

AN INVESTIGATION INTO ENGLISH VOCABULARY LEARNING STRATEGIES USED BY ENGLISH MAJOR FRESHMEN AT A SCHOOL OF THAI NGUYEN UNIVERSITY

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ARTICLE INFO	ABSTRACT
Received: 09/02/2022	This study was conducted as a descriptive research with the purposes of exploring the vocabulary learning strategies of English major freshmen at a School of Thai Nguyen University and the relationship between their vocabulary learning strategies and their vocabulary size in order to help students to develop suitable vocabulary learning strategies in the process of improving their lexical competence. The subjects of the study were 158 students at the School. To collect the data, a vocabulary learning strategies questionnaire and a vocabulary size test were used. The results suggested that most students use a variety of vocabulary acquisition tactics. However, the majority of them appear to lack an average vocabulary size for comprehending university-level materials. Furthermore, the researchers discovered a link between vocabulary size and the learners' vocabulary learning strategies. It can be concluded that in the teaching and learning process, students should be informed about the effective exploration of their strategies in addition to being aware of the many approaches to manage their vocabulary studies and it is also critical for teachers to assist learners in becoming aware of their own styles, preferences, habits, as well as to get them to practice effective strategies and take charge of their own learning.
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KEYWORDS	
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KHẢO SÁT CHIẾN LƯỢC HỌC TỪ VỰNG TIẾNG ANH CỦA SINH VIÊN CHUYÊN NGỮ NĂM THỨ NHẤT TẠI MỘT TRƯỜNG CỦA ĐẠI HỌC THÁI NGUYÊN

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THÔNG TIN BÀI BÁO	TÓM TẮT
Ngày nhận bài: 09/02/2022	Bài báo này là một nghiên cứu mô tả nhằm mục đích khảo sát chiến lược học từ vựng của sinh viên năm thứ nhất chuyên ngành tiếng Anh tại một trường của Đại học Thái Nguyên và tìm ra mối liên hệ giữa chiến lược học từ vựng với số lượng từ vựng của sinh viên để giúp sinh viên phát triển chiến lược học từ vựng phù hợp trong quá trình cải thiện năng lực từ vựng của mình. Đối tượng nghiên cứu là 158 sinh viên năm thứ nhất chuyên ngành tiếng Anh của trường. Để thu thập dữ liệu, nhà nghiên cứu đã sử dụng bảng hỏi khảo sát chiến lược học từ vựng của sinh viên và một bài kiểm tra lượng từ vựng. Kết quả của nghiên cứu cho thấy đa phần sinh viên sử dụng nhiều chiến lược học từ vựng khác nhau. Tuy nhiên, lượng từ vựng của sinh viên về cơ bản chưa đáp ứng được yêu cầu đọc hiểu tài liệu ở cấp độ đại học. Ngoài ra, giữa những chiến lược học từ vựng và lượng từ vựng của sinh viên cũng có những mối liên hệ nhất định. Nghiên cứu kết luận rằng trong quá trình dạy và học, sinh viên cần được thông tin về hiệu quả của những chiến lược học từ vựng của mình và không ngừng tìm hiểu, phát triển nhiều chiến lược khác; đồng thời giáo viên cũng cần hỗ trợ sinh viên trong việc nhận thức được phong cách học, sở thích, thói quen học tập của mình; giúp sinh viên thực hành những chiến lược học tập hiệu quả và bồi dưỡng khả năng tự học.
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1. Introduction

Learning vocabulary is considered as an indispensable part of language learning and production as limited knowledge of vocabulary results in learners' difficulties in production as well as comprehension of language. Horwitz (1988) [1] found that vocabulary acquisition was considered by learners to be the most crucial part of language learning. David Wilkins (1972) [2, p. 97] also pointed out that "While without grammar very little can be conveyed, without vocabulary nothing can be conveyed". Furthermore, Schmitt (2008) [3, p. 329] added that "one thing that students, teachers, materials writers, and researchers can all agree upon is that learning vocabulary is an essential part of mastering a second language". Concerning the complexity of this issue, vocabulary learning strategies, as a sub-category of learning strategies in general, is believed to be significant in language learning and consequently being aware of these strategies is important for both teachers and students.

According to the cognitive theory, which deals with mental processes involved in learning, each individual language learner has his or her own way of approaching learning (Pavicic Takac) [4], which, in turns, results in different outcomes in foreign language acquisition. Vocabulary learning strategies have been developed in learners' attempts to apply learning strategies in vocabulary acquisition. Vocabulary learning strategies have recently received paramount attention because they help us understand what processes language learners go through when learning vocabulary. Recent studies have focus on identifying the vocabulary learning strategies and the relationship between vocabulary learning strategies use of students and their vocabulary size and reported a variety of results. For example, Zahra Heshmatifar (2013) [5] investigated what strategies are more or less common for learning vocabulary among EFL students at Hakim Sabzevari University in Iran. The results of the study revealed that the determination strategies were most frequently used while the social strategies were rarely used by the students. In another study, Kanthimathi Letchumanan, Paramasivam, Potchelvi Govindasamy & Atieh Farahaiyan (2016) [6] provided an overview of preferred vocabulary learning strategies by learners. Data from the study showed that learners do use certain vocabulary learning strategies and that strategies has become their preferred vocabulary learning strategies. The study also confirmed that multiple use of vocabulary learning strategies are preferred by learners especially the cognitive, determination and metacognitive strategies. In order to explore the relationship between the vocabulary learning strategies and vocabulary size of English language teaching students at Eastern Mediterrance University, Kalajahi and Pourshahian (2012) [7] used a vocabulary learning strategies questionnaire adapted from Kudo's study (1999) and the Vocabulary levels test of Schmitt's (2000). This study found no relationship between the psycholinguistic strategy and the vocabulary size of the participants, and the relationships between the metacognitive strategy and the vocabulary size, as well as the vocabulary learning strategy questionnaire and the vocabulary size of the participants were negligible. The findings also revealed that students did not operate certain strategies, rather a variety of strategies. Employing the same Vocabulary Level Test and another vocabulary learning strategies questionnaire developed by Sener (2003), a study by F. Filiz Yalçın Tılfarhoğlu & Yunus Bozgeyik (2012) [8] indicated that the participants used a wide range of VLS. Futhermore, Memory Strategies correlated positively with the participants' academic and general vocabulary proficiency levels. However, there were also some differences among the proficiency groups about which specific VLS are correlated with their vocabulary proficiency levels. Barlian Kristanto (2015) [9] also attempted to identify the use of vocabulary learning strategies and to find out the vocabulary learning strategies use in relation to vocabulary size but using a 27-item questionnaire adapted from Schmitts' taxonomy and the Vocabulary size test of Nation & Beglar (2007). Statistical analysis revealed that social strategies were the most frequently used strategies whereas metacognitive strategies were not used by all students. Correlation analysis showed that a relationship exists at the moderate level between vocabulary learning strategy use and vocabulary size score.

It can be seen that a number of studies exploring individual vocabulary learning strategies as well as the relationship between vocabulary learning strategies use of students and their

vocabulary size have been conducted. However, few studies have been done to investigate learners' vocabulary learning strategies used in the context of teaching English as a foreign language in Vietnam. The lack of literature over the issue inspired the researcher to carry out this study in the context of English teaching at a School of Thai Nguyen University. This study was carried out to explore the vocabulary learning strategies (VLS) of English major freshmen at the School and the relationship between their vocabulary learning strategies and their vocabulary size (VLS). The study focuses on answering two main research questions:

- What are the commonly-used English vocabulary learning strategies of English major freshmen at the School?
- What are the relationships between the students' use of vocabulary learning strategies and their vocabulary size?

2. Methodology

The subject of the study was 158 first-year English major students at the School, including 150 girls and 8 boys. They were mostly 18-19 years olds and their English was at the elementary level (A1-A2). The number of participants chosen were based on Slovin's formula sampling techniques, which is written as: $n = N/(1+(N.e^2))$ where n = Number of samples; N = Total population; e = Error tolerance.

According to Stephanie Ellen [10], Slovin's formula allows a researcher to sample the population with a desired degree of accuracy. It also gives the researcher an idea of how large the sample size needs to be to ensure a reasonable accuracy of results. In this study, the total population is 367 students, the error tolerance is 6%.

The study was carried out in the first semester of the school year 2021-2022. The students were in the first few weeks of the semester when the study was being conducted, so their vocabulary learning strategies and their vocabulary size were identified and measured regardless of the influences of the teaching curriculum.

In order to investigate the most commonly used vocabulary learning strategies of the freshmen, a 30-item questionnaire adapted from Schmitt's Taxonomy was used. The questionnaire consisted of two parts. The first part was designed to collect information concerning the students' general background information. The second part of the questionnaire consisted of 30 questions which were classified under 5 different groups of strategies as 6 statements on Determination strategies (items 1-6), 5 statements on Social strategies (items 7-11), 9 statements on Memory strategies (items 12-20), statements on Cognitive strategies (items 21-26) and statements on Metacognitive strategies (items 27-30). The questionnaire asks about the frequency of the use of vocabulary learning strategies implemented by the students. The frequency of use is measured by 5-point Likert-scale from 1 (never) to 5 (always).

Besides questionnaires, vocabulary size test was also one of the main tools to collect information for the study. In this study, the vocabulary size test designed by Paul Nation was implemented. To begin the data collection procedure, first of all, prior approval was sought from the university principals according to the university's ethical guidelines. Then, a pilot study was conducted. The goal of the pilot study was to examine the usefulness of the questionnaire and whether they reflect the research aims or not. Additionally, it further facilitated the researcher to know if the language used in the questionnaire was appropriate to students' proficiency or what should be adjusted or explained. Besides, the pilot study of the questionnaire enabled the researcher to identify the time necessary to complete all the questions. The pilot questionnaire was carried out among about ten students. They were carefully instructed to answer the questions. The time these students need to finish the questionnaire was noted.

After the first step- pilot questionnaire study finished, the students were invited to complete the questionnaire online. The students were given enough time to answer the questions completely. The students were told that their participation in the research was voluntary. They

were assured of the privacy of their answers, and that their responses would influence their course scores. After all of the students completed the questionnaire, they were asked to do a vocabulary size test that must be accomplished for a maximum of 45 minutes.

After being collected, data from the questionnaire and the vocabulary size test was analysed by means of SPSS for Windows (Statistical Product and Services Solutions) (version 26). Firstly, descriptive statistics were calculated to see the overall patterns of vocabulary learning strategies used by the students and their vocabulary size. Then, the results from the vocabulary size test were computed to see the relationship between vocabulary learning strategies and vocabulary size of the students.

3. Findings and discussion

3.1. Students' vocabulary learning strategies

The first research question was to determine which VLS was most commonly used by the students. To begin, descriptive statistics were employed to determine the frequency with which vocabulary learning strategies were used. The completed VLS questionnaire was analyzed using SPSS (version 26) after data collection. Descriptive statistics, such as means and standard deviations of the five categories and their subdivisions, are used to describe the most and least often employed vocabulary learning strategies. Table 1 shows the findings of the descriptive analysis. As shown in the table, determination strategies ($M=2.52$; $SD=0.57$) are the most commonly used of the five vocabulary learning strategies, followed by social strategies ($M=1.79$), cognitive strategies ($M=1.68$; $SD=0.34$), memory strategies ($M=1.67$; $SD=0.48$), and metacognitive strategies ($M=1.48$; $SD=0.53$).

Table 1. Descriptive Statistics for each vocabulary learning strategy

Strategy	N	Minimum	Maximum	Mean	Std. Deviation
DET	158	1.67	3.33	2.52	.57
COC	158	1.00	2.60	1.79	.57
SOG	158	1.00	2.33	1.68	.34
MEM	158	1.00	2.56	1.67	.48
MET	158	1.00	2.50	1.48	.53
Valid N (listwise)	158				

When it comes to the most and the least frequently used vocabulary learning strategies with respect to individual items, Table 2 shows that the most frequently used strategies spread across the three categories of vocabulary learning strategies, namely determination strategies (DET), cognitive strategies (COG) and memory strategy (MEM). The highest mean ($M=4.57$) was achieved by strategy item 1 "I use a dictionary to check for meanings of new words". Strategy Item 24 "I repeatedly write the words" reached the second highest mean of 3.04 followed by using flash card (Item 26; $M=2.94$), asking classmates for meanings (Item 9; $M=2.92$) and remembering the new words together with their contexts (Item 19; $M=2.77$).

Table 2. Top 5 of the most frequently-used vocabulary learning strategies

Rank	Description	Category	Item	N	Minimum	Maximum	Mean	Std. Deviation
1	I use a dictionary to check for meanings of new words	DET	1	158	3	5	4.57	.83
2	I repeatedly write the word	COG	24	158	1	5	3.04	1.02
3	I write a new word on a flash card so I can remember it	COG	26	158	1	5	2.94	.95
4	I ask my classmates for meaning of the word	SOC	9	158	1	5	2.92	1.4
5	I remember the new word together with the context where the new word occurs	MEM	19	158	1	4	2.77	1.18

The results of the questionnaire also reveal that analyzing pictures or gestures (Item 5; $M=1.51$), analyzing words by breaking them into sound segments (Item 2; $M= 1.38$), asking teachers to make sentences (Item 10; $M= 1.37$), remembering words by doing projects (Item 25; $M=1.23$) and remembering words by doing dictations (Item 30; $M= 1.11$) were determined as the least frequently used strategies.

3.2. Student's vocabulary size

The results of the students' performance on the VST are presented in figure 1. After being calculated, the students' vocabulary size was grouped into four categories, which are from 0 to 1900 words, from 2000 to 2900 words, from 3000 to 5000 words and more than 5000 words. It can be seen from the chart that about 20 percent of the students have a vocabulary size of less than 2000 words; the majority of them (about 63%) has an adequate size of the 2000-word; however, the students' test performance seem to indicate an inadequate vocabulary size at the 3000 to 5000-word level, as well as the higher word level.

The findings of the present study, interpreted in light of the pertinent research, suggested that a threshold size of around 2,000 high-frequency words is necessary for effective basic language use and a vocabulary size of 3,000 to 5,000 words is needed for successful text comprehension. To be more specific, Laufer (1998) [11] suggested that the threshold vocabulary size essential for reading comprehension is about 3,000 word level. Furthermore, it is necessary to have good knowledge of at least 5,000 words if someone aims to read advanced, authentic, academic texts [12].

Therefore, the findings of the study seem to indicate that the majority of the freshmen would have difficulties with advanced studies at the university level. They must develop more effective vocabulary learning strategies to increase their vocabulary size to be able to cope with academic studies at the university.

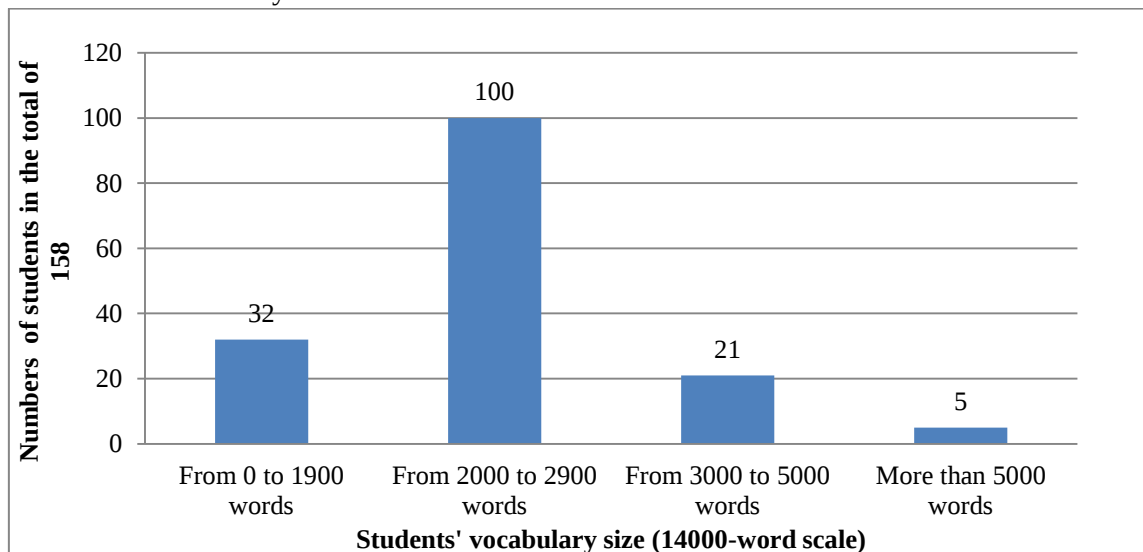


Figure 1. Students' vocabulary size

3.3. Relationship between students' vocabulary learning strategies and their vocabulary size

The second research question was an attempt to explore if there is any relationship between vocabulary learning strategies and vocabulary size among the learners. Addressing the second research question, correlational analysis of Pearson at the alpha level of ($\alpha=0.05$) was performed.

Table 3 presents the correlations between the VLS and the vocabulary size of the students. As the table illustrates, the correlations between the strategies and the vocabulary size of the

participants are strong and positive. Among which, the correlation between the memory strategy and the vocabulary size is the strongest with $r=0.913$ and $\text{sig.} <0.05$, followed by determination strategy ($r=0.883$, $\text{sig.} <0.05$), metacognitive strategy ($r=0.881$, $\text{sig.} <0.05$), cognitive strategy ($r=0.795$, $\text{sig.} <0.05$) and social strategy ($r=0.745$, $\text{sig.} <0.05$). The findings of the study suggest that all five vocabulary learning strategies have positive influences on the student's vocabulary size, the more they apply them, the bigger their vocabulary size will be. However, it is also worth noticing that the students who use memory strategy often seem to have bigger vocabulary size than others. Accordingly, beside their familiar and commonly-used vocabulary learning strategies, the students are suggested to be open to new strategies, especially memory strategy, such as remembering the sentence in which the word is used; remembering the new word together with the context where it occurs, in order to increase their vocabulary size at the university studying environment.

Table 3. *Correlations between students' vocabulary learning strategies and vocabulary size*

		COG	SOC	MEM	DET	MET	Vocab size
COG	Pearson Correlation	1	.910**	.842**	.899**	.772**	.795**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	158	158	158	158	158	158
SOC	Pearson Correlation	.910**	1	.895**	.905**	.829**	.745**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	158	158	158	158	158	158
MEM	Pearson Correlation	.842**	.895**	1	.950**	.953**	.913**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	158	158	158	158	158	158
DET	Pearson Correlation	.899**	.905**	.950**	1	.862**	.883**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	158	158	158	158	158	158
MET	Pearson Correlation	.772**	.829**	.953**	.862**	1	.881**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	158	158	158	158	158	158
Vocab size	Pearson Correlation	.795**	.745**	.913**	.883**	.881**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	158	158	158	158	158	158

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

3.4. Discussion

The VLS questionnaire and vocabulary size test results have completely answered the two research questions. Firstly, the study's findings show that most students use a variety of vocabulary acquisition tactics; nonetheless, they appear to be more willing to use the determination strategy. Additionally, the results of the vocabulary size test revealed that the majority of them appear to lack an average vocabulary size for comprehending university-level materials. Furthermore, the researchers discovered a link between vocabulary size and the learners' vocabulary learning practices.

Although some researchers found no relationship between vocabulary learning strategy preferences and vocabulary size, such as Kalajahi and Pourshahian (2012) and Najmeh Maghsoudi & Mohammad Golshan (2017) [13], the findings of this study are congruent with the study carried out by F. Filiz Yalçın Tılfarlıoğlu & Yunus Bozgeyik (2012) who indicated that the participants used a wide range of VLS. Furthermore, Memory Strategies correlated positively with the participants' academic and general vocabulary proficiency levels. Barlian Kristanto (2015) also showed that the relationship exists at the moderate level between vocabulary learning strategy use and vocabulary size score.

4. Conclusion

In conclusion, this study indicated that it is critical to investigate the VLS, vocabulary size, and their interaction. They may assist students, teachers, and administrators in becoming aware of VLS profiles, vocabulary knowledge, and proficiency so that vocabulary education and training can be designed and delivered appropriately. According to Nation (2001) [14], strategy training has been shown to be extremely effective in widening students' strategic knowledge. Students should be informed about the effectiveness of their strategies in addition to being aware of the many approaches to manage their vocabulary studies. Furthermore, students, particularly less successful students, can be taught to make educated selections about which method to use in certain learning situations. There is little doubt that professors play a significant influence in students' strategy development. They are the ones who provide students with opportunities to learn about and practice methods. The purpose of strategy training is to encourage learners to take control of their own learning. To attain this goal, teachers must have a broad strategy repertoire in order to prepare their students for both instructional and independent study situations.

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