

Thai EFL Undergraduates' Vocabulary Learning Strategies: Perception and Practice

Suphawat Pookcharoen

This study investigates the use of vocabulary learning strategies among Thai EFL university students. The aims of the project were threefold: (a) to identify the strategies used most and least frequently by the students and those they perceive as most and least useful; (b) to examine how the students' frequency of strategy use relate to their perceptions of the strategy usefulness; and (c) to document the factors contributing to their failure to employ certain strategies they consider useful. A total of 400 students from different academic disciplines participated in the study in which a questionnaire was administered. Follow-up semi-structured interviews were carried out with 20 students who each subsequently submitted a two-week vocabulary-learning journal. The results indicate that the students' frequency of strategy use is strongly related to their perceptions about the usefulness of strategies. Findings of the study also shed some light on the complex factors that prevented them from utilizing the strategies they consider useful.

Key Words: vocabulary learning strategies, frequency of strategy use, perception of strategy usefulness

กลวิธีการเรียนรู้คำศัพท์ภาษาอังกฤษของนักศึกษาไทยระดับปริญญาตรี: ความคิดเห็นและการนำไปใช้ งานวิจัยชิ้นนี้มุ่งศึกษากลวิธีการเรียนรู้คำศัพท์ภาษาอังกฤษของนักศึกษาไทยระดับปริญญาตรี โดยมีจุดประสงค์เพื่อศึกษา 1) ความถี่ของการใช้กลวิธีการเรียนรู้คำศัพท์ภาษาอังกฤษของนักศึกษาและความคิดเห็นเกี่ยวกับประโยชน์ของกลวิธีในการเพิ่มพูนคำศัพท์ของตนเอง 2) ความสอดคล้องระหว่างความถี่ของการใช้กลวิธีการเรียนรู้คำศัพท์และความคิดเห็นของนักศึกษาเกี่ยวกับประโยชน์ของกลวิธีเหล่านั้น และ 3) ปัจจัยที่ส่งผลให้นักศึกษาไม่สามารถใช้กลวิธีการเรียนรู้คำศัพท์บางประเภทที่มองว่ามีประโยชน์ต่อการเรียนรู้ของตนเองได้ กลุ่มตัวอย่างในการศึกษาระดับปริญญาตรีนี้ ได้แก่ นักศึกษาจำนวน 400 คนจากหลากหลายสาขาวิชา ซึ่งได้ตอบแบบสอบถามเกี่ยวกับกลวิธีการเรียนรู้คำศัพท์ภาษาอังกฤษ หลังจากนั้น นักศึกษาที่ได้รับการสุ่มจำนวน 20 คน เข้าร่วมการสัมภาษณ์และเขียนบันทึกรายวันเกี่ยวกับพฤติกรรมการใช้กลวิธีการเรียนรู้คำศัพท์ของตนเองเป็นระยะเวลา 2 สัปดาห์ ผลการวิจัยพบว่าความถี่ของการใช้กลวิธีมีความสัมพันธ์อย่างยิ่งกับความคิดเห็นของนักศึกษาเกี่ยวกับประโยชน์ของกลวิธีเหล่านั้น ตลอดจนมีหลายปัจจัยที่ส่งผลให้นักศึกษาไม่สามารถใช้กลวิธีบางประเภทในการเรียนรู้คำศัพท์ของตนเองได้

คำสำคัญ: กลวิธีการเรียนรู้คำศัพท์ ความถี่ของการใช้กลวิธี ความคิดเห็นเกี่ยวกับประโยชน์ของกลวิธี

Introduction

For over two decades, much research in the area of second language learning has emphasized the significance of vocabulary acquisition. In particular, vocabulary has received increased attention as witnessed by the substantial amount of empirical research on vocabulary learning strategies in the 1990s (e.g. Haastrup, 1991; Mondria & Wit-de-Boer, 1991; Wang, Thomas, Inzana, & Primicerio, 1993). Vocabulary is the very foundation of language use, be it for a receptive or productive dimension. Nation (1990) defined receptive learning as being able to recognize a word and recall its meaning when it is encountered in reading or listening, whereas productive learning not only refers to recognition and recall but also includes the ability to use the word at the appropriate time through speaking or writing. He further indicated that most students' difficulties in both receptive and productive language use result from their inadequate vocabulary. Hence, promoting students' vocabulary knowledge has become an educational priority as it is inextricably associated with knowledge acquisition and, therefore, academic achievement.

Due to the complexity of word knowledge, students often struggle with the vocabulary-learning task, particularly in a second language-learning context in which they devote their time and energy to take responsibility for their own learning process. Researchers have claimed that the learner's use of language learning strategies correlates with various aspects of their success (Nyikos & Oxford, 1993). They also argue that most language learning strategies are used for vocabulary tasks, and they attempt to identify a link between the learner's success and their preference for strategy use.

A number of recent studies reported that many Thai EFL students' repertoire of vocabulary learning strategies was limited, which has, in turn, become one of the factors leading to their lacking the four skills necessary to communicate in the English language effectively (e.g., Pookcharoen, 2007; Siriwan, 2007). Nevertheless, very little is known about how Thai learners perceive the use of vocabulary learning strategies, and why they occasionally fail to use certain strategies they consider useful. In addition, with regard to methodology, most of the research studies have only been conducted quantitatively using questionnaires to investigate vocabulary learning strategies employed by students at different levels. This common practice is often deemed inadequate at yielding a profound understanding of the complex vocabulary acquisition process (Gu, 1994; Lawson & Hogben, 1996).

The present mixed methods study investigates the use of vocabulary learning strategies among Thai EFL university students. The aims of the project were threefold: (a) to identify the strategies used most and least frequently by the students and those they perceive as most and least useful; (b) to examine how the students' frequency of strategy use relate to their perceptions of the strategy usefulness; and (c) to document the factors contributing to their failure to employ certain strategies they consider useful.

Literature Review

Language Learning Strategies

The past few decades have witnessed an enormous growth in research activity in language learning strategies. Much of the research conducted in this area has been influenced by developments in cognitive psychology (Williams & Burden, 1997). Even though there is no consensus on a definition of the term *learning strategies*, an often-quoted one is “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations” (Oxford, 1990, p. 8). Adding to its functions, Oxford and Cohen (1992) further proposed a detailed definition of the term as:

...steps or actions taken by learners to improve the development of their language skills. These strategies have the power to increase attention essential for learning a language, to enhance rehearsals that allows linkages to be strongly forged, to improve the encoding and integration of language material, and to increase retrieval of information when needed for use (p. 1).

After thirty years of research and practice, Cohen (2007) devised a comprehensive survey to examine the use of terminology by an international group of strategy experts in the field of language learner strategies. To define what language learner strategies are, each of the seven major themes was taken into consideration: level of consciousness, degree of mental activity, extent of describable actions, degree of goal orientation, strategy size, amount of strategy clustering, and potential for leading to learning. Their collective self-reflection reveals that the construct is multidimensional and elusive. Even though disagreements in various respects exist, there is some consensus among these experts that language learner strategies are “conscious or semi-conscious thoughts and behaviors employed by learners, often with the intention of enhancing their knowledge about and performance in a second language (L2)” (Cohen, 2007, p. 57).

Definition and Classification of Vocabulary Learning Strategies

Vocabulary learning strategies constitute a subcategory of language learning strategies. Catalan (2003) defined vocabulary learning strategy as “knowledge about the mechanisms (processes,

strategies) used in order to learn vocabulary as well as steps or actions taken by students (a) to find out the meaning of unknown words, (b) to retain them in long-term memory, (c) to recall them at will, and (d) to use them in oral or written mode" (p. 56).

Ellis (1994) pointed out that some influencing factors in classifying language learning strategies include, but are not limited to, the particular subjects in the study, the research setting, and the specific interests of the researchers. In classifying vocabulary learning strategies, different researchers have their specific ways that are also reflected in different names used to refer to an individual strategy.

According to Oxford (1990), language learning strategies can be divided into two main classes: (1) direct strategies, which directly involve the target language such as reviewing and practicing; and (2) indirect strategies, which provide indirect support for language learning such as planning, co-operating and seeking opportunities. These two categories constitute six subcategories: memory (helps learners to store and retrieve information), cognitive (allows learners to make sense of and produce new language), compensation (enables learners to communicate despite lack of language knowledge), metacognitive (allows learners to regulate their learning through planning, monitoring, and evaluating), affective (enables learners to manage their emotions, attitudes, motivations, and values), and social strategies (helps learners to interact with other people to improve language learning). While memory, cognitive, and compensation strategies belong to the direct strategy group, the indirect strategy group consists of metacognitive, affective, and social strategies.

By the same token, Schmitt (1997) proposed a vocabulary learning strategy inventory with two main categories: strategies for the discovery of a new word's meaning, and strategies for consolidating a word, once it has been encountered. Similar to Oxford's classification system, Schmitt's taxonomy adopted four categories, namely social, memory, cognitive, and metacognitive. In order to cover cases where meanings of new words are discovered without other people's assistance, Schmitt introduced a fifth category, determination strategies. Thus, his final taxonomy of vocabulary learning strategies contains five categories with 58 individual strategies in total.

Research on L2 Vocabulary Learning Strategies

Most studies on vocabulary learning strategies were directed at individual strategies or a small number of them. Gu and Johnson (1996) conducted a large-scale study to examine the relationship

between vocabulary used by 850 Chinese learners of English and their vocabulary size and general language proficiency. They reported that visual repetition of new words did not contribute to positive learning outcome, as opposed to such deeper strategies as contextual guessing, dictionary use skills, note-taking, and metacognitive strategies. In the same vein, Schmitt (1997) surveyed a sample of 600 Japanese learners to explore the use of different vocabulary learning strategies and their perceptions of how helpful they were. He pointed out that learners used more dictionary and repetition strategies and considered them more useful than other strategies. Fewer imagery and semantic grouping strategies were used than other strategies and were considered the least useful. Based on the findings of studies related to learning and vocabulary learning, Schmitt further concluded: 1) many learners were aware of the importance of vocabulary learning; moreover, strategies for learning vocabulary were used more often than those for other linguistic aspects; 2) such mechanical strategies as memorization, note-taking, and repetition were used more often than deep strategies such as guessing, imagery, and the keyword technique; and 3) good learners used a wider range of vocabulary learning strategies than poor students and actively engaged in their own vocabulary learning process.

More recently, in Hong Kong, Fan (2003) extended the scope of previous studies by revealing the relationships among how frequently strategies were used by 1,067 students, how useful they were perceived to be, and how useful they actually were in enriching the vocabulary of learners. Lip (2009) conducted another study to determine 36 Cantonese-speaking learners' frequency of use of vocabulary learning strategies and their perception of the strategies' usefulness. Both studies reported that the frequency of strategy use among the students was positively and significantly correlated with their perceptions about the usefulness of strategy. In other words, the more often a learner used a strategy, the more useful he or she would find it for learning vocabulary.

While a large number of vocabulary studies have been conducted in the Thai context and have added to our understanding of what strategies student use (e.g. Kongthong, 2007; Pookcharoen, 2009; Siriwan, 2007), there is a dearth of research that seeks to document the relationship between students' frequency of strategy use and their perceived usefulness. Thus, the current study is primarily aimed to help identify the relationship among Thai EFL learners.

Research Questions

Aiming to investigate the frequency of use and perceived usefulness of vocabulary learning strategies employed by Thai EFL undergraduates in several dimensions, the current study addresses the following research questions:

1. What are the strategies used most and least frequently by the students, and what strategies do they perceive as most and least useful?
2. To what extent does the students' frequency of strategy use relate to their perceptions of the strategy usefulness?
3. What are the factors contributing to their failure to employ certain strategies they consider useful?

Methodology

Participants and Context

The participants of the study included 400 Thai EFL students who were enrolled in EG221 *Reading for Information* at Thammasat University in the second semester of the 2010 academic year. This reading course focused on three principal aspects: (1) studying strategies used in reading informative texts; (2) analyzing the content and the writer's presentation of information; and (3) practicing outlining and summarizing as well as giving opinions about the texts through oral discussion or writing. In addition, the course reinforced a wide range of vocabulary learning strategies, which played a pivotal role in enabling the students to read informative texts effectively.

The participants were diverse in terms of age, academic discipline, and English proficiency. Of all the students, 286 students (71%) were female and 114 students (29%) were male. Their ages ranged from 19-23 years old. These students were from various faculties including Liberal Arts (N = 179 or 45%), Commerce and Accountancy (N = 105 or 26%), Political Science (N = 64 or 16%), Science and Technology (N = 16 or 4%), Economics (N = 15 or 3.75%), Law (N = 8 or 2%), Journalism and Mass Communication (N = 7 or 1.75%), and Social Administration (N = 6 or 1.5%). These students had an average of 15 years of learning English as a foreign language in school.

Instrumentation

The questionnaire used for the current study was adapted from Schmitt's (1997) taxonomy of vocabulary learning strategies (see Appendix A). It included six strategies in each of the five categories: determination (DET), social (SOC), memory (MEM), cognitive (COG), and

metacognitive (MET). The frequency of use and perceived usefulness were measured by five-point Likert scales (1 = Never to 5 = Very Often; 1 = Not Useful to 5 = Very Useful). A section eliciting the respondents' background information, their grade for EL172 (the EG221 course prerequisite), and the factors preventing them from using certain strategies they considered useful was also included. For all participants to provide as accurate and complete information as possible, the questionnaire was translated into Thai and reviewed by an expert before the actual questionnaire administration.

This study was designed as mixed methods research which Johnson and Onwuegbuzie (2004) defined as “the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (p. 17). Even though this research paradigm has been implemented in a small proportion of vocabulary studies, this innovative approach helps acquire a better understanding of students' vocabulary learning process in different aspects.

In this study, a one-hour semi-structured interview was conducted with each of 20 randomly selected students who previously provided their email address in the survey questionnaire (see Appendix B). A two-week vocabulary learning journal was also used as data. The aim of this instrument is to allow the students to describe their actual use of vocabulary learning strategies as well as their difficulties and limitations for using some strategies when engaging in different tasks at school and at home without the presence of the researcher.

Data Collection and Analysis

Working collaboratively with the instructors who taught the course, the researcher asked for their permission and assistance to recruit students during a class session. A total of 400 students from a wide range of majors responded to the questionnaire on vocabulary learning strategies. Although not timed, the entire survey took approximately 15 minutes to complete. The mean scores and standard deviations of responses to 30 strategy items were calculated to identify which strategies were reported as being used most and least frequently and which were perceived as most and least useful. Pearson product-moment correlation coefficients were also calculated to ascertain whether there were any significant relationships between the frequency of use and perceived usefulness of strategy.

Twenty students were randomly selected to participate in a follow-up interview that was conducted in Thai by the researcher and lasted approximately one hour. All conversations were recorded and transcribed for data analysis. The participants verified the accuracy of the transcription, which was subsequently translated into English.

Two weeks later, each of the 20 participants submitted a written description in Thai of their use of vocabulary learning strategies. In addition to statistical reports, the researcher qualitatively discussed the emerging themes from the interviews and self-reports of strategy use and perception to allow triangulation of the data from multiple sources.

Results and Discussion

Research Question 1: What are the strategies used most and least frequently by the students, and what strategies do they perceive as most and least useful?

To answer this question, the researcher used quantitative data from the questionnaire, which measured the students' frequency of use and their perceived usefulness of strategies. Table 1 below demonstrates the means and standard deviations for the top five and the bottom five vocabulary learning strategies reported by the students in the current study. The value of the mean refers to the frequency of use which ranged from 1 (never) to 5 (very often) with 3 as sometimes.

Table 1: Most and Least Frequently Used Strategies

Strategy		M	SD
Most Frequently Used			
DET	5. Bilingual dictionary	4.29	0.86
MET	25. Use English-language media (songs, movies, etc.)	4.19	0.92
DET	4. Guess from textual context	3.98	0.90
COG	23. Take notes in class	3.89	0.95
DET	3. Analyze any available pictures or gestures	3.77	0.99
Least Frequently Used			
COG	22. Flash cards	2.54	1.11
MET	27. Test oneself with word tests	2.77	1.04
MET	30. Continue to study word over time	3.02	1.02
MET	28. Use spaced word practice	3.03	1.01
SOC	9. Ask teacher for a sentence including the new word	3.12	1.11

As revealed in the preceding table, the respondents reported using each vocabulary learning strategy with varying degrees of frequency. The means of individual strategy items ranged from a high of 4.29 (item no. 5) to a low of 2.54 (item no. 22) with an overall mean of 3.41.

Based on the three levels of interpretation of strategy use proposed by Oxford and Burry-Stock (1995), these means can be divided into the following broad groups: high-usage group (mean of 3.50 or above), medium-usage group (mean of 2.50 to 3.49), and low-usage group (mean below 2.50). For the students in this study, 11 of the 30 strategies (37%) fell in the high-usage group, while the remaining 19 strategies (63%) represented medium-usage. None of the strategies was reported to be used with low frequency. Thus, it can be concluded that they used a wide range of vocabulary learning strategies on a relatively regular basis.

As for the most frequently used strategies, three of the top five items are determination strategies (i.e., bilingual dictionary, guess from textual context, and analyze any available pictures or gestures). This specific result is consistent with that of previous studies, particularly those conducted in the Thai context (e.g. Kongthong, 2007; Pookcharoen, 2009). For instance, based on his empirical evidence, Pookcharoen (2009) pinpointed that most students tended to make use of textual cues to decipher the meanings of unfamiliar words. In cases where sufficient cues were not provided, they often resorted to other reference materials including monolingual and bilingual dictionaries. Often, due to their limited English proficiency, they failed to guess meanings from context and then consulted dictionaries immediately, as demonstrated in the preceding table.

It is also noteworthy that three of the bottom five items belong to the metacognitive category, which could potentially explain why several students in the study reported having difficulty remembering vocabulary items they had encountered. These three strategies include testing oneself with word tests, continuing to study a word over time, and using spaced word practice. According to Baddeley (1990), in order to maximize the effectiveness of learning, learners' practice time should be scheduled and organized rather than random. As informed by research findings that most forgetting occurs very soon after learning and the rate of forgetting slows after that major loss, learners should review new material soon after the initial exposure and then at gradually increasing intervals.

Following an investigation into the most and least frequently used strategies as discussed previously, the means and standard deviations indicating the degree to which the respondents perceived each strategy as most and least useful are summarized in Table 2 below. The value of the mean refers to the perceived usefulness, which ranged from 1 (not useful) to 5 (very useful) with 3 as moderately useful.

Table 2: Most and Least Useful Strategies

Strategy		M	SD
Most Useful			
MET	25. Use English-language media (songs, movies, etc.)	4.61	0.69
DET	5. Bilingual dictionary	4.39	0.79
MET	26. Interact with native speakers	4.36	0.89
DET	4. Guess from textual context	4.35	0.78
COG	23. Take notes in class	4.21	0.81
Least Useful			
MET	29. Skip or pass new word	2.94	1.15
COG	22. Flash cards	3.50	1.08
SOC	11. Discover new meaning through group work activity	3.65	0.91
SOC	10. Ask classmates for meaning	3.69	0.92
SOC	12. Study and practice meaning in a group	3.71	0.94

Based on the ranking shown above, the means of individual strategy items which were perceived as useful by the respondents ranged from a high of 4.61 (item no. 25) to a low of 2.94 (item no. 29) with an overall mean of 4.00.

Comparing the two lists aforementioned, the study found that four out of the top five strategies were both very often used and perceived as very useful: 1) Bilingual dictionary (frequency of use 4.29/0.86; perceived usefulness 4.39/0.79); 2) Use English-language media (4.19/0.92; 4.61/0.69); 3) Guess from textual context (3.98/0.90; 4.35/0.78); and 4) Take notes in class (3.89/0.95; 4.21/0.81). However, only one strategy from the bottom five strategy ranking was found to be both never used and perceived as not useful: Flash cards (2.54/1.11; 3.50/1.08).

Evidently, the mean values of the most and least useful strategies (as shown in Table 2) were comparatively higher than those of the most and least frequently used strategies (as shown in Table 1), which postulates that, in general, the students in the present study failed to employ each of these reported strategies as frequently as the degree they perceived them as useful in learning vocabulary. Furthermore, such high usefulness ratings imply that the students might be ready or willing to try new strategies to enrich their vocabulary repertoire if they are introduced to them and provided an explicit instruction.

Research Question 2: To what extent does the students' frequency of strategy use relate to their perceptions of the strategy usefulness?

The focus of the second question was on the relationship between frequency of use and perceived usefulness of the Thai EFL undergraduates' vocabulary learning strategies. To address the question,

quantitative data from the questionnaire were used. The means, standard deviations, and correlation coefficients of the five strategies achieving the strongest correlation were calculated and are presented in Table 3 that follows.

Table 3: Strategy Items with the Strongest Correlation

Strategy		Frequency		Usefulness	Corr	
		M	SD	M	SD	r
MEM	18. Say new word aloud when studying	3.53	1.08	3.86	1.03	.722*
MEM	17. Study the sound of a word	3.35	1.11	3.81	1.08	.711*
DET	3. Analyze any available pictures or gestures	3.77	0.99	3.98	0.91	.698*
MEM	13. Image word's meaning	3.30	1.15	3.90	1.05	.673*
MEM	14. Connect word to a personal experience	3.56	1.05	4.11	0.92	.646*

* Correlation is significant at the 0.01 level (2-tailed).

It was found that a number of vocabulary learning strategies used by the students with high frequency had strong and significant correlative relationships with their perceived usefulness, as displayed in the preceding table. To illustrate, the strongest correlation ($r = .722$, $p < 0.01$) was achieved by strategy item 18—*Say new word aloud when studying*. Strategy item 17—*Study the sound of a word*—reaches the second strongest correlation between frequency of use and perceived usefulness ($r = .711$, $p < 0.01$). Similarly, the determination strategy item 3—*Analyze any available pictures or gestures* achieves the third strongest correlation between two variables ($r = .698$, $p < 0.01$).

It is particularly noticeable that four out of the five strategies in the preceding table belong to the memory category, which involves relating the new word with some previously learned knowledge in order to retain the information about the word. To provide further insights into the students' attitude toward using such strategies, the qualitative data were also incorporated in this research question. The following excerpt illustrates the point:

For me, the best way to learn vocabulary is to understand each element of a word rather than just reciting it. Also, to learn new words by heart without having to devote too much energy, I try to create scenarios in my head that helps me to remember how the words are used. Most importantly, I need to use them often in daily life before they are kept in my memory (Student 3, interview).

With regard to the strategies with the weakest correlation, as identified in Table 4 that follows, four out of five items are metacognitive strategies. These include item 30 *Continue to study word over time* ($r = .302$, $p < 0.01$), item 28 *Use spaced word practice* ($r = .335$, $p < 0.01$), item 26 *Interact with native speakers* ($r = .351$, $p < 0.01$), and item 27 *Test oneself with word test* ($r = .365$, $p < 0.01$).

Table 4: Strategy Items with the Weakest Correlation

Strategy		Frequency		Usefulness		Corr r
		M	SD	M	SD	
MET	30. Continue to study word over time	3.02	1.02	4.16	0.95	.302*
MET	28. Use spaced word practice	3.03	1.01	4.05	0.91	.335*
MET	26. Interact with native speakers	3.24	1.12	4.36	0.89	.351*
MET	27. Test oneself with word tests	2.77	1.04	3.89	0.95	.365*
SOC	7. Ask teacher for an L1 translation	3.32	1.13	3.89	1.00	.367*

* Correlation is significant at the 0.01 level (2-tailed).

Even though the statistical data in the preceding table did not reveal a strong correlation between frequency of use and perceived usefulness of vocabulary learning strategies, it is interesting to remark that the strategies considered very useful outnumbered those reported to be very often used. This can partially be observed from the mean values in their perception of usefulness that were much higher than those in their frequency of use, which manifests the students' clear tendency to benefit from these strategies more substantially. The following is indicative of their awareness:

I really dislike looking up words in a dictionary because it doesn't make me understand and remember the words permanently. When I learn new words, I try to use them in conversations with native speakers or write them down on colorful pieces of paper and stick them to wherever I can see them every day. I sometimes create sentences that contain those words. Anyway, I should always do this rather than do it once in a while (Student 14, interview).

Like many students, my problem is I forget words I have learned after a few days. I tend to forget words that I do not use or see often. My problem can be solved by reviewing these words as much as possible. I plan to improve my vocabulary by using the different methods I mentioned earlier (Student 20, journal entry).

After the individual strategies were examined earlier, Table 5 below summarizes this section by presenting the means, standard deviations, and correlation coefficients of the five strategy categories.

Table 5: Correlation between Categories

Category	Frequency		Usefulness		Corr r
	M	SD	M	SD	
Memory Strategies	3.43	1.07	3.95	0.99	.650*
Determination Strategies	3.68	1.02	4.16	0.84	.577*
Cognitive Strategies	3.35	1.14	4.02	0.94	.546*
Social Strategies	3.30	1.06	3.85	0.94	.479*
Metacognitive Strategies	3.29	1.13	4.00	1.07	.345*

* Correlation is significant at the 0.01 level (2-tailed).

As identified in all the preceding categories, the frequency of use and perceived usefulness were found to be related to each other with varying degrees of correlation. Based on this ranking,

the category that achieves the strongest correlation was memory strategies ($r = .650$, $p < 0.01$), followed by determination strategies ($r = .577$, $p < 0.01$), cognitive strategies ($r = .546$, $p < 0.01$), social strategies ($r = .479$, $p < 0.01$), and metacognitive strategies ($r = .345$, $p < 0.01$).

Research Question 3: What are the factors contributing to their failure to employ certain strategies they consider useful?

For responses to this research question, the data were gathered from multiple sources. First, based on the survey, the students' responses to the open-ended question as to the factors that prevented them from using certain strategies they considered useful were analyzed. Qualitative analyses of data obtained from both interviews and vocabulary learning journal entries were also implemented.

A total of 274 (69%) students who completed the survey provided responses to the open-ended question. Figure 1 below summarizes and reports the percentage in each of the four factors, which contributed to the students' failure to make use of the strategies they considered useful in enhancing their vocabulary knowledge.

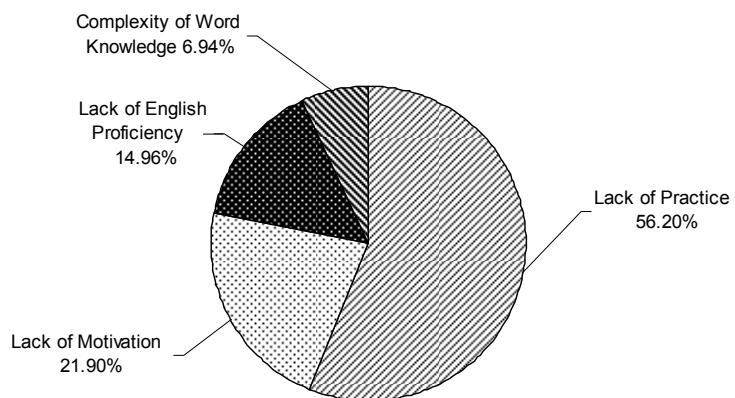


Figure 1: Factors Contributing to Failure to Use Strategies

As indicated in Figure 1, lack of practice is reported by 154 (56.20%) students as their major factor. They regarded their time limitation and limited opportunities for practice as their principal problem. A total of 60 (21.90%) students considered their lack of motivation their main obstacle to employing a wide variety of useful vocabulary learning strategies. In addition to these two factors, lack of English proficiency and complexity of word knowledge were reported by 41 (14.96%) and 19 (6.94%) students, respectively.

The following section scrutinizes the issue by discussing in greater detail each factor that contributes to the students' failure to use their preferred vocabulary learning strategies. The analyzed data were obtained from the survey responses, the interviews, and the journal entries.

Lack of Practice

The majority of students participating in the current study articulated their lack of practice mostly due to time constraints as their principal factor that prevented them from making use of a wide selection of vocabulary learning strategies. Excerpts from a few questionnaires are given below:

I don't think I'm very fond of learning vocabulary. I know the spoken English language that is full of slang and idioms better than the written language. Anyway, because of my tight academic schedule, I have little time to concentrate hard on learning it. This prevents me from knowing as much vocabulary as I should as a university student (Student 2, interview).

I used to think that I needed to know as many words as possible, so I tried to seek a good resource about words. For me, that was a dictionary. When in high school, I read a dictionary almost every day. I already knew some words and thought that there were many words like technical terms that I didn't need to know. I still keep a book where I have jotted down many words I learned, but it's kind of sad that I don't have time to review it now (Student 10, journal entry).

Lack of Motivation

Motivation plays a fundamental role in learning. According to a number of students in the study, a lack of adequate motivation inevitably resulted in their failure to take advantage of certain strategies they found helpful in broadening their existing vocabulary repertoire. They asserted:

Personally, I don't find vocabulary learning a difficult task. My problem is I'm always too lazy to consult a dictionary, so I tend to skip them without trying to make sense of what they mean. This may seem like a trivial problem, but it sometimes leads to a misunderstanding of the whole text I am reading (Survey respondent 25).

I memorize unknown vocabulary only when studying for exams, and I often remember their meanings for just a couple of days. This may be because I hardly use them. Anyway, I've never bought a vocabulary book for self-study, which is why I do not improve my vocabulary. Perhaps it might be due to my own lack of motivation to learn English (Student 11, journal entry).

Lack of English Proficiency

Based on the comments made by some students, sufficient background knowledge in English is deemed a prerequisite for expanding their vocabulary. Without this required component, the process of vocabulary learning occasionally poses a considerable challenge. The following quotes stress the point:

Although I think reading news and articles in English is the best way to learn vocabulary as it not only helps me gain knowledge but also provides a lot of reliable information, I don't use this strategy much. I believe it's too challenging for me because my English is

not that good, and I'm afraid of misinterpreting the information. So I'd better ignore or stay away from it (Student 1, interview).

One of the problems I usually encounter during reading is my English proficiency is limited, and I struggle with so much unknown vocabulary that I feel overwhelmed and demotivated to continue learning English and its vocabulary (Survey respondent 79).

Complexity of Word Knowledge

Unlike the three aforementioned factors, this factor pertains to the word knowledge itself. Nineteen students claimed that even though they usually attempted to derive word meanings or learn words through different strategies, there were times when they were not successful in doing so. They clarified:

I enjoy guessing word meanings through context and word parts, which was recommended by all English teachers and proficient English users. I found it boring at first but later gained more and more words using these techniques, and it was fun. Unfortunately, I have a difficult time applying them to many academic words and technical terms. The vocabulary learning task then becomes too complicated and boring (Survey respondent 15).

A whole lot of vocabulary words have different meanings, so it's quite hard to pick the right meaning when I consult a dictionary. Or for writing, because of nuances in meaning, it's not easy at all to pick the right word to use (Student 9, journal entry).

Summary

The study has addressed the first research question and arrived at the conclusion that the students reported using each vocabulary learning strategy item with either high or medium frequency, suggesting they made use of a wide range of strategies on a regular basis. Three of the top five items are determination strategies while three of the bottom five items belong to the metacognitive category. It was also revealed that, in general, the students failed to employ each of these reported strategies as frequently as the degree they perceived them as useful in learning vocabulary.

As for the second research question, a number of vocabulary learning strategies used by the students with high frequency had strong and significant correlative relationships with their perceived usefulness. It was noticeable that four out of the five strategies with the strongest correlation belong to the memory category whereas four out of five items with the weakest correlation are metacognitive strategies.

In relation to the third research question, the study identified four major factors contributing to the students' failure to use the strategies they considered useful: lack of practice, lack of motivation, lack of English proficiency, and complexity of word knowledge.

In line with previous studies conducted in the Thai EFL context (e.g., Kongthong, 2007; Pookcharoen, 2009; Siriwan, 2007), the current study revealed the most and least frequently used strategies among university students. What this research added to existing knowledge of vocabulary learning strategy use pertains to the complicated relationships between their frequency of use and their perceived usefulness. The data obtained also provided valuable insights into the students' learning process and how to help them become a better vocabulary learner.

Pedagogical Implications

The findings pointed out that there is no secret recipe to success in vocabulary teaching and learning. What strategy one uses and how he or she uses it appear to be dependent upon the contexts in which learning occurs. This study, however, suggests a number of pedagogical implications, especially in EFL settings. First, taking into account the students' frequency of use of vocabulary learning strategies and their perception of usefulness, I propose the following three types of strategies to facilitate the implementation of vocabulary strategy instruction:

- 1) Strategies which were perceived as useful and reported to be often used (e.g., bilingual dictionary, use English-language media, guess from textual context, and take notes in class).

Teachers may not need to introduce the preceding strategies to students; however, they are beneficial for students when teachers provide assistance should the need arise. Some students voiced their concerns about using bilingual dictionary effectively. Also, others expected that teachers, as expert vocabulary learners, model extensively and provide verbal explanations as to how to use such strategies as guessing word meanings using clues provided.

- 2) Strategies which were perceived as useful and reported to be seldom used (e.g., continue to study word over time, use spaced word practice, interact with native speakers, test oneself with word tests, and ask teacher for an L1 translation).

Teachers may need to explain and discuss with students the value of strategies before providing an explicit instruction or other types of assistance. Several factors, as outlined earlier in the current study, should also be taken into consideration. Most importantly, students should be encouraged or reminded to apply these strategies in actual task situations.

- 3) Strategies which were perceived as not useful and reported to be seldom used (e.g., flash cards, discover new meaning through group work activity, ask classmates for meaning, and study and practice meaning in a group).

Teachers may find it appropriate to initially identify the reasons why these strategies are not favored by many students. Should there be any strategies they consider useful for vocabulary

learning among students, they may decide to introduce those to them. However, it should be noted that the selection of strategy varies greatly from one learner to another, and it may prove advantageous to allow students to choose their own effective strategies that suit their specific needs and learning styles.

Limitations

Although all research questions have been addressed, it should be admitted that some limitations exist in the study. First, the data obtained from the questionnaire were self-reported, and one of the problems with this self-report measure is that the participants may not report what they actually do in vocabulary learning. However, interviewed and self-reported strategies generally tended to match, though the quality of application varied. Another limitation is related to how appropriate and effective strategy use is related to several interrelated variables (e.g., learner autonomy, learning styles, gender, and motivation). Rather than scrutinize the very specific details, this study only intends to give a general overview of the topic being discussed. Hence, the data obtained should be cautiously interpreted.

Suggestions for Further Research

As discussed earlier, part of the data in this study was obtained from the survey questionnaire. Future research should be conducted to document students' actual use of strategies to provide empirical evidence as to their learning process, which can subsequently be compared with their attitude toward using those strategies. In attempts to report detailed observation of the learners' use of strategies, researchers may conduct their studies by means of the think-aloud procedure.

This specific type of verbal report offers various advantages. Oxford and Burry-Stock (1995) indicated that think-aloud protocols provide the most detailed information on how students implement strategies while performing a language task. Even though this procedure, when compared with silent conditions, increases the time for undertaking the task, it does not affect the sequence of thoughts (Ericsson & Simon, 1993). Kuusela and Paul (2000) added that reporting which happens concurrently while performing a task offers more and better information than reporting what they did retrospectively.

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Appendix A

Questionnaire on Vocabulary Learning Strategies

The purpose of this survey is to collect information about the frequency of use and the perceived usefulness of English vocabulary learning strategies. The entire survey will take you approximately 15 minutes. Your response will be confidential and anonymous. Only the researcher of this study will have access to it.

1. Gender	<input type="radio"/> Male	<input type="radio"/> Female
2. Age	_____	
3. Faculty	_____	
Major	_____	
4. Years of English learning	_____	

5. What is your grade of EL172?

Exempted A B+ B C+ C

6. For each statement below, you are requested to respond to both of the following:

a) Frequency: How frequently do you use the strategy stated to learn English vocabulary?

very often	often	sometimes	seldom	never
5	4	3	2	1

b) Usefulness: To what extent do you think the same strategy is or maybe useful to you?

very useful	quite useful	moderately useful	slightly useful	not useful
5	4	3	2	1

No.	Strategies	Scale	5	4	3	2	1
		Frequency	very often ← → never				
		Usefulness	very useful ← → not useful				
1.	Analyze part of speech	Frequency Usefulness					
2.	Analyze affixes and roots	Frequency Usefulness					
3.	Analyze any available pictures or gestures	Frequency Usefulness					
4.	Guess from textual context	Frequency Usefulness					
5.	Bilingual dictionary	Frequency Usefulness					
6.	Monolingual dictionary	Frequency Usefulness					
7.	Ask teacher for an L1 translation	Frequency Usefulness					

8.	Ask teacher for paraphrase or synonym of new word	Frequency Usefulness					
9.	Ask teacher for a sentence including the new word	Frequency Usefulness					
10.	Ask classmates for meaning	Frequency Usefulness					
11.	Discover new meaning through group work activity	Frequency Usefulness					
12.	Study and practice meaning in a group	Frequency Usefulness					
13.	Image word's meaning	Frequency Usefulness					
14.	Connect word to a personal experience	Frequency Usefulness					
15.	Connect the word to its synonyms and antonyms	Frequency Usefulness					
16.	Study the spelling of a word	Frequency Usefulness					
17.	Study the sound of a word	Frequency Usefulness					
18.	Say new word aloud when studying	Frequency Usefulness					
19.	Verbal repetition	Frequency Usefulness					
20.	Written repetition	Frequency Usefulness					
21.	Word lists	Frequency Usefulness					
22.	Flash cards	Frequency Usefulness					
23.	Take notes in class	Frequency Usefulness					
24.	Use the vocabulary section in your textbook	Frequency Usefulness					
25.	Use English-language media (songs, movies, newscasts, etc.)	Frequency Usefulness					
26.	Interact with native speakers	Frequency Usefulness					
27.	Test oneself with word tests	Frequency Usefulness					
28.	Use spaced word practice	Frequency Usefulness					
29.	Skip or pass new word	Frequency Usefulness					
30.	Continue to study word over time	Frequency Usefulness					

7. Any other vocabulary learning strategies you use or think they are useful? (Please specify)

**8. What are the factors that prevent you from using certain strategies you consider useful?
Please explain below:**

9. Are you willing to participate in the interview phase of the study?

If yes, please provide your e-mail address _____

■ Thank you very much for your time and cooperation ■

Appendix B

Semi-structured Interview Questions

1. Are you a good vocabulary learner?
2. How often do you learn vocabulary?
3. What do you think are the best ways or strategies to learn vocabulary?
4. In what ways do you actually learn vocabulary?
5. Do you use vocabulary learning strategies that you think are useful to you?
Why or why not?
6. What problems or difficulties do you have when learning vocabulary?
7. How do you solve those problems?
8. What do you think good language learners do when learning vocabulary?
9. What are some characteristics of a good vocabulary learner?
10. If someone asked for your advice on how to learn vocabulary, what would you respond to that person?

Biodata

Dr. Suphawat Pookcharoen is a lecturer in the English Department, Thammasat University. He holds a Ph.D. in Literacy, Culture, and Language Education from Indiana University Bloomington, USA. His research interests include strategies-based language learning, vocabulary acquisition for EFL learners, new literacies, and professional development. He can be reached at suphawatoak@hotmail.com