AN INVESTIGATION OF VOCABULARY LEARNING STRATEGIES USED BY NON-ENGLISH MAJORS AT HONG DUC UNIVERSITY

Nguyen Thi Thuy Ngan¹

Received: 03 August 2021/ Accepted: 25 March 2022/ Published: April 2022

Abstract: This article aims at studying the English vocabulary learning strategies (VLSs) employed by non-English majors at Hong Duc University (HDU) and the frequencies of the strategies used. A set of questionnaires adapted from Schmitt's taxonomy of VLSs was delivered to 140 non-English majored students as a tool for data collection. The results from data analysis reveal some major findings about frequency of students' reported overall VLSs use and that of the six main strategy categories, the most frequently used VLSs and the least frequently used VLSs. Based on these findings, the writer has provided some recommendations with the hope of improving English vocabulary teaching and learning at HDU.

Keywords: Vocabulary learning strategies (VLSs), frequency of students' VLSs use, Schmitt's Taxonomy of Vocabulary Learning Strategies.

1. Introduction

Good learning strategies may have a great contribution to the learners' success in language learning. Chamot, Barnhardt, El-Dinary and Robbins [4] stated: "differences between more effective learners and less effective learners were found in the number and range of strategies used, in how the strategies were applied to the task, and in whether they were appropriate for the task". It can be inferred that with appropriate learning strategies, students can learn faster and more effectively. In addition, developing the students' knowledge of English cannot be separated from vocabulary mastery. It is obvious that vocabulary is an important part of linguistic knowledge. Zimmerman [16] indicates: "Vocabulary is central to language and of crucial importance to the typical language learner". Fromkin et. al. [9] also states: "Knowing a language means knowing the words of that language". The more words we know, the better we can convey our thoughts. Consequently, vocabulary acquisition has always been a fundamental and important activity in English learning and teaching.

The aforementioned important roles of learning strategies and vocabulary learning are the main reasons which prompt the writer to conduct this study to get an insight into this matter. Besides, the ideas for this study also come from the researcher's own experience as an English teacher for non-English majors at HDU. As a teacher, the writer can recognize the deficiency in non-English majored students' vocabulary knowledge, which in turn has a bad influence on their English learning process and achievement. This research, therefore, sets its objectives to investigate the Vocabulary learning strategies (VLSs) used by HDU non-English majors and frequency of students' vocabulary learning strategy use. Based on this background knowledge, the researcher gives some implications to vocabulary English teaching and learning at HDU.

¹ Faculty of Foreign Languages, Hong Duc University; Email: thuyngan21697@gmail.com

2. Theoretical background

2.1. Definitions of Vocabulary Learning Strategies

To generally define VLSs, Nation [12, p.217] states that VLSs are a subclass of language learning strategies. He claims that it is not easy to define what a strategy is, but "a strategy would need to: (1) involve choice, that is, there are several strategies to choose from, (2) be complex, that is, there are several steps to learn, (3) require knowledge and benefit from training, and (4) increase the efficiency of vocabulary learning and vocabulary use" [8, p.217].

Cameron [2] defines VLSs as "actions that learners take to help themselves understand and remember vocabulary". (Cameron 2001, p.92; as cited in Fooziyeh Rasouli & Khadijeh Jafari 2016). Similarly, Catalan [3, p.56] defines VLSs 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, and (c) to recall them at will, and (d) to use them in oral or written mode".

In general, all definitions mentioned above all share the same goals to help learners learn and use vocabulary more easily and effectively. They are the actions and techniques which learners use to help them discover the meaning of a new word, remember it, retrieve it when necessary and increase their vocabulary knowledge.

2.2. Schmitt's Taxonomy of Vocabulary Learning Strategies

To briefly describe his classification, Schmitt [15, p.206-207] affirms in his research that it is organized according to both the Oxford [13] system and the Discovery/Consolidation distinction suggested by Cook and Mayer [7]. In other words, this taxonomy takes advantage of Oxford's categories including Social strategies (SOC), Memory strategies (MEM), Cognitive strategies (COG), and Metacognitive strategies (MET). However, his classification differs from Oxford's in terms of the presence of a new category - Determination Strategies (DET).

Schmitt's taxonomy includes two major classes, namely, strategies for the discovery of a new word's meaning and strategies for consolidating a word once it has been encountered. Each class is divided into different sets of strategies. Totally, his present taxonomy contains 58 strategies.

2.2.1. Strategies for the discovery of a new word's meaning

These strategies are used to discover initial information about a new word when learners encounter it for the first time. This class includes Determination strategies and Social strategies.

Determination strategies (DET): help learners discover the meaning of a new word by using four options: guessing from their structural knowledge of the language, guessing from an L1 cognate, guessing from context, using reference materials.

Social strategies (SOC): help learners discover the meaning of a new word by asking someone who knows. Learners can ask their teacher or classmates for L1 translation, paraphrase, synonym, a model sentence containing that word; or they can discover the meaning through group work activity.

2.2.2. Strategies for consolidating a word once it has been encountered

Once learners have gained initial information about a new word, they need to use some strategies to remember it. These strategies are called Consolidation strategies which contain Social SOC), Memory (MEM), Cognitive (COG) and Metacognitive strategies (MET).

Social strategies (SOC): Besides their use in the discovery of the meaning of a new word, social strategies can also be employed to learn or practice vocabulary. Learners can work in a group or interact with native-speakers. This group also involves teacher's checking students' flashcards word lists for accuracy.

Memory strategies (MEM): (traditionally known as mnemonics) are used to retain the word, using some form of imagery, or grouping. A new word "can be integrated into many kinds of existing knowledge (i.e. previous experiences or known words) or images can be custom-made for retrieval (i.e. images of the word's form or meaning attributes)" [4, p.211].

Cognitive strategies (COG): "are similar to memory strategies, but are not focused so specifically on manipulative mental processing" [4, p.219]. Cognitive strategies contain repetition and using mechanical means to study vocabulary. Learners can write or say a word again and again to remember it. Besides, they can take notes in class, make use of special vocabulary sections in their textbooks, study by listening, record a tape of word lists or label their physical objects in L2.

Metacognitive strategies (MET): are used by students "to control and evaluate their learning, by having an overview of the learning process in general" [4, p.220]. In the other words, metacognitive is related to planning and self-evaluation to reflect on the learning processes.

3. Setting of the study

The study was conducted at Hong Duc University (HDU) during the second semester of the academic year 2020-2021. At HDU, students are required to learn three English subjects with three respective levels, namely, English 1 (Elementary level), English 2 (Intermediate level) and English 3 (Advanced level). However, it is worth noticing that the general English level of students at HDU is not very high. Each semester, the number of students who do not pass English subjects is quite high. To some students, English is a real obstacle to get their bachelor's degrees. In addition, vocabulary is also one of the biggest problems to students in learning English.

The participants of this study were 140 non-English majors at HDU (77 females and 63 males). They were students of four different faculties, namely, Faculty of Economics, Faculty of Science and Technology, Faculty of Information Technology and Faculty of Primary Education. All of them have learnt English for seven years or more. These students were chosen randomly for the survey. They were taking part in English classes at the time of the survey. By investigating their ways of learning vocabulary and their use of VLSs, this study is hoped to draw some implications and suggestions for English vocabulary teaching and learning at HDU.

4. Data collection and analysis procedure

In this research, a set of questionnaire was used as two tools for data collection. The questionnaires were distributed to 140 non-English majored students to investigate the VLSs reported using by learners and the frequency of use of these strategies. Data collected from the questionnaires were analyzed quantitatively via Excel software for mean scores. In addition, descriptive statistics were also counted for percentage and ranks.

The mean scores were used to determine the frequency use of strategies by students. The means cores were interpreted as follows: In questionnaires, the frequency of strategy use was presented on a five-point rating scale, ranging from 'never or almost never', valued as 1; 'generally not used', valued as 2; 'sometimes used', valued as 3; 'usually used', valued as 4; and 'always or almost always used', valued as 5. This study is based on the Reference of mean score proposed by Oxford [13] in her SILL (Strategy Inventory for Language Learning) Profile of results version 7 to interpret the mean scores. Accordingly, the mean score of strategy use of each category or item which valued from 1.0 to 2.4 was determined as 'low use', from 2.5 to 3.4 as 'medium use', and from 3.5 to 5.0 as 'high use'.

High Always or almost always used Usually used 3.5 to 4.4

Medium Sometimes used 2.5 to 3.4

Low Generally not used 1.5 to 2.4

1.0 to 1.4

Table 1. Reference to mean scorebased on Oxford's (1990) SILL Profile of results version 7

5. Frequency of students' Vocabulary Learning Strategies use

Never or almost never used

5.1. Frequency of students' reported overall Vocabulary Learning Strategies use

Table 2 below reveals the mean score of overall 58 vocabulary strategies items in the questionnaires administered to 140 non-English majored students at HDU.

Students' Strategies Use	Mean Score	Frequency Category
Overall Strategy Use	2.84	Medium use
Strategies to discover the meaning of an English word	3.13	Medium use
Strategies to learn and practice an English word after finding out its meaning	2.74	Medium use

Table 2. Frequency of students' overall vocabulary learning strategies use

As can be seen in Table 2, the mean score of overall vocabulary learning strategies use reported by participants is 2.84. This means that participants of this research reported employing vocabulary learning strategies with medium frequency. In addition, the mean scores for the two sub-classes, namely Strategies to discover the meaning of an English

word and Strategies to learn and practice an English word after finding out its meaning, are 3.13 and 2.74 respectively. They also belong to the medium frequency use category. However, it can be seen that the mean score of the former sub-class is bigger than that of the latter. Therefore, it can be concluded that 140 participants of this research used more strategies to discover meaning of an English word than to consolidate a new word.

5.2. Frequency of Use of Vocabulary Learning Strategies in the Six Main Strategy Categories

Chart 1 below reveals the mean scores of the six main strategy categories: Determination (DET), Social (SOC1) (for the discovery of a new word's meaning), Social (SOC2) (Consolidation strategies), Cognitive (COG), Memory (MEM) and Metacognitive (MET).

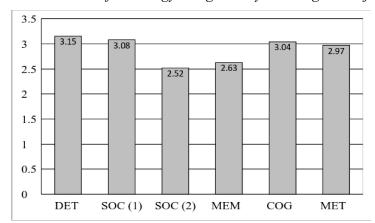


Chart 1. The use of 6 strategy categories by non-English majors

As can be seen from the above chart, the mean scores for six strategy categories range from 2.52 to 3.15. This means that 140 participants reported using VLSs in all six main categories at medium frequency. The ranking of mean scores for 6 strategy categories is presented in the following table.

Ranking	Strategy Categories	Mean score	Frequency category	
1 st	Determination	3.15	Medium use	
2 nd	Social (for the discovery of a new word's meaning)	3.08	Medium use	
3 rd	Cognitive	3.04	Medium use	
4 th	Metacognitive	2.97	Medium use	
5 th	Memory	2.63	Medium use	
6 th	Social (Consolidation strategies)	2.52	Medium use	

Table 3. Ranking of mean scores for 6 strategy categories

This table shows that students used Determination category the most frequently with the mean score of 3.15. Social category (SOC) for the discovery of a new word's

meaning ranks the second with the mean score quite closed to that of Determination category (\overline{X} = 3.08). It is followed by Cognitive (COG), Metacognitive (MET) and Memory (MEM) categories with the mean scores of 3.04, 2.97 and 2.63 respectively. Social (SOC) group for consolidating a new word ranks the last, but its mean score still belongs to medium frequency category (\overline{X} = 2.52).

5.3. The most frequently used Vocabulary Learning Strategies

Table 4 below presents the most frequently used VLSs, which are also 9 strategies which were reported using at high level of frequency.

Ranking	Strategy categories	Item No.	Vocabulary learning strategies	Mean score
1 st	DET	6	I use a bilingual English/Vietnamese dictionary.	4.94
2 nd	COG	45	I use verbal repetition.	4.3
3 rd	MEM	31	I study the spelling of a word.	4.26
4 th	COG	46	I use written repetition.	4.25
5 th	MEM	32	I study the sound of a word.	4.23
6 th	MEM	33	I say the word aloud when studying.	3.92
7 th	MET	58	I continue to study the new English word overtime.	3.74
8 th	SOC	10	I ask the teacher for the Vietnamese translation of the word.	3.68
9 th	SOC	13	I ask my classmates for the Vietnamese meaning of the word.	3.58

Table 4. Top frequently used vocabulary learning strategies

As demonstrated in the above table, the 9 most frequently used VLSs belong to Determination, Social (for the discovery of a new word's meaning), Cognitive, Memory and Metacognitive groups. This means that no Social strategy for the consolidation of a new word was used at high frequency level. This result completely coincides with the data presented in table 3 when Social group (consolidation strategies) ranks the last amongst 6 main strategy categories. Likewise, the most frequently used strategy ("I use a bilingual English/Vietnamese dictionary", $\overline{X} = 4.94$) goes to Determination category, which also ranks the first amongst the 6 main VLSs categories in the table of frequency ranking. According to Oxford's system of reference to mean score, its mean score of 4.94 shows that this strategy was "always or almost always used" by most of the students.

A close look at the table 4 reveals that amongst 9 most frequently used strategies, 6 strategies are used to consolidate a new word and 3 of them are used to discover the meaning of a new word. The 6 consolidation strategies: verbal repetition (\overline{X} = 4.3), study the spelling of a word (\overline{X} = 4.26), written repetition (\overline{X} = 4.25), study the sound of a word (\overline{X} = 4.23), say the word aloud when studying (\overline{X} = 3.92) and continue to study the new English word overtime (\overline{X} = 3.74) occupy from the 2nd to the 7th positions in the ranking

table of the top frequently used VLSs. The 3 VLSs to discover the meaning of a word, namely "use a bilingual English/Vietnamese dictionary", "ask the teacher for the Vietnamese translation of the word" and "ask classmates for the Vietnamese meaning of the word" rank the 1st, 8th and 9th amongst the most frequently used VLSs with the mean scores of 4.94, 3.68 and 3.58 respectively.

5.4. The least frequently used Vocabulary Learning Strategies

The 6 least frequently used VLSs amongst 58 strategy items are presented in table 5 as follows:

Ranking	Strategy categories	Item No.	Vocabulary learning strategies	Mean score
1 st	MEM	25	I use the Peg method.	1.82
2 nd	COG	48	I use flashcards.	1.83
3 rd	MEM	24	I use 'scales' for gradable adjectives.	1.87
4 th	MEM	23	I use semantic maps.	1.89
5 th	MEM	26	I use the Loci method.	1.90
6 th	MEM	37	I use the Keyword Method - connecting the English word with a Vietnamese word that sounds similar.	2.00

Table 5. The least frequently used learning strategies

It is noticeable that five amongst the six least used VLSs belong to Memory category, which ranks the 5th in the Ranking table of mean scores for 6 strategy categories (table 3). One Cognitive strategy which ranks the 2nd in this table is the strategy "use flashcards" with the mean score of 1.83. "Peg method", whose mean score is 1.82, is the least frequently used VLS. The other four strategies are "use scales for gradable adjectives" (\overline{X} =1.87), "use semantic maps" (\overline{X} =1.89), "Loci method" (\overline{X} =1.90) and "Keyword Method" (\overline{X} =2.00).

In brief, the findings about frequency of VLS use can be summarized as follows:

- (1) In terms of the frequency of use of overall VLSs, 140 students who were investigated reported employing VLSs with medium frequency.
- (2) Regarding the frequency of use of VLSs in the six main categories (DET, SOC, SOC, MEM, COG and MET), students reported using strategies at medium frequency level of use in each of these categories.
- (3) However, students reported using each individual strategy item at different level of frequency: 33 items at medium frequency, 16 strategies at low frequency and 9 strategies at high frequency level.
- (4) The most frequently used VLSs were: using a bilingual English/Vietnamese dictionary, using verbal repetition, studying the spelling of a word, using written repetition,

studying the sound of a word, say the word aloud when studying, continue to study the new English word overtime, asking the teacher for the Vietnamese translation of the word and ask my classmates for the Vietnamese meaning of the word.

(5) The least frequently used VLSs were: Peg method, using flashcards, using 'scales' for gradable adjectives, using semantic maps, Loci method and Keyword Method.

6. Implications and suggestions

Based on findings of the research, the writer has provided some recommendations with the hope of improving the English vocabulary teaching and learning at HDU, as follows:

Firstly, it is necessary that teachers be aware of their students' VLSs preferences and understand why they value certain kinds of strategies. The information about students' VLSs use and preference may be very helpful for teachers. Based on this awareness, teachers can design their lesson plans with the most suitable teaching techniques and methods which suit the needs and learning styles of their learners.

Secondly, teachers need to help students be aware of VLSs and teach them how to use VLSs effectively. Brown [1] states that students will become more successful and responsible for their own learning if they are taught how to use a strategy effectively and develop their own strategies which suit their learning purposes. In class discussions about VLSs, after students have listed their own techniques, teachers can write these VLSs on the board and help students identify the strategies. Asking students to complete the questionnaires about VLSs is also another effective way to raise students' awareness about VLSs. This can give them a wider selection of strategies to apply in learning new vocabulary.

Thirdly, students should be taught about how to use VLSs appropriately instead of learning vocabulary in whatever way they want. Teachers can spend one or two first lessons at the beginning of the English course to introduce and guide students how to use VLSs or they can integrate strategy training into the lessons during the course with different kinds of exercises.

In order to guide students how to use VLSs effectively, teachers can follow different strategy training models proposed by famous researchers in the language field [3] [11] [13] [14] [16]. Among them, Grenfell and Harris's strategy instructional model may be the most comprehensive one. Grenfell and Harris's model can be summarized into 6 steps as follows:

- "(1) Awareness raising: The students complete a task, and then identify the strategies they used.
- (2) Modeling: The teacher models, discusses the value of new strategy, makes checklist of strategies for later use.
 - (3) General practice: The students practice new strategies with different tasks.
 - (4) Action planning: The students set goals and choose strategies to attain those goals.
- (5) Focused practice: The students carry out action plan using selected strategies; the teacher fades prompts so that students use strategies automatically.

(6) Evaluation: The teacher and students evaluate success of action plan; set new goals; cycle begins again."

(Grenfell and Harris, 1999; as cited in Jing Liu, 2010)

Lastly, teachers should design a variety of particular vocabulary exercises and activities to help students practise applying VLSs in class. Giving students more exercises to practice will help them be familiar with using new strategies. Then, with time, their use of VLS can become unconscious and automatic. As a result, students' vocabulary learning can be significantly improved.

7. Conclusion

This article aims at exploring the strategies used by non-English majored students at HDU and the frequency of VLS use of those learning strategies. The results from data analysis reveal that the most frequently used VLSs were: using a bilingual English/Vietnamese dictionary, using verbal repetition, study the spelling of a word, use written repetition, studying the sound of a word, say the word aloud when studying, continuing to study the new English word overtime, asking the teacher for the Vietnamese translation of the word and ask my classmates for the Vietnamese meaning of the word. The least frequently used VLSs were: Peg method, using flashcards, using 'scales' for gradable adjectives, using semantic maps, Loci method and Keyword Method.

Based on the findings, the researcher has provided some recommendations with the hope of improving the English vocabulary teaching and learning at HDU. By studying VLSs used by non-English majored students, this article provides English teachers at HDU with better background about their students' vocabulary learning. Teachers can find out the ways their students learn English vocabulary and which strategies they consider as the most useful. Based on this background comprehension, English teachers at HDU can create a more effective plan and adopt more suitable methods to teach their students.

References

- [1] C. Brown. (1993), Factors affecting the acquision of vocabulary: Frequency and saliency of word, In T. Huckin, M. Haynes, J. Coady (Eds.), Second language reading and vocabulary learning, Norwood, N. J. Ablex.
- [2] L. Cameron. (2001), *Teaching languages to young learners*, Cambridge, England: Cambridge University Press.
- [3] R. M. J. Catalán. (2003), Sex differences in L2 vocabulary learning strategies, *International Journal of Applied Linguistics*, 54-77.
- [4] Uhl. Chamot, Barnhardt, El-Dinary and Robbins. (1999), Children's learning strategies in language immersion classrooms, *Modern Language Journal*, 319.
- [5] A. D. Cohen. (1990), Language Learning: Insight for Learners, Teachers, and Researchers, Boston: Heinle & Heinle.
- [6] A. D. Cohen. (1998), *Strategies in learning and using a second language*, London: Longman.

- [7] L. K. Cook & R. E. Mayer. (1983), Reading strategies training for meaningful learning from prose. In M. Pressley & J. R. Levin (Eds.), *Cognitive strategy research: Educational applications*, New York: Springer-Verlag.
- [8] R. Fooziyeh, J. Khadijeh. (2016), A Deeper Understanding of L2 Vocabulary Learning and Teaching: A Review Study, *International Journal of Language and Linguistics*, 40-46.
- [9] V. Fromkin, R. Rodman, H. Nina (2003), *An Introduction to Language: Seventh Edition*. United States: Thomson Wadsworth.
- [10] M. Grenfell, V. Harris (1999), Modern Languages and Learning Strategies: In Theory and Practice, Routledge.
- [11] Jing Liu. (2010), Language Learning Strategies and Its Training Model, *International Education Studies*, 35-52.
- [12] P. Nation. (2001), Learning Vocabulary in Another Language. Cambridge University Press.
- [13] R. L. Oxford. (1990), Language Learning Strategies: What every Teacher should Know. New York: Newbury House.
- [14] P.D. Pearson, J.A. Dole. (1987), Explicit comprehension instruction: A review of research and a new conceptualization of instruction, *The Elementary School Journal*.
- [15] N. Schmitt. (1997), *Vocabulary Learning Strategies*. In N. Schmitt & M. McCarthy (Eds.), Vocabulary. Description, acquisition and pedagogic. Cambridge, England: Cambridge University Press, 199-227.
- [16] C. B. Zimmerman. (1997), Historical trends in second language vocabulary instruction, Cambridge, England: Cambridge University Press. 5