้นเท้า
b. พืชซึ่งมีอายุยืน
c. พืชซึ่งมีดอกหันไปทางพระอาทิตย์
d. สัตว์มีกระเป๋าหน้าท้องสำหรับลูกอ่อน
e. ไม่ทราบคำตอบ
- a. ขาเพื่อลดความปวด
b. ส่วนที่เป็นสีแดงของเลือด
c. โลหะสีขาวออกแดง
d. สมาชิกของครอบครัวปลาหว
e. ไม่ทราบคำตอบ
- 117 augur: It **augured** well. 118 cordillera: They were stopped by the **cordillera**.
- a. สัญญาว่าจะเกิดสิ่งดีในอนาคต
b. เป็นไปคนความคาดหว้ง
c. มีทัศนซึ่งเข้ากับตั้งอื่น
d. ทำให้เกิดเสียงใสและไพเราะ
e. ไม่ทราบคำตอบ
- a. กฎหมายพิเศษ
b. เรือคืดอาวุธ
c. แนวเทือกเขา
d. โอรสคนโตของกษัตริย์
e. ไม่ทราบคำตอบ
- 119 bawdy: It was very **bawdy**. 120 limpid: He looked into her **limpid** eyes.
- a. คาคการณ์ไม่ใ้, ไม่สามารถคาคการณ์ได้
b. นำผลิตเพลิน
c. เร่งรีบ
d. หยาบคาย
e. ไม่ทราบคำตอบ
- a. ซัดเงินหรือใส
b. น้ำตาเร่ง
c. ี่น้ำตาลเข้ม
d. สวยงาม
e. ไม่ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 121 olive: We bought **olives**.
- ผลไม้ซึ่งมีน้ำมัน
 - ดอกไม้สีชมพูหรือแดง มีกลิ่นหอม
 - ชุดว่ายน้ำผู้ชาย
 - อุปกรณ์สำหรับชุดตอนวิชาชีพ
 - ไม้ทราบคำตอบ
- 122 bloc: They have joined this **bloc**.
- วงดนตรี
 - กลุ่มหัวขโมย
 - ทหารกลุ่มเล็กๆที่ถูกส่งเพื่อเป็นทัพหน้า
 - กลุ่มประเทศซึ่งมีเป้าหมายเดียวกัน
 - ไม้ทราบคำตอบ
- 123 quilt: They made a **quilt**.
- ข้อความซึ่งระบุว่าผู้ใดควรได้รับทรัพย์สินเมื่อเจ้าของสมบัติเสียชีวิต
 - ข้อตกลงที่แน่นอน
 - ผ้าคลุมเตียงหนาและอบอุ่น
 - ปากกาทำจากขนนก
 - ไม้ทราบคำตอบ
- 124 demography: This book is about **demography**.
- การศึกษาเกี่ยวกับรูปแบบการใช้พื้นที่
 - การศึกษาการใช้ภาพในการแสดงข้อเท็จจริงเกี่ยวกับตัวเลข
 - การศึกษาเกี่ยวกับการเคลื่อนที่ของน้ำ
 - การศึกษาเกี่ยวกับประชากร
 - ไม้ทราบคำตอบ
- 125 stealth: They did it by **stealth**.
- การใช้จ่ายเงินจำนวนมาก
 - ทำร้ายผู้อื่นอย่างมากจนผู้นั้นต้องยอมจำนน
 - เคลื่อนไหวอย่างลับๆ ด้วยความระมัดระวังและความเงียบอย่างมาก
 - ไม่สังเกตว่ามีปัญหา, ไม่รู้ว่ามีปัญหา
 - ไม้ทราบคำตอบ
- 126 gimmick: That's a good **gimmick**.
- สิ่งที่ใช้ขึ้นเพื่อทำงานในที่ที่สูงจากพื้นดิน
 - สิ่งของขนาดเล็ก ที่มีกระเป๋าสตางค์ใส่เงิน
 - การกระทำหรือสิ่งที่ใช้เพื่อเรียกความสนใจ
 - แผนหรือกลยุทธ์ที่ชาญฉลาด
 - ไม้ทราบคำตอบ
- 127 shudder: The boy **shuddered**.
- พูดด้วยเสียงเบาๆ
 - เกือบจะหกล้ม
 - สั่น
 - เรียกเสียงดัง
 - ไม้ทราบคำตอบ
- 128 azalea: This **azalea** is very pretty.
- ต้นไม้ขนาดเล็ก มีดอกเป็นช่อ
 - วัตถุน้ำหนักเบาทำจากเส้นใยธรรมชาติ
 - ผ้าสีนยาว ที่หญิงชาวอินเดียสวมใส่
 - หอยซึ่งมีรูปร่างคล้ายพัด
 - ไม้ทราบคำตอบ
- 129 bristle: The **bristles** are too hard.
- คำถาม
 - ขนที่มีลักษณะแข็งและสั้น
 - เตียงแบบพับได้
 - พื้นรองเท้า
 - ไม้ทราบคำตอบ
- 130 yoghurt: This **yoghurt** is disgusting.
- โคลนสีเทาซึ่งพบได้ที่กินแม่น้ำ
 - แผลเปิดที่ดูไม่ดี
 - นมซึ่งขึ้นมีรสเปรี้ยว ส่วนมากมีน้ำตาลและการปรุงแต่งรสชาติ
 - ผลไม้ซึ่งมีขนาดใหญ่ที่มีเนื้อนุ่ม
 - ไม้ทราบคำตอบ

Instruction: Choose the letter a-e with the closest meaning to the key word in the question.

- 131 devious: Your plans are **devious**. 132 thesis: She has completed her **thesis**.
- a. มีเล่ห์เหลี่ยม
b. ซึ่งพัฒนามาอย่างดี
c. ขาดการไตร่ตรอง
d. ราคาแพงเกินความจำเป็น
e. ไม่ทราบคำตอบ
- a. รายงานการศึกษานานาชาติเพื่อใช้ประกอบการรับปริญญา
b. ค่าแถลงของผู้พิพากษาเมื่อจบการพิจารณาคดี
c. ปีแรกของการทำงานในฐานะอาจารย์
d. การขยายเวลาของการรักษา
e. ไม่ทราบคำตอบ
- 133 premier: The **premier** spoke for an hour. 134 strangle: He **strangled** her.
- a. คนที่ทำงานในศาล
b. อาจารย์ในมหาวิทยาลัย
c. นักหญิงกษัตริย์
d. ผู้นำรัฐบาล
e. ไม่ทราบคำตอบ
- a. ฆ่าเธอโดยการรัดคอ
b. ให้ทุกสิ่งทุกอย่างที่เธอต้องการ
c. เอาตัวเธอไปโดยการบังคับ
d. ซ้ำนชมเธออย่างมาก
e. ไม่ทราบคำตอบ
- 135 butler: They have a **butler**. 136 cavalier: He treated her in a **cavalier** manner.
- a. คนใช้ผู้ชาย
b. เครื่องตัดต้นไม้
c. ทรูซอนส่วนตัว
d. ห้องมีดและเข็น ที่อยู่ชั้นใต้ดินของบ้าน
e. ไม่ทราบคำตอบ
- a. ไม่เอาใจใส่ หรือ ไม่ดูแล
b. อย่างสุภาพ
c. อย่างขุ่มขาม
d. อย่างที่พี่ชายคนหนึ่งควรจะทำ
e. ไม่ทราบคำตอบ
- 137 accessory: They gave us some **accessories**. 138 malign: His **malign** influence is still felt.
- a. เอกสารอนุญาตให้เข้าประเทศ
b. คำสั่งทางราชการ
c. ความคิดเห็นสำหรับให้เลือกใช้
d. ชั้นที่ได้เกินมา
e. ไม่ทราบคำตอบ
- a. ชั่วร้าย
b. ดี
c. คำคัญมาก
d. เป็นความลับ
e. ไม่ทราบคำตอบ
- 139 threshold: They raised the **threshold**. 140 veer: The car **veered**.
- a. ธรง
b. จุดหรือเส้นที่เกิดการเปลี่ยน
c. หลังคาในตึกอาคาร
d. ค่าธรรมเนียมในการขิมเงิน
e. ไม่ทราบคำตอบ
- a. เปลี่ยนทิศทางอย่างฉับพลัน
b. เคลื่อนที่อย่างไม่มั่นคง
c. ทำเสียงดังมาก
d. ไถลออกด้านข้าง โดยที่ล้อไม่ได้หมุนตาม
e. ไม่ทราบคำตอบ

APPENDIX B

Questionnaire

First name:..... Last name:.....

Student Id:.....

1. Do you think that acquiring more vocabulary could improve your learning performance?

Why?

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2. How often do you spend your time exclusively on learning new vocabulary?

.....
.....

3. What do you do or will you do to acquiring new vocabulary?

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.....
.....

Thank you for your participation

BIOGRAPHY

Name	Ms. Sujika Thangaroonsin
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