What Should Be Considered in Teaching Vocabulary in the Thai EFL Classroom
สิ่งที่ควรคำนึงถึงในการสอนคำศัพท์สำหรับผู้เรียนไทย ที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ

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    คำศัพท์จัดเป็นส่วนประกอบที่สำคัญสำหรับผู้เรียนภาษาอังกฤษ ถ้าหากว่าผู้เรียนมีความรู้คำศัพท์มากเพียงพอก็จะสามารถสื่อสารได้อย่างมีประสิทธิภาพ ปัจจุบันมีวรรณกรรมและงานวิจัยจำนวนมากที่อธิบายถึงการสอนคำศัพท์ แต่ในทางปฏิบัติแล้วพบว่ามีการนำผลจากวรรณกรรมเหล่านี้มาใช้จริงในชั้นเรียนน้อยมาก ดังนั้นเพื่อที่จะช่วยให้ครูผู้สอนคำศัพท์ได้ตระหนักถึงความสำคัญของวรรณกรรมเหล่านี้และนำมาใช้ให้เกิดประโยชน์ งานเขียนชิ้นนี้จึงมุ่งเน้นที่จะอธิบายถึงสิ่งที่ผู้สอนจำเป็นจะต้องคำนึงถึงในการสอนคำศัพท์ โดยยึดจากวรรณกรรมและงานวิจัยที่เกี่ยวข้องเป็นหลัก บทความนี้ได้แบ่งการนำเสนอออกเป็นสองประเด็นประเด็นแรกจะกล่าวถึงการทบทวนวรรณกรรมที่เกี่ยวข้องกับคำศัพท์ที่ควรนำมาประยุกต์ใช้ อันได้แก่ ประเภทของคำศัพท์ การเรียนรู้คำศัพท์ วิธีการคัดเลือกคำศัพท์ และวิธีการเรียนคำศัพท์ ในประเด็นท้ายของบทความจะมุ่งเน้น สิ่งที่ผู้สอนสามารถนำผลจากการทบทวนวรรณกรรมที่เกี่ยวข้องมาประยุกต์ใช้ในการสอนในห้องเรียนไทยจริง

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Abstract

Vocabulary is considered to be a very important sub-skill for English language learners. If they have greater vocabulary knowledge, they are more likely to be proficient in language communication. There are currently numerous research studies and related literature review conducted on vocabulary teaching English as a Foreign Language (EFL). However, it was found that there are only a few research studies applied in real classroom. To assist language instructors, this article aims to present what teachers should consider when teaching vocabulary in the English as a Foreign Language (EFL) classroom. To better understand this issue, this paper will be divided into two main parts. The first part provides a brief literature review related to vocabulary including the types of vocabulary, the principles of vocabulary learning, criteria for vocabulary selection, and a vocabulary learning approach. The second part will focus on how vocabulary instructors could apply the results of the literature review to teach vocabulary to Thai students in the classroom.

Keyword: vocabulary

Introduction

Vocabulary is regarded as a significant component for all communication and is encountered by language learners on a daily basis. Success in communication depends on how well students acquire and retain vocabulary (Nation, 2001). Read (2000) said that vocabulary can be seen as a priority area in language teaching. Current second language (L2) vocabulary studies consistently show that the ability to use context in inferring the meaning of unknown words is highly correlated with reading proficiency (Carrell, 1988; Koda, 1989; Laufer, 1992). Researchers

have also considered the number of words a learner needs in order to successfully communicate by speaking or writing. The general consensus is that approximately 2,000 word families provide the lexical resources needed for learners to speak conversationally at the L2 level (Nation & Meara, 2000; Schmitt, 2000).

In addition, several research studies have demonstrated the relationship between vocabulary knowledge and language proficiency (Barrow, Nakanishi, & Ishino, 1999). From these findings it can be concluded that language learners need to learn vocabulary, in other words vocabulary is very vital. Therefore, this should be the first emphasize for course designers and instructors.

In general Thai EFL classroom, English instructors use their own methods in teaching vocabulary usually based on a commercial textbook, and their teaching experience. Traditionally, they usually begin teaching vocabulary with words presentation on the board, give the meanings of words both in Thai and in English, and provide various vocabulary exercises at the end. As a researcher and instructor, I wonder how many instructors will know and consider the vocabulary teaching in terms of how many appropriate words students should know, how much time students remember the meaning of words, how many repetitions of words students can recall, which the goals of vocabulary learning are, what the vocabulary learning approaches should be considered and how instructor can select vocabulary to teach. These important questions can be explored from the previous research studies and literature review conducted on vocabulary teaching. In order to achieve the ultimate goal of improving vocabulary for Thai learners, it is necessary for instructors to reconsider the significant points before teaching vocabulary.

The main discussion of this paper will focus on some considerations for teaching vocabulary. This paper will attempt to answer the following questions:

- What are the types of vocabulary?
- What are the principles of vocabulary teaching in terms of the objectives of vocabulary teaching, the number of new words that EFL students should learn in a lesson, and the time taken by students to memorize new words?
- What are the criteria in vocabulary selection?
- How can vocabulary instructors apply the literature review and previous research studies to teach Thai students in the classroom?

The paper is organized into two main parts. In the first part, I will provide a brief literature review on the types of vocabulary, the principles of vocabulary learning, criteria for vocabulary selection, and the vocabulary learning approach. The second part of the paper will focus on how vocabulary instructors could apply the results of the reviewed literature to teach Thai students in the classroom.

Types of Vocabulary

The English language has more than 600,000 words which can be put into diverse groups based on specific purposes. For example, some words may be found in newspapers although notion everyday conversation, while some words are more likely to be used frequently in service and tourist industry texts than in engineering text. Therefore, English words can be categorized into many groups and based on word frequency (Nation, 2001).

High frequency words

High frequency words are the most important elements in language use. According to the British National Corpus (BNC), there are 3,000 families of words which mostly deal with spoken and written words in everyday life such as content words (*ask, answer, big, black, make, reduce*) and function words (prepositions, conjunctions, auxiliaries). Nation (2001) described this type of words as including the words used in everyday life and the words mostly found in academic texts.

Academic words

Academic words are frequently used in many field-related academic texts. Accordingly, this type of words is not viewed as comprising technical words in each subject area. These words include words like *approach, analyze, cite, element, integrate, justify, and manipulate* which are derived from the Academic Word List (AWL) and the University Word List (UWL).

Technical words

Technical words have a clear connection with particular subjects such as the terms "accelerometer" and "alternator" which are used in engineering practice. In addition, some of this type of words may have technical meanings that are distinct from the word when used in everyday life. For example, the terms "range" and "frequency" are specifically used in the linguistics field and the engineering field; however they convey completely different meanings. Therefore, technical words provide in-depth knowledge to learners who would normally apply these terms in their subject-related classes.

Low frequency words

The majority of English words comprise low frequency words due to their lower exposure in everyday life, the classroom, and workplace, that is, proper nouns. These nouns are also rarely seen in the academic field.

I think that categorizing English words becomes highly significant when teaching vocabulary because instructors will be aware of the types and number of words that learners need to practice well in the classroom. More importantly, instructors should give first consideration to high frequency words. However, this would leave learners with some gaps when it comes to effectively performing everyday conversation, the classroom, or the workplace. The high frequency words can be categorized by using the corpus analysis that can assist the instructors to identify the high frequency words found in the contexts they teach students.

Another one point is to be regarded as they need to acquire some knowledge of academic words. Coxhead and Nation (2001) indicated that learners have few problems with technical words due to their capacity to learn these terms from the classroom or other learning activities in each field. Low frequency words are used approximately 2-3% in everyday life, the classroom, and the workplace. Consequently, when teaching vocabulary we should consider the type of words.

Principles of Vocabulary Learning Goals

Before teaching vocabulary, it is important the instructor understands the vocabulary learning goals, which facilitate them to set the goals of their teaching. Ooi and Lee (1996) mentioned that "the main focuses in teaching vocabulary should be to make the learner more discriminating of word form, word meaning, and word use". Aebersold and Field (1997) affirmed that the three main goals of vocabulary teaching

and learning are to help students to: (1) know the vocabulary in the text; (2) recognize vocabulary in order to make sense of the text; and (3) to consider what vocabulary students need to know to function in L2/FL (Foreign Language) in future. Baker and Westrup (2000) suggested that teachers need to teach students what the word means, its pronunciation, and how to use it. Krashen and Terrell (1983) asserted that one goal of vocabulary learning is to provide sufficient vocabulary to allow language use outside the classroom, and to place the students in a position to continue second language acquisition. Similarly, Catala (2003) proposed vocabulary learning goals as: (1) to find out the meaning of unknown words; (2) to retain them in long-term memory; (3) to recall them at will; and (4) to use them in an oral or written mode. To summarize, vocabulary learning goals can be taught or learnt effectively as proposed by different scholars who have focused on the help and guidance that students need in order to learn, retain, and use words.

Number of new words that EFL students should learn in a lesson

When teaching vocabulary, many instructors are unsure of how many new words students should learn in a lesson. Wallace (1984) recommended that the quantity of new words that students should learn in a lesson was approximately 5-7 new words, but that this depended on a number of factors which varied from class to class and learner to learner. He also found from his research on vocabulary growth that the number of new words that students learned per year ranged from as few as 1,000 to as many as 7,300. The minimum was equivalent to approximately 20 words a week. McCarthy (1996) also advised that students should learn approximately 5-15 new words each week. Graves (1986) and Baumann and Kameenui (1991) pointed out that students learn about 3,000

new words a year. Approximately eight words were learnt per lesson (Nation 1982; Doff 1983).

It can be said that there is no exact answer as to how many new words students should learn. Nevertheless, considering the measurements from several research studies, students should learn approximately 10-20 new words per lesson. In teaching vocabulary, I think that it is important for instructor to consider the number of new words that the students should learn at a time in order to achieve the learning goal.

Time taken by students to memorize new words

In order to retain the new words, one of the goals for students studying vocabulary is to actually remember the words they have just learned. There are two main kinds of memory, short-term and long-term memory (Garirns and Redman ,1990). It is said that short-term retention is limited and usually lasts up to 30 seconds. Long-term memory is the capacity to recall information weeks and years after receiving the first input. Kachroo (1962) found that words repeated seven times or more were the ones known by students. Similarly, Crothers and Suppes (1967) also suggested that six or seven repetitions are the minimum requirement for vocabulary learning. Nation (1982) reported similarly, revealing that students only need to see words about 7-8 times before they can remember them, and that students will remember words better if they have more chance to practice them. Tinkham (1993) pointed out that students require 5-7 repetitions to remember words. Saragi and Nation (1978) was of the opinions that students need more repetitions (e.g., 16 times) to recall words. Wallace (1982), on the other hand, stated that words can be remembered after hearing them once. They affirmed that students can remember words if they see or use words more than once and practice

them repeatedly. Later, in 1990, Nation identified that 5-16 exposures are needed in order to learn a word in its context.

　　　　Although results so far seem to vary considerably, it is evident that repetition is significant in order to remember words long term and the greater number of repetitions is likely to be a more effective strategy for remembering vocabulary. As mentioned by several researchers, I also agree that students normally have to encounter a word at least seven times (and possibly more) before they can remember it. Therefore, the instructor should select words for students to learn and ensure approximately 7-10 repetitions in order for them to be learnt as vocabulary.

　　　　An example is provided below for how to take into consideration the time taken by students to memorize new words.

Table 1 an example of how to take into consideration the time taken by students to memorize new words.

The time taken by students to memorize new words	Vocabulary practice
7-10 repetition to remember the words	1. Presentation of words (first repetition)
	2. Checking known or unknown words (second repetition)
	3. Matching exercise (third repetition)
	4. Multiple choice exercise (fourth repetition)
	5. Gap filling exercise (fifth repetition)
	6. Word association exercise (sixth repletion)
	7. Vocabulary test (seventh repetition)

　　　　This table is presented in order to give an example of designing vocabulary practice to ensure 7 repetitions. This vocabulary practice is administered to help learners to learn and rehearse the words. Firstly, this practice includes a10-word study which presents the target words to be

learned. In each lesson, the students learn a set of approximately10 new target words to enhance their memorization of the meaning. (Nation, 1982; Wallace, 1984). The ten study words are presented in the first stage of the vocabulary practice.

Next is what is called "doing vocabulary exercises" in which the learner becomes familiar with the meaning and usage of the words. Exercises include matching words, multiple choice, filling words into a gap, and word association. Matching the target word with a definition or synonym is chosen because this type of task requires learners to recognize the target words and at least one of their meanings. The multiple choice exercise, is chosen because it aims to help learners to understand the meanings of the target words in context. Gap-filling exercises, are chosen because they aim to help learners to understand the meanings of the target word in a particular context, and to recognize words that could be substituted in the gap. Word association, is also chosen as this activity is to involve more precise semantic and syntactic analysis, including the relationship between the target words and other words in context. Therefore, the students can see and rehearse the target words approximately seven times. That means the course designers consider the time taken by students to memorize new words to be effective in memorizing the target words better.

Vocabulary selection

When teaching vocabulary to students, there are many questions raised by English language instructors on how to select appropriate words to be taught. The selection of the vocabulary that should go into a course has long been recognized and since we cannot teach all of the words that a student should know in a foreign language, it is necessary to find some basis for selecting words (Worthington & Nation 1996). Worthington and

Nation (1996) pointed out that one of the problems of vocabulary teaching is how to select which words to teach.

The following criterion for vocabulary selection was suggested by Mackey (1976): (1) frequency, (2) range, (3) availability, (4) coverage, and (5) learning ability. Similarly, Garirns and Redman (1990) recommended that the selected lexical items should be useful. They offered the following criteria: (1) frequency the high frequency of an item is no guarantee of usefulness, but there is obviously a significant correlation between the two so it is worth examining some of the work on frequency word counts that has been carried out in recent decades, such as the General Service List of Words (West 1953); (2) cultural factors; and (3) need and level.

Carter and McCarthy (1988) also supported the same criteria for vocabulary selection as that proposed by West and others, for the early stages of acquisition which are that: (1) the frequency of each word in written English should be indicated; and (2) information should be provided about the relative prominence of the various meanings.

Garirns & Redman 1990; Nation & Coady 1988; Hunston, Francis, & Manning 1997 pointed out that all vocabulary selection is in one way or another based on the frequency of the meanings and uses of a word. Words have been listed and taught on the basis of frequency, that is, the number of times they appear in average reading materials. Vocabulary difficulty is estimated in various ways: the most usual is word frequency and/or familiarity and word length. That is, sentences are more readable if they contain words that occur at high frequency and which are shorter rather than longer.

Vocabulary learning approaches

Several learning strategies seem especially beneficial for learning new words. Nation (1990), Rubin and Thompson (1994), and Richek et al. (1996)

indicated that students learn vocabulary in two general ways: the direct vocabulary learning approach and the indirect vocabulary learning approach.

Laufer and Hulstijn (2001) mentioned 'direct' or 'explicit' vocabulary learning involves conscious learning processes in which language students learn vocabulary explicitly, both in context and in isolation, through direct instruction in either the meanings of individual words or word-learning strategies. In direct learning, students are systematically taught specific words and language structures (Richek et al. 1996). This approach for vocabulary learning is necessary for learning core vocabulary - basic and important vocabulary that is used and serves in most situations. This is particularly true for learning basic lexical and semantic knowledge, particularly for beginner-level or less successful language students (Nation 1990).

Read(2000) ; Laufer & Hulstijn (2001) stated 'Indirect' or 'implicit' vocabulary learning, on the other hand, involves learning the meaning of new words implicitly whereby language students hear or see the words used in many different contexts, for example, through daily opportunities, through conversations with others, and through reading extensively on their own . Indirect vocabulary learning is concerned with the unconscious processes of learning through reading or listening without language students necessarily being aware of the goals of learning: new words are learned incidentally while reading or are learned from listening to stories, films, television, or the radio (Nation 1982, 2001; Sternberg 1987; Anderson & Nagy 1991). Moreover, students absorb the meaning of the vocabulary, grammatical structures and concepts simply from being exposed to rich language (Richek et al. 1996). Learning vocabulary indirectly via guessing the meaning of words from their context is widely accepted as the most important of all ways of learning vocabulary (Nation, 2001).

Many researchers (e.g.,Sternberg, 1987; Nation, 1990; Hulstijn, 2000; Sökmen, 1997; Schmitt, 2000; Gu, 2002) maintained that guessing

the meaning of words presented in context is an effective strategy for vocabulary learning, and that most vocabulary can be learned from a word's context by means of strategies of inference.

Although there is evidence that indirect vocabulary learning is found to be beneficial, recent studies of L2 students have provided evidence that a combination of both direct and indirect vocabulary learning approaches is superior to using either the direct or indirect vocabulary learning approach on its own. Both types of vocabulary learning approaches improve students' language abilities, and thus should be emphasized in English learning so that language students know how to maximize the effectiveness of learning, using, coping with, and storing newly-learned vocabulary on their own.

Application of The Literature Review into The Vocabulary Class

The review of the literature related to vocabulary described in the previous section has shown that there are four main components: types of vocabulary, principles of vocabulary learning, criteria for vocabulary selection, and the vocabulary teaching approach that instructors should be considering when teaching vocabulary.

According to the literature review, it was found that learners should learn about 5-10 new words per study session. The number of repetitions should be approximately 7-10 times to help the learners remember the words. Wallace (1982) stated that students need 10 repetitions to remember words. Nation concluded that 5-16 exposures are needed in order to learn a word from its context. Tinkham (1993) stated that learners require 5-7 repetitions to remember words. From my English teaching experience, in practice we cannot estimate the exact number of words repetitions to be taught, it depends on the learners from class to class.Therefore, the instructor should consider a set of 10 repetitions of new target words to

learn: this is an appropriate number of words to enhance their memorization
of the meaning of words (Nation, 1982, 2000; Wallace, 1984).

In teaching vocabulary, high frequency words should be the first
priority. High frequency words are a focus of learners' attention (Nation &
Newton, 1997). To select a word list to be learned, it is suggested that the
corpus of most frequently appearing words should be promoted. Teachers
and course designers can use the high frequency of words derived from
the corpus and the BNC in designing their materials.

Vocabulary learning goals should focus on noticing words,
recognizing words, understanding the meaning of words, and using the
words correctly. Noticing is the first step of vocabulary learning. This
process must be emphasized in order to draw the attention of learners to
the target words by using their listening skill or scanning technique (Gass,
1985b; Nation, 2001). Retrieval is the second major process that may
lead to vocabulary retention (Baddeley, 1990). Learners may initially notice
a word and understand its meaning through a text during this task, or through
the teacher's explanation, or through dictionary use. They may then memorize
the word better if they retrieve that word during the task. Using the words
is the third process that leads to achieving vocabulary learning goals.

Understanding a word has been acquired from encountering it in
context while reading is still useful. It can be helpful to develop learners'
awareness of strategies such as intelligent guessing from the context.
When learning a new unit or a new lesson, students always come across
masses of new words. It would be easier for them to learn these words
in context and they would then know how these words fit in with the other
words in an actual sentence. What is thus meant is that the words should
be used in their proper forms, varying the parts of speech. Usually, a list of
new words is provided in random order, together with an English definition
of these words and some sentences each of which has a blank space.

Students have to work out what word is missing in the blank space, what part of speech is needed and make the sentences make sense. Therefore, words learnt in this way are not difficult to remember.

Example of using vocabulary learning pedagogy in class in the Thai context: research to practice

A number of Thai teachers and researchers have been constructing vocabulary teaching and learning materials with the main focus being to integrate the vocabulary component   into the English course thus enabling students to learn more words and improve their learning of vocabulary.

An example of successful materials used for constructing the Theme-Based Vocabulary Learning program (TVLP) for Mathayomsuksa 1 students is presented. With the intention of facilitating the Mathayomsuksa 1 students to improve their vocabulary learning, Maneeganont & Liangpanit (2012) designed a Theme-Based Vocabulary Learning Program (TVLP) for these students. Maneeganont's example of designing the TVLP lessons based on the vocabulary learning principles mentioned above is described below.

The TVLP consisted of five units in accordance with the themes in the curriculum. Each unit was completed in class time (60 minutes for one lesson). Each unit consisted of eight words that were presented in three activities and four vocabulary exercises. It is included totally seven repetitions for exposures words. The students were taught through web-based instruction for six weeks and spent about 60 minutes doing each exercise. Then, students were required to complete the questionnaire and the interview. The results of the questionnaire were used to study the effectiveness of the web-based instruction. The theories applied to each activity in the TVLP lessons are presented in Table 2 below.

Table 2 The vocabulary learning goals applied in the design of the TVLP

Name of activity	Purposes of the activity	Theory
1. Words study	The words study was aimed at facilitating the students' recognition of eight words in each unit.	The students study eight words per lesson which is an appropriate number of words in order to acquire new words and to retain the meaning of words (Gairns & Redman 2007).
2. Vocabulary test	The vocabulary test was designed to check the words which students knew and did not know.	The students have to evaluate their vocabulary first in order to know how their learning is progressing when they are learning vocabulary (Read 2000).
3. Noticing words	Noticing words was aimed at noticing eight words. The students must learn the unfamiliar words.	The students need to notice the word and to be aware of it as a useful language item. While listening or reading, the students notice or think that a word is new (Nation 2001).
4. Retrieval words	Retrieval words was aimed at letting the students guess the meaning of the words in the exercises through the TVLP.	The second major process that leads to a word being recognized is retrieval (Nation 2001). A word may be noticed and its meaning comprehended in the textual input to the task, through providing the explanation.
5. Exercises	Exercises were aimed at students practicing the vocabulary that they had learned. The TVLP exercises included matching words, word association, word collocation and gap filling.	The exercises can be used to focus on some aspect of vocabulary learning. The vocabulary exercises are to develop the students' command of target language vocabulary (Wallace 1985). An exercise is an explicit learning. Explicit learning is particularly essential for beginning students whose lack of vocabulary limits their reading ability (Coady 1997).
6. Vocabulary test	The vocabulary test was designed to measure the progress of the students' vocabulary learning after finishing each unit.	After learning, students have to know their vocabulary learning progress in order to gain feedback (Nation 2001).

Conclusion

Teaching vocabulary to students who are not native English speakers is a very challenging task for instructors because developing vocabulary knowledge is the first basic step to becoming proficient in using English for communication. This paper has provided a brief literature review related to vocabulary which includes the types of vocabulary, principles of vocabulary learning, criteria for vocabulary selection, and the vocabulary learning approach. It is important for the instructor to apply this literature review to their classroom pedagogy. Teaching vocabulary will be successful if the instructor knows show to incorporate the knowledge from the literature review and the research studies which were reviewed and applies it to make language instruction more beneficial for students. I believe that this paper will be helpful for instructors and course designers in fulfilling the enhancement of knowledge in their language teaching.

References

Aebersold, J. A., & Field, A. L. (1997). **From reader to reading teacher**. Cambridge: Cambridge University Press.

Anderson, R. C., & Nagy, W. E. (1991). Word meanings. In R. Barr, M. L. Kamil, P. B. Mosenthal, & P. D. Pearson (Eds.), **Handbook of reading research** (pp. 690-724). New York: Longman.

Baddeley,A.(1990).**Human Memory. London:Lawrence**. Erlbaum Associates.

Baker and Westrup.(2000). **The English Teacher Handbook**. International Publishing group. Newyork:London.

Barrow, J., Nakanishi, Y., and Ishino, J.(1999). Assessing Japanese college students' vocabulary knowledge with a self-checking familiarity survey. **System**, 27(2), 223-247.

Baumann & Kameenui.(1991).**Research on Vocabulary Instruction: Ode to Voltaire."** In J. Flood, J. J.D. Lapp, and J. Squire (Eds.), Handbook of research on teaching the English language arts.(pp.604-632). NewYork: Macmillan.

Carrell, P. (1988). "**Interactive Text Processing: Implications for ESL and Second Language Classrooms.**" In P. Carrell, J. Devine, & D. Eskey (Eds.), Interactive Approaches to Second Language Reading (pp. 239-259). Cambridge, UK: Cambridge UP.

Catala, R. M. J. (2003). Sex differences in L2 vocabulary learning strategies. **International Journal of Applied Linguistics**, 13 (1): 54-77.

Carter,R &M. McCarthy. (1988). **Vocabulary and Language Teaching**. Longman.

Coady, J., & Huckin, T. (Eds.). (1997). **Second language vocabulary acquisition**. Cambridge: Cambridge University Press.

Corson, D.(1995). **Using English Words**. Boston.:Macmillan.

Coxhead, A. &P. Nation. (2001). The specialized vocabulary of English for Academic Purposes, in J. Flowerdew &M. Peacock (eds.) **Research Perspectives on English for Academic Purposes.** Cambridge: Cambridge University Press

Crothers, E. & Suppes, P. (1967). **Experiments in Second-Language Learning**. New York: Academic Press.

Doff,A. & Jones, C. (1983). **Meaning into Words**. Cambridge :Cambridge University Press.

Garirns, R. & Redman, S.(1990). **Working with Words: A guide to Teaching and Learning Vocabulary**. Cambridge: Cambridge University Press.

Garirns, R., & Redman, S. (2007). **Working with words: a guide to teaching and learning vocabulary**. Cambridge: Cambridge University Press.

Gass, S. M., & Varonis E. M. (1985b). Task variation and nonnative/ nonnative negotiation of meaning. In S. M. Gass and C. G. Madden (Eds.), **Input in second language acquisition** (pp. 149-161). Rowley, MA: Newbury House.

Graves, M. F., & Penn, M. C. (1986).Costs and benefits of various methods of teaching vocabulary. **Journal of Reading,** 29,596-609.

Gu, P. Y. (2002). Gender, academic major, and vocabulary learning strategies of Chinese EFL learners. **RELC Journal**, 33 (1): 35-54.

Harmer, J. (1996). **The Principle of English Language Teaching**. London:Longman.

Hirsh, D. & P. Nation. (1992). What vocabulary size is needed to read un simplified texts for pleasure? **Reading in a Foreign Language**. 8, 2: 689-696.

Hunston & Francis & Manning. (1997). Grammar and Vocabulary: Showing the Connections". **ELT Journal**, 51(3): 8-216.

Hulstijn, J. H. (2000). The use of computer technology in experimental studies of second language acquisition: A survey of some techniques and some ongoing studies. **Language Learning and Technology, 3(2)**, 32-43. Retrieved May 14, 2001, from http://llt.msu.edu/vol3num2/hulstijn. Goteborg, Sweden: Acta Universitatis Gothburgensis.

Koda, K. (2005). **Insights into second language reading: A cross-linguistic approach**. Cambridge, UK: Cambridge University Press.

Laufer, V. (1992). Making foreign language texts comprehensible for beginners: an Experiment with an electronic glossary. **System,** 20 (1), 63-73.

Laufer, B. (1997). **What's in a word that makes it hard or easy: some intralexical factors that affect the learning of words**. In N. Schmitt & M. McCarthy (eds.), Vocabulary Description, Acquisition and Pedagogy. (pp. 140-155). Cambridge University Press

Laufer, B., & Hulstijn, J.H. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. **Applied Linguistics**, 22, 1-26attention.

Mackey, &William.(1976).**Bilinguism et contact des langues. Paris**: editions Klinsieck.

Maneeganont & Liangpanit.(2013). Theme-Based Vocabulary Learning Program (TVLP) for Mathayomsuksa 1 students. **Silapakorn Educational research Journal**, Silpakorn University. 5(1).

McCarthy, M. (1996). **English vocabulary use**. Cambridge: Cambridge university press.

Meara, Paul &Fitzpatrick, Tess. (2000) Lex30: an improved method of assessing productive vocabulary in an L2. **System** 28 , 9-30.

Nation, P. (2001a). Using small corpora to investigate learner needs. In M Ghadessy et al eds. **Small Corpus Studies and ELT**. Amsterdam: Benjamins. 31-45.

Nation, I.S.P. (1982).Beginning to learn foreign vocabulary: a review of the research. RELC Journal 13: 14-36Doff,A. & Jones, C. (1983). **Meaning into Words**. Cambridge :Cambridge University Press.

Nation, P. &J.Cody.(1988). **Vocabulary and reading**.In Carter,R.and M.McCarthy(eds):97-108.

Nation, I. (1990). **Teaching and learning vocabulary**. New York: Newbury House.

Nation, P. & Waring, R. (1997). Vocabulary size, text coverage and word lists. In N. Schmitt and M. McCarthy (Eds.), **Vocabulary: Description, Acquisition, and Pedagogy (**P. 6-19*). Cambridge: Cambridge University Press.

Nation, P., & Newton, J. (1997). **Teaching Vocabulary.** In J. Coady & T. Huckin (Eds.), Second Language Vocabulary Acquisition (pp. 238-254). Cam- bridge: Cambridge University Press.

Ooi &Lee.(1996). Vocabulary teaching: looking behind the words, **ELT Journal**. (50) 1. 43-56.

Richek, Margaret Ann. et al. (1996). **Read Problems: Assessment and Reading Strategies**. Massachusettes: A Simon & Schuster .

Read, J. (2000). **Assessing Vocabulary**. Cambridge: Cambridge University Press.

Rubin .J.&Thomson.I.(1994). **How to be a more successful language Learners**. Second edition.Boston.Maa:Heinle& Heille.

Saragi, I. & I.S.P., Nation , G. F. (1978). **Vocabulary Learning and Reading.** London : Longman .

Schmitt, N., & McCarthy, M. (1997). **Vocabulary:Description, Acquisition, and Pedagogy**. Cambridge: Cambridge University Press.

Schmitt, N. (2000). **Vocabulary in language teaching**, Cambridge: Cambridge.

Sökmen, A. J. (1997). Current trends in teaching second language vocabulary. In N. Schmitt and M. McCarthy (Eds.), **Vocabulary: Description, Acquisition and Pedagogy** (pp. 237-257). Cambridge: Cambridge University Press.

Sternberg, R.J. (1987). Most vocabulary is learned from context. In M.G. McKeown & M.E. Curtis (Eds.), **The nature of vocabulary acquisition** (pp. 89-105). Hillsdale, NJ: Erlbaum.

Tinkham. (1993). The effect of semantic clustering on the learning of
        second language vocabulary, **System**,21,371-380.

Wallace.(1982). **Teaching Vocabulary**. London: Heineman Education
        Books.

Wallace, M. (1984). **Teaching vocabulary**. Heinmann Educational Books
        Ltd.

West, M. (1953). **A General Service List of English Words**. London:
        Longman.

Worthington, D. & Nation, P. (1996). Using texts to sequence the introduction
        of new vocabulary in an EAP course. **RELC**. 3(4),67-72.