

A STUDY ON ENGLISH VOCABULARY STRATEGIES  
USED BY NON-ENGLISH MAJORS

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Date: May 2, 2011

A STUDY ON ENGLISH VOCABULARY LEARNING STRATEGIES  
USED BY NON-ENGLISH MAJORS

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A Seminar Paper

Presented to

The Graduate Faculty

University of Wisconsin-Platteville

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In Partial Fulfillment of the

Requirement for the Degree

Masters of Science

in

Education

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by

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2010

## Abstract

Two studies were made to investigate the relationship between the use of strategies and students' learning achievements and the main differences in use of strategies between successful learners and less successful learners. In Study one, one hundred and seventy third-year non-English majors (N-EM) participated in the vocabulary learning strategies questionnaire (Appendix A) and vocabulary level test investigation (Appendix B). After the descriptive statistics and correlation analysis, the statistical results revealed a significant correlation between most strategies and students' learning achievements. The result shows that, a) guessing, dictionary use, and note-taking strategies have a significant positive correlation with V-test scores at  $**p < 0.01$  level, b) repetition strategy has a significant negative correlation with V-test scores at  $**p < 0.01$  level, c) planning, reviewing and testing, selective-attention, association, activation, and self-encouragement strategies have a significant positive correlation with V-test scores at  $*p < 0.05$  level. In Study two, six third-years N-EMs from two groups (successful and less successful) participated in the interviews (Appendix C). The results indicate the differences between two groups in vocabulary learning styles. Successful learners tend to use both reviewing and testing and selective-attention strategies frequently, while less successful learners are only conscious of the selective-attention strategy. Both groups use guessing, dictionary, and note-taking strategies, but successful learners use them more frequently and in a more effective way. Successful learners have a strong affinity for association, activation and self-encouragement strategies, while less successful learners are more likely to adopt word list and repetition strategies.

*Key words:* language learning strategies (LLS), vocabulary learning (VL), second language (SL), foreign language (FL), vocabulary learning strategies (VLS), non-English majors (N-EM)

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## **CHAPTER ONE**

### **INTRODUCTION**

Vocabulary plays a crucial role in all aspects of language learning, including listening, speaking, reading, writing and translating. Words are “basic building blocks of language” (Brown, 1994, P. 365). Among professionals there is a unanimous agreement that vocabulary competence is one of the key symbols of one’s language proficiency. The mastery of vocabulary plays a key role in the whole process of second language (L2) or foreign language (FL) learning. Therefore, learners must learn vocabulary well and develop large vocabularies in order to become proficient in a L2 or FL. Over the past few decades, vocabulary teaching methods were employed without obvious effects, therefore some researchers focused on the student's language learning strategies (LLS), especially their vocabulary learning strategies (VLS). It was in this background that research on LLS and VLS emerged. Research into the area of LLS began in the 1970s. In the early 1970s, the studies mainly concerned the strategies employed by good language learners. It was found that less successful learners could have access to these strategies if they identified them (Rubin, 1975). The result of many studies both abroad and in China on VLS suggests that VLS had a great influence on VL outcomes. However, the studies abroad are not about China and therefore do not describe the true situation of Chinese students. It is meaningful to investigate the use of VLS by non-English majors (N-EM) in China. The focus of literature for the proposal paper included LLS used by ESL learners and the relationship between VLS and language learning achievements. The status of the studies on VLS in China was also reviewed in the context of the topic.

The use of VLS is significant in ESL learning. Teachers should know the overall pattern of VLS used by their students and pay attention when combining vocabulary teaching with strategy

training; and students should also be aware of active management of VLS leads to a better command of vocabulary and beneficial backwash.

### **Statement of the Problem**

The problem expressed as a question is, “What is the relationship between the use of VLS and students’ learning achievements?”

The problem presented in this paper is to identify whether or not students’ learning achievements were affected by vocabulary learning strategies (VLS). Anecdotal evidence and societal perception seems to indicate that it does, but what does the research say? Another objective is to discover the main differences in the use of strategies between successful learners and less successful learners as a whole.

### **Definition of Terms**

**Learning Strategy (LS).** “Foreign or second language (L2) learning strategies are specific actions, behaviors, steps, or techniques that students (often intentionally) use to improve their progress in developing L2 skills. These strategies can facilitate the internalization, storage, retrieval, or use of the new language. Strategies are tools for the self-directed involvement necessary for developing communicative ability” (Oxford, 1992/1993, p. 18).

**Language Learning Strategy (LLS).** Foreign or second language (L2) learning strategies can be summarized in eight different ways according to Ellis (1994). The review of literature includes a discussion of each characteristic.

**VL.** Abbreviation for the term vocabulary learning

**FL.** Abbreviation for the term foreign language

**L2.** Abbreviation for the term L2 = "Language 2" = the language being learned or studied (Commonly-used Acronyms from The Internet TESL Journal Retrieved from <http://iteslj.org/>).

**VLS.** Abbreviation for the term vocabulary learning strategies, they are general approaches, specific behaviors, techniques, or thoughts that learners consciously use to directly or indirectly facilitate their vocabulary learning.

**N-EM.** Abbreviation for the term non-English majors

**ESL.** Abbreviation for the term ESL = English as a Second Language (Studying English as a non-native speaker in a country where English is spoken. Depending on where you are from, the term ESL may be more inclusive and includes EFL. For some people the reverse seems to be true. (Commonly-used Acronyms from The Internet TESL Journal Retrieved from <http://iteslj.org/>).

### **Delimitations of Research**

The research was conducted in and through the Karrmann Library at the University of Wisconsin-Platteville in United States and at the library at the South-Central University for Nationalities in the People Republic of China over sixty (60) days. Primary searches that were conducted via the Internet were through EBSCO host with ERIC, Academic Search Elite, CNKI databases and Google/Google Scholar as the primary sources. Key search topics include “language learning strategies,” “vocabulary learning strategies,” “vocabulary acquisition” and “vocabulary learning.”

### **Method of Approach**

A brief review of literature on the previous theoretical basics of language learning strategies (LLS) and vocabulary learning strategies (VLS) employed by ESL learners was also conducted.

A second review of literature relating to research, studies and theoretical basics of the relationship between VLS and learners' achievements was conducted.

### **Procedure**

The experiment study took 20 days. First, 180 copies of the vocabulary learning strategies (VLS) questionnaire with vocabulary-test (V-test) paper were distributed to the participants to determine the specific VLS they use and their achievement. Secondly, the interviews are used to illustrate the differences in strategy use between successful learners and less successful learners.

### **Participants**

The participants in the study were 180 third-year non-English majors (N-EM) from South Central University for Nationalities in the People Republic of China. Then average age was 21.

### **Instrumentation**

The questionnaire is mainly based on O'Malley and Chamot's (1990) classification of learning strategies, with reference to Gu and Johnson's (1996) questionnaire. V-test paper is partially adapted from Nation's Vocabulary Learning Test (1990). Quantitative data collected from the questionnaire and V-test is put into the SPSS, and then descriptive statistics and correlation analysis are conducted to analyze the data. As for the qualitative study, some students were selected from those participants that were interviewed.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

#### **Language Learning Strategies**

Research into the area of LLS began in the 1970s. From 1970s to the present, a number of researchers have made contributions on learning strategies. The review of the definitions of LLS reveals some problems. The first problem is whether LLS should be regarded as behavioral, mental, or as both. Some researchers are inclined to (Cohen, 2000; Chamot, 1987; Oxford, 1989) define LLS as behavioral, while others (Weinstein and Mayer 1986) view them as both mental and behavioral. Secondly, it is not clear whether LLS should be regarded as conscious or as subconscious. LLS as “deliberate actions” is identified by Chamot (1987). On the contrary, learning strategies are conscious, and learners have a clear goal in their mind (Cohen, 2000). Another problem is whether LLS should be considered as a technique or an approach. “Technique” is more specific, and learning strategies can only be referred to as an “approach” which was argued by Stern (1983). However, learning strategies are thought of as techniques, approaches or deliberate actions by Chamot (1987). The fourth problem concerns whether LLS is considered to have a direct or an indirect effect on language learning. It has a direct effect (Rubin, 1987), but other researchers believe that it is more indirect. Finally, there are differences in viewpoints on what motivates the use of learning strategies. The use of the strategies is rewarding which is held by Oxford (1989), but other researchers think it is only an effect to study something about the L2.

Researchers were also trying to categorize LLS in order to describe them all, while a variety of strategies were being identified. LLS is divided into two main categories by Oxford (1990): direct strategies and indirect strategies, concerning the relationship between the language learning material and the strategies. According to her, direct strategies refer to strategies that

directly involve the target language, in terms of that they require mental processing of the language. The direct strategies are composed of memory strategies for reviewing and memorizing new information; cognitive strategies for producing and understanding the language, and compensation strategies for using the language in spite of gaps. The indirect strategies consist of meta-cognitive strategies for coordinating the learning process, social strategies for learning with other people, and affective strategies for controlling emotions. It offers indirect support for language learning through planning, focusing, evaluating, controlling anxiety, seeking opportunities, increasing cooperation and other methods (Oxford, 1990).

Three main types of strategies are distinguished according to the information processing model, in O'Malley and Chamot's (1990) framework: meta-cognitive, cognitive, and social/affective strategies. Meta-cognitive strategies are higher order executive skills which make use of knowledge about the cognitive process. They constitute an attempt to manage language learning in ways of planning for learning, monitoring one's comprehension or production, and self-evaluating the success of a learning activity. To be specific, they are composed of the following strategies: advance organizers, directed attention, self-management, advance preparation, self-monitoring, delayed production, and self-evaluation. Cognitive strategies are more limited to a specific learning task. They involve more direct operation of the learning material themselves. They have a cognitive or operative function in processing. There are 15 specific strategies under this category: repetition, resourcing, directed physical response, translation, grouping, note-taking, deduction, recombination, imagery, auditory representation, keyword method, contextualization, elaboration, transfer, and inferring. Social/affective strategies, which include cooperation and question for clarification strategy, represent a broad grouping that involves either ideational control over affect or interaction with another person.

For instance, cooperation involves peer interaction to reach a common aim in learning (O'Malley and Chamot's, 1990).

The learning strategies were classified into LLS and language use strategies in terms of different objectives of strategy use by Cohen (2000). LLS includes "identifying the material for learning, distinguishing it from other material, grouping it for easier learning, repeatedly engaging oneself in contact with the material, and remembering it with efforts" (Cohen, 2000, P. 73-74). Language use strategies aim at using a language, which includes retrieval strategies for calling up language material from storage, rehearsal strategies for rehearsing target language structures, cover strategies (a special type of compensatory or coping strategy) and communication strategies for conveying messages in interaction (Cohen, 2000).

In conclusion, the divergence in the existing definitions and classifications results from 1) different strategies identified in different studies and 2) different understandings of the language learning process. To sum up, among all the classifications above, O'Malley and Chamot's (1990) classification is the most comprehensive and reasonable one. The classification of Cohen (2000) is simple and not comprehensive for its exclusion of meta-cognitive strategies, which do some extent effectiveness on the learning language. Oxford's (1990) attempts to build up her classification to cover almost every strategy mentioned previously in the literature, but her classification appears to overlap, such as with social strategy and compensation strategy. This problem is solved by O'Malley and Chamot's (1990) classification for compensation strategy as it is included in social strategy; memory strategy is embedded in cognitive strategy. Moreover, Oxford's (1990) classification has something in common with O'Malley and Chamot's (1990). Her direct strategies correspond to the cognitive strategies, and indirect strategies correspond closely to O'Malley and Chamot's (1990) meta-cognitive strategies. There is no hierarchical

relation between direct and indirect categories (Oxford, 1990). However, the opposite opinion held by Malley and Chamot (1990) is that meta-cognitive control the use of cognitive and social/affective strategies. This hierarchical system indicates the inner relationship between the three categories of learning strategies, and it is easy to put into practice.

### **Vocabulary learning strategies**

VL is an important aspect of language learning, research into VLS can possibly be viewed from at least three different perspectives—the action of VLS is to help them learn new vocabulary in a very broad spectrum; the actions which improve the efficiency of VL; the conscious (as opposed to unconscious) actions taken by learners in order to learn new words.

According to Ahmed (1989) it is possible to view VLS on two levels: macro-strategies which are related to general approaches to learning, and micro-strategies which refer to more detailed, specific learner behaviors. Later on, Schmitt (1997) defines that “vocabulary learning strategies could be any behaviors, steps, techniques, thoughts, and mental processes which affect this rather broadly-defined process” (P. 200). It proves Rubin’s (1987) understanding of learning as “the process by which learners obtain, store, retrieve, and use the information” (P. 29); though here “use” will mainly be defined as vocabulary practice rather than interactional communication. Moreover, Nation (2001) lists some features of a strategy, rather than offer a clear-cut definition. According to him, VLS would “increase the efficiency of vocabulary learning and vocabulary use” (P. 217).

Although a lack of taxonomy development in the area of VLS is mentioned, even by recent publications (Kojic-Sabo and Lightbown, 1999), some researchers have made contributions in this direction. The followings are three representative ones.

The classification of VLS from Gu and Johnson (1996) includes the following categories: meta-cognitive regulation (selective attention, self-initiation), guessing strategies (wider context, immediate context), dictionary strategies (comprehension, extended dictionary strategies, looking-up strategies), note-taking strategies (meaning-oriented note-taking, usage-oriented note-taking), rehearsal strategies (using word lists, oral repetition, visual repetition), encoding strategies (association/elaboration, visual encoding, auditory encoding, use of word-structure, semantic encoding, contextual encoding) and activation strategies.

Another famous researcher Schmitt (1997) offers his classification of VLS according to both the Oxford's (1990) system and the discovery/consolidation distinction. He distinguishes the strategies, which learners use to determine the meaning of new words when they first encounter them from the ones they use to consolidate meaning when they encounter the words again. The former includes determination and social strategies, and the latter includes memory, cognitive and metacognitive strategies.

The classification of VLS from Nation (2001) tries to distinguish among vocabulary knowledge (what is involved in knowing a word) from sources of vocabulary knowledge (finding information about words), and learning processes (establishing knowledge).

### **Previous Studies on Vocabulary Learning Strategies**

During the past few years, a number of studies on VLS have been conducted by scholars both abroad and in China, and many valuable conclusions have been drawn in this field.

Some research on VLS in western countries focused on the description of specific strategies and the evaluation of their effectiveness. A lot of earlier studies concentrated on rote memorization and explored such questions as to the times of repetition needed to learn a list, the maximum number of words to be learned at one time, or the timing of repetition. Generally

speaking, these studies revealed that rote repetition appeared less efficient than using structured reviews and spaced recall, and silent repetition and silent writing were less useful than repeating the words aloud. The misconception that teaching vocabulary equated to making the students memorize word lists was criticized. Rote learning was one of the most inefficient applications of learning strategies. One of the studies was conducted by Cohen and Apeh (1981). They investigated 17 students of different English levels. They identified eleven different types of mnemonic strategies, and thus drew the conclusion that the use of mnemonic association helped VL and any attempt to form association involving the target word assisted memorization.

Whether the guessing strategy could facilitate the retention of a word effectively was suspected by Lawson and Hogben (1996). Their conclusion is that because the rich context reduced the learners' attention to the word itself. Although it was easier for the learner to infer the meaning by presenting words in a context, this was likely to lead to less efficient learning of the new words precisely. A large-scale survey of VLS among Japanese students was conducted by Schmitt (1997). It was found out that rote repetition featured highly in their rating of significance, while strategies based on internal evidence and cross-linguistic translations were low on the list. They also found out differences in the usage of the different types of strategies between students from beginning, intermediate and advanced classes. By examining the following five criteria: vocabulary notes, dictionary use, time, review, learner independence, Kojic-Sabo and Lightbown (1999) investigated forty-seven English as L2 and forty-three English as FL students' approach to VL. They found out that more frequent and detailed strategy users achieved the higher levels, whereas students who lacked of self-reported effort was connected with poor performance. Their result also implied two factors—time and learner

independence—was most closely connected with VL successful and improvement in English proficiency in general.

Some empirical studies in China have been carried out among Chinese English learners in order to explore the VLS further. The study on the VLS used by good and poor Chinese English as FL learners were carried out and described by Gu (1994). The two groups of learners were compared and contrasted at both metacognitive and cognitive levels. It was found that they used dramatically different learning strategies, resulting in very different processes. Later on, in order to provide a general picture of VLS employed by some Chinese college students, a relatively large-scale study was carried out by Gu and Johnson (1996). The subjects in it were 850 second-year students of non-English majors in Beijing Normal University. The research topics were on their vocabulary strategy use as well as the relationship between the strategies and outcomes in VL. The researchers found out that Chinese students used a wide variety of VLS, such as (1) meta-cognitive regulation: self-initiation, selective attention; (2) rehearsal strategies: oral repetition, visual repetition, using of word lists; (3) encoding strategies: association, visual encoding, imaginary encoding, semantic encoding; (4) activation strategies. It was also concluded that most strategies were positively correlated with both vocabulary size and general English proficiency. The results revealed that Chinese college students generally use more meaning-oriented strategies than memorization strategies which are considered the popular VLS among Asian learners. Later on, to get more depth into this field, Gu (2003) examined two successful adult Chinese EFL learners. He found that although the two learners more from the same Chinese learning context, they used different learning styles to achieve the same vocabulary-learning task. The results showed that the successful learners a) argued vocabulary which is the important part of language learning that should be combined with language use b)

represented a high attention on self-initiation and selection c) used extensive vocabulary-learning strategies. However, the two learners only represent a small part of successful Chinese ESL students. Researchers need more specific research on successful learners to provide the learning models for Chinese ESL students. In the same year, Gu (2003) found out different tasks, learner and learning context determine the choice, use and effectiveness of VLS.

Up to now, the main features of the studies on VLS in China at present are as follows: Firstly, VLS in English learning are the focus of the research. Secondly, the research on the relationship between learning strategies and learning outcomes are paid increasing attention by scholars. Thirdly, the factors affecting learning strategies are gradually emphasized. However, VLS research into middle school students has just begun, some researchers have planned to investigate VLS use by middle school students of ten middle schools in Nanjing and Yangzhou through interview, questionnaire, diary, think-aloud, etc. VLS training has set foot in a few colleges through lectures or short-time focused training; however, it is rare to insert VLS training into language teaching, let alone research into the effects of VLS training.

## **CHAPTER THREE**

### **INSTRUMENTATION AND DATA FINDINGS**

#### **Procedure**

The experiment study took 20 days. First of all, 180 copies of the vocabulary learning strategies (VLS) questionnaire with vocabulary-test (V-test) paper were distributed together to the participants to determine the specific VLS they use and their achievement. The participants were required to finish them during their regular class time. The participants were given 20 minutes to complete the questionnaires. Then the vocabulary level tests were administered immediately after the questionnaire was filled (about 15 minutes). All the papers were collected within the set time. The teacher, who assisted the author to carry out the survey in class, repeated written instructions orally before the subjects answered the questionnaires and V-test. On the whole, there were no problems for students to understand the instructions. After class, the author collected the returned questionnaires and V-test paper from the teacher. Secondly, the scores were collected and computed to check the correlations between the use of VLS and V-test scores and if there were correlations, which strategy or strategies was/were most beneficial for the ESL learners. SPSS software was used to process and analyze the data collected from the questionnaires and the V-test paper. After the correlation analysis was performed, the interviews were used to illustrate the differences in strategy use between successful learners and less successful learners. The interviews were conducted one week later in the students' spare time. In the interviews, the author posed a few predetermined questions and then listened to their responses for cues as to which question to ask next, or whether it was important to probe for additional information. During this process, the author tried to make every question clear and motivating. Besides, the interviews were carried out in a friendly and informal way to make the subjects relaxed and thus resulted in more thorough and free expression. All the interviews were

tape-recorded and each of them lasted on about fifteen minutes. Then all tape recordings were transcribed into text for future detailed analysis.

To obtain accurate information on strategy use while not overburdening the participants with L2 processing (Cohen, 2000), the author conducted the interviews in Chinese. After the interviews, some representative qualitative data from the interview were selected to illustrate the differences in strategy use between successful learners and less successful learners. Data shown in this thesis are English translations.

## **Participants**

### **Participants for the quantitative study**

The participants in the study were one hundred and eighty third-year non-English majors (N-EM) from four classes of the College of Foreign Languages from a south central Chinese university. After the questionnaires and test papers were collected, ten copies of questionnaires and test paper were considered invalid and thus eliminated. Finally one hundred and seventy students became the real subjects of this study. Among the one hundred and seventy participants, sixty were girls and one hundred and five were boys, with the average age of twenty one.

The third-year English majors were chosen to participate in the study in view of the following facts. Firstly, by the time of the study, these learners had all had about nine years' English learning experience, six years in secondary school and nearly three years in university, so most of them had a very extensive English vocabulary. Secondly, by taking professional training on English for almost three years in university, it is believed that they have already formed a stable habit of using VLS. Thirdly, although they are N-EM, English still plays a significant role in their study, and English vocabulary levels are closely related to the improvement of their listening, speaking, reading, writing and translating ability. It may have

even greater influence on their future job. Therefore, most of them are eager to master efficient strategies to learn English vocabulary well. Taking these facts into account, the author considers the study, with English as its subjects, as meaningful and of great significance.

### **Participants for the qualitative study**

Among the one hundred and seventy subjects, six participants were selected for an in-depth interview according to the following features. The subjects were willing to discuss the topic without force (Kruger, 1994). And the subjects represented high or low vocabulary proficiency so that they could provide the needed information for the research question. Among the six students, three of them achieved high scores on the V-test, who were defined by the author as “successful learners,” while the other three got very low scores and were defined as “less successful learners.” In Table 1, the author presents the information of the six interview subjects, with their names omitted so as to keep these students anonymous.

***Table 1***

#### ***Information of the 6 interview subjects***

<b>Successful learners</b>	<b>Sex</b>	<b>Age</b>	<b>V-test score</b>
Student A	Male	21	27
Student B	Female	20	27
Student C	Male	21	26
<b>Less successful learners</b>			
Student D	Female	21	10
Student E	Female	20	10
Student F	Male	21	12

## **Instruments**

Vocabulary Learning Strategies Questionnaire: The questionnaire is mainly based on O'Malley and Chamot's (1990) classification of learning strategies, with reference to Gu and Johnson's (1996) questionnaire, the author designed the questionnaire for this study. The questionnaire of Gu and Johnson's (1996) has been widely used by many famous scholars in their research, so it is proved to have high reliability and validity. Appendix A provides a thorough description of the questionnaire in the present study. To avoid the possibility of misunderstanding of the items, the questionnaire is written in Chinese.

The questionnaire is composed of two parts. The first part is about personal data, including the information about the subject's sex and age. The second part includes forty three questionnaire items on VLS, which are categorized into three main categories: metacognitive strategies, cognitive strategies and social/affective strategies. The meta-cognitive category is subdivided into three specific strategies: planning, reviewing & testing, and selective attention. The cognitive category is classified into the following specific strategies: guessing, dictionary use, word list, repetition, association, word formation, grouping, contextualization, and activation. The social/affective category includes three specific strategies. They are inquiry, cooperation and self-encouragement strategy. See Table 2.

**Table 2**

**Description of the VLS Questionnaire**

<b>Category</b>	<b>Strategy</b>	<b>Questions</b>	<b>Number of items</b>	<b>Alpha</b>
Metacognitive strategies	Planning	1	1	
	Reviewing & testing	2,20,21,28	4	0.736
	Selective-attention	3,36	2	0.559
Cognitive strategies	Guessing	4,5,22,23,37,38	6	0.673
	Dictionary use	6,7,24,25	4	0.499
	Note-taking	8,9,26,27	4	0.702
	Word list	10,39	2	0.528
	Repetition	11,29,40	3	0.513
	Association	12,30,41	3	0.578
	Word formation	13,31	2	0.665
	Grouping	14,32,42	3	0.686
	Contextualization	15,33	2	0.613
Activation	16,34,43	3	0.631	
Social/affective strategies	Inquiry	17	1	
	Cooperation	18,35	2	0.542
	Self-encouragement	19	1	

As it is shown above, Table 2 outlines main categories in the questionnaire, the strategies under each category, the number of items consisting of each strategy, and the internal reliability

(alpha value) of each category, which the author analyzes with the help of SPSS. Statistic analysis shows that the alpha value of most groups of items for reliability is over 0.50 and proves the internal reliability of the questionnaire.

The forty three questionnaire items in this part are arranged randomly in order to avoid the subjects' boredom. The present questionnaire adopts a 5-point Likert scale rating system. Each question is provided with five choices which show the different frequency of the use of VLS ranging from "never" to "always." Different scores are given to the 5-scale rating system: "1" stands for "I never do this;" "2" stands for "I seldom do this;" "3" stands for "I sometimes do this;" "4" stands for "I often do this;" "5" stands for "I always do this." Students are required to choose only one of them according to what they really do rather than what they think they should do (Appendix A).

Vocabulary Level Test: V-test paper is partially adapted from Nation's Vocabulary Learning Test (1990). The original measure of Nation's test is composed of five parts: the 2000-word level, the 3000-word level, the 5000-word level, the university-word level, and the 10000-word level. The 2000 and 3000-word levels contain high-frequency words; the 5000-word level is a boundary level between the high-frequency level and low-frequency level; the university-word level consists of words frequently appearing in university textbooks, which does not represent a frequency level; and the 10000-word level covers the low-frequency words. Each word level consists of six groups, which consists of six words to be matched to three definitions. The participants are required to choose the number of the word next to its corresponding meaning. For example:

1. business
2. clock              6      part of a house

3. horse              3      animal with four legs
4. pencil             4      something used for writing
5. shoe
6. wall

This format with an unequal number of words and definitions minimizes the chances of guessing correctly and tests a large number of words within a short period of time (Nation, 1990). All the items in each group belong to the same word class in order to avoid giving any grammatical clues as to the correct definition. Nation's Vocabulary Levels Test has been widely accepted by many language researchers and proves to be a valid test for breadth of vocabulary knowledge. To fit the third-year English majors' actual vocabulary level, only the 3000, 5000 and university word levels are chosen by the author to test the participants' vocabulary levels. Moreover, only three groups in each word level are used in the present thesis to avoid the subjects' boredom. In scoring, the answers are scored as correct or incorrect. Each correct answer is given one point. Therefore, the full mark of this test is 27 points, with each item scored as one point (Appendix B).

Interview: After finishing the questionnaire survey, the author conducted the interviews to get further information about the VLS used by the participants. This may prove the results obtained from the questionnaire, in particular to answer the third research question, i.e. "Are there any differences existing between successful learners and less successful learners in using VLS? If yes, what are those differences?"

General interview questions in Chinese were developed in advance to provide direction for the two groups in their individual interviews. For instance, "Do you make a plan when you learn

new vocabulary?"; "Do you prefer to memorize news words by repeating them or using them in daily life?" (Appendix C)

### **Data findings**

The correlation study on the relationship between VLS and students' learning achievements is conducted with the help of SPSS. In the view of Seliger and Shohamy (1989), by analyzing data collected from descriptive research, correlation analysis is used to examine existing relationships between variables. The correlation study in this survey is the relationship between VLS and the VL achievement, which refers to the V-test scores in this study. Sixteen strategies listed in Table 4 are used as independent variables and the V-test score as one dependent variable. Table 3 is a description of the V-test scores from the one hundred and seventy participants, followed by the result of correlation study in Table 4.

Then based on the results of interviews, the author will discuss the differences in use of VLS between successful learners and less successful learners.

***Table 3***

#### ***Description of V-test scores***

<b>Variable</b>	<b>N of subjects</b>	<b>MPS</b>	<b>Max.</b>	<b>Min.</b>	<b>Mean</b>	<b>S.D.</b>
V-test score	170	27.00	27.00	9.00	22.35	3.89

*Note.* MPS=Maximum possible score; Max=Maximum; Min=Minimum

**Table 4**

***Correlation between VLS and V-test scores***

<b>Categories</b>	<b>Strategies</b>	<b>N</b>	<b>R</b>
Metacognitive strategies	Planning	170	.203*
	Reviewing & testing	170	.207*
	Selective-attention	170	.183*
Cognitive strategies	Guessing	170	.242**
	Dictionary use	170	.376**
	Note-taking	170	.348**
	Word list	170	.017
	Repetition	170	-.287**
	Association	170	.232*
	Word formation	170	.101
	Grouping	170	-.009
	Contextualization	170	.061
	Activation	170	.289*
Social/affective strategies	Inquiry	170	-.067
	Cooperation	170	.129
	Self-encouragement	170	.245*

*Note.* \* P<0.05; \*\* P<0.01 (2-tailed)

From the results in Table 4, all the metacognitive strategies are correlated with VL achievement at 0.05 levels, which indicates that metacognitive strategies are important and helpful in VL. With executive function, metacognitive strategies can be used to regulate and

control the whole process of language learning and specific learning activities as well. Therefore those who use metacognitive strategies consciously may make greater progress in their VL. It is proved that metacognitive strategies can lead to higher learning and better performance. Learners can manage their studies systematically and purposely by using planning strategy ( $R=0.203^*$ ). Reviewing & testing strategy ( $R=0.207^*$ ) helps learners to check their learning outcomes, can correct their mistakes, adjust their VL plans and review what they have learned before regularly. Compared with the previous two strategies, selective-attention ( $R=0.183^*$ ) was frequently used by students at present and it has significant positive correlation with V-test scores. Most students were aware that masteries of the common vocabulary would help them master a language more quickly. Therefore, if students can select what kind of words or which aspects of a word should be memorized in advance in the process of VL, they can master vocabulary efficiently. However, the present study suggests that students should pay more attention to the strategies of planning and reviewing and testing which belong to the metacognitive strategies as well as selective-attention strategy and have a significant positive correlation with V-test scores.

Although there are some cognitive strategies that have no statistical meaning, cognitive strategies do have a great influence on VL from three aspects below:

1. The strategy of guessing, dictionary use, and note-taking are highly correlated to the students' V-test scores achieved 0.01 level.
2. Association and activation strategy are also correlated to their V-test scores achieved 0.05 level.
3. Repetition strategy is negatively correlated to the subjects' V-test scores at the 0.01 level.

The specific strategies were analyzed one by one as follows:

1) Guessing strategy ( $R=0.242^{**}$ ) is significantly correlated with the quality and quantity of students' vocabulary knowledge. Gu and Johnson's study (1996) also reveals that contextual guessing is positively correlated with the scores of vocabulary size. Guessing the meaning of an unknown word demands special effort from students, and involves a learners' deeper processing of learning. According to depth of processing theories ( Craik and Lockhart, 1972), a learner is more likely to store a piece of new information in long-term memory if he or she processes the information deeply at the first meeting. The more students that are involved, the better retention they will have. Through guessing, students not only remember the referential meaning of a word, but also know its collocations, grammatical features, and emotional knowledge. Dictionary use strategy ( $R=0.376^{**}$ ) is useful and efficient for students' VL. First, according to Nation (2001), dictionary use also reduces the cognitive processing workload, and thus learning and retention can be enhanced. Second, dictionary provides both accurate information and good examples of a word which are corpus-based and very authentic. Third, a dictionary contains knowledge that is beyond the learners' competence. It can provide pronunciation, meanings, usage, collocations, and other useful information. Fourth, when students use a dictionary to look up an unknown word, they will definitely pay more attention to some features of the word. This can help the input change into the intake. Note-taking strategy ( $R=0.348^{**}$ ) refers to writing down the useful information of new words being learned, including its English explanation, its antonyms or synonyms, its collocations and relevant expressions. Students benefit a lot from taking notes mainly in two ways. For one thing, taking notes in class helps students concentrate on their studies and requires them to organize what they hear while listening, and this enables them to integrate new knowledge with old. For another, the notes that learners have taken serve as a good

source of reference for later revision.

2) Association strategy ( $R=0.232^*$ ) can be explained in terms of depth of processing theories proposed by Craik and Lockhart (1972). They argued that the degree to which learners process the input determines the retention of new information. The deeper the information is processed, the better the learners are likely to remember it. By associating new words with certain images or pictures, or with some known words, such as its homonym, synonym, or its antonym, association strategy is a deep-encoding approach which involves greater cognitive efforts. All these activities contain a deep level of processing or elaboration on target words. This strategy is not often used by students in this study because of its complexity, but it is indeed of great help for them. Activation strategy ( $R=0.289^*$ ) refers to mastering new words by using them in speaking, reading, writing and in some exercises. Such kinds of activities may create more favorable conditions and opportunities for students to notice the words to be learned, to use the target words in different contexts, and to recall the words that have been met before.

3) Among the cognitive strategies, repetition strategy ( $R=-0.274^{**}$ ) should be paid special attention to. It is used by some students in the study, but it is negatively correlated to V-test scores at the 0.01 level. What is the reason? It is true that in the early stage of VL, repetition can help students to manipulate the oral and written forms of new words by repeating them for many times. Some students can make great progress and achievement from this activity. However, vocabularies are semantically related, and cannot be grouped together randomly by lots of meaning-separate words. Mechanical repetition, as a kind of rote-learning, simplifies the process of VL, and neglects the relationships among words. According to Gairns and Redman (1986), repetition, which is essential to short-term retention may not be adequate for long-term retention. Therefore, in order to achieve more effective memorization, students of English major need to

process and analyze new words more deeply. Too much mechanical repetition will make them feel boring and dreary and thus lead to frustration and other negative effects.

Other cognitive strategies, such as word list, word formation, grouping and contextualization, are relevant to V-test scores to some degree. However, the relationships are very weak and not statistically significant.

Social/affective strategies are in general not frequently used by students. The finding of the correlation analysis indicates that self-encouragement strategy ( $R=0.245^*$ ) is significantly correlated to students' learning achievement at 0.05 level. Other relationships are weak. Self-encouragement helps learners to control anxiety, regulate their emotions, or provide them confidence. VL is a complex process, in which students would naturally meet great difficulty or frustration. If they are able to regulate their emotions properly, they will keep confident in learning, and thus make progress gradually. Instead, students who cannot encourage themselves may easily lose heart in the face of difficulty and face setbacks.

In brief, compared with metacognitive and cognitive VLS, social/affective strategies are not as important and helpful as the former two categories.

The qualitative data from interviews shows that there are significant differences between the two groups in use of the metacognitive strategies. Successful learners tend to use both reviewing & testing and selective-attention strategy frequently, while less successful learners are only conscious of the strategy of selective-attention.

Student B, a successful learner, female, 20, said,

*"I have a special notebook for some interesting and frequently-used words and expressions I encounter in class. I not only try to remember them, but also review them regularly or test myself to make sure I have indeed mastered these words."*

*“I do not think I am able to learn all the new words at one time, though I have a good memory. So I prefer to select some of them to study, including those new words explained by my teacher.”*

Student D, a less successful learner, female, 21, said,

*“I do not try to remember all the words in the textbook, and I only memorize those important words emphasized by our teachers. I want to focus my attention on those words. Usually I do not like to go over the new words until I have to do so, because I think it is time-consuming.”*

This finding is in line with the previous literature review on VLS’ conclusion that beside selective-attention, reviewing or testing regularly plays a more important role in VL than other strategies. The finding also reflects that the successful learners of English majors have the ability or awareness in selecting target words and reviewing what they have learned before.

The study who revealed that successful learners use more cognitive strategies than less successful learners.

First, both of two groups use guessing, dictionary, and note-taking strategies, but the successful learners use them more frequently and in a more effective way.

Student A, a successful learner, male, 21, said,

*“In my opinion, it is easier to guess the meaning of a new word in a sentence or passage, because I can make use of some hints in the context, for example, paraphrases, definitions, grammatical structure of the word, logical development, or background information in the whole text. It is very helpful to guess the meaning of a word with reading materials.”*

Student C, a successful learner, male, 21, said,

*“I consider guessing as important and useful as looking it up in the dictionary, because it*

*is a process that requires the good combination of all kinds of knowledge in that language. Challenge makes progress.”*

Student F, a less successful learner, male, 21, said,

*“Sometimes I guess the meaning of unknown words, but I prefer to ask others for help or look it up in the dictionary more frequently. It’s hard for me to guess its meaning in some complicated sentences. Sometimes the guessed meaning is opposite or irrelevant to the correct one. If I have to guess in exams, I like to guess all by feeling.”*

Since successful learners are able to take advantages of grammatical structure of the sentence, logical development, or background information about the unknown words, they use the guessing strategy more frequently and more effectively than less successful learners.

In both of the two groups students use the dictionary frequently, but they use it in different ways for different purposes. Successful learners can make full use of the dictionary to gain much important information about the target words, but the less successful learners’ purpose of consulting dictionary is only to get the Chinese meaning of the unknown words. For instance:

Student C, a successful learner, male, 21, said,

*“Beside of its accurate pronunciation, I’m also interested in the phrases, set-expressions, example sentences, and idioms about the unknown words when I consult the dictionary. Sometimes I look up two or more words in a dictionary in order to distinguish their meaning and usage, or to find its synonyms and antonyms. I think both the Chinese meaning and English explanation of the unknown words are very useful and important.”*

*“I often bring my dictionary to my classroom, for I like using the dictionary. It is just like my partner in vocabulary learning.”*

Student E, a less successful learner, female, 20, said,

*“Usually I consult the dictionary about an unknown word when I come across it several times. I just like to write down its Chinese meaning so that I can go over it sometime in the future.”*

*“I think the Chinese meaning provided by dictionary is enough for me. I do not like to pay much attention to the English explanation of the new word, such as its connections, homonyms, synonyms, and antonyms.”*

With regard to the note-taking strategy, the difference is found out between the two groups. Although both of them incline to use note-taking strategy, the successful learners use it in a more logical and flexible way.

Student C, a successful learner, male, 21, said,

*“I don't think taking notes means to write down everything the teacher tells us. I just pay attention to the most important information about a new word, and organize the information into a logical and concise structure. Then it will be easier and more convenient for me to review the notes. Besides, I try to take notes in English as much as I can, because it's better for my English learning.”*

*“I often take notes on the margin of my textbook. It's convenient for me to review. In my notes, there are some very special words, such as simple pictures, signals, abbreviations...All of them are helpful and unique.”*

Student F, a less successful learner, male, 21, said,

*“I often write down all the words that the teacher has said, even including what I don't understand at that time. I prefer to take notes in Chinese, unless I have to use English. I think it's more convenient and easy to recognize.”*

Second, the interview shows that successful learners have a strong affinity for association

and activation strategy. Different from this, less successful learners are more likely to adopt word list and repetition strategy. The difference in using these strategies can be reflected from the following examples.

Student B, a successful learner, female, 20, said,

*“When I learn a new word, I like to memorize it by associating it with its synonyms or homonyms. Then I can get more information. Sometimes, drawing a picture relating to the word in my mind can also facilitate me to remember it.”*

*“I would like to use new words in oral communication with my teachers and classmates. Furthermore, I try to use them in writing composition. Practice is the best way to learn something new, I believe.”*

Students A, a successful learner, male, 21, said,

*“I believe that new words can be easily remembered by using them. So I often try to use the new words in communication with others, to make sentence, or in composition writing, though sometimes I make mistakes.”*

Student D, a less successful learner, female, 21, said,

*“I like very much to make a word list in small cards to carry about, in which the left are new words, and right are their Chinese meaning.”*

*“Usually, I memorize new words by repeating the pronunciation and spelling while I’m writing them on the paper. Sometimes I write them again and again until I can recite them. It’s a useful way for me, I think.”*

The above interview data gives us a clear picture of the different tendency in using cognitive strategies between successful and less successful learners. As we have discussed in the quantitative study, the strategies of guessing, dictionary, note-taking, association and activation

are positively correlated to learning achievement, while strategies of repetition and word list have negative or weak relationships with students' learning achievement. So this is why students of English majors have significantly different proficiencies in VL.

As far as the social/affective strategies are concerned, the result from the interview shows that a great difference between successful learners and less successful learners lie in the use of the self-encouragement strategy. To be specific, students with higher proficiency in VL are more willingly to use this strategy.

Student A, a successful learner, male, 21, said,

*"I always encourage myself to use some new words in writing. I'm not afraid of making mistakes. Mistakes make progress."*

*"When I make some achievements in memorizing new vocabulary, I will reward myself with something I like, including material things and spiritual things."*

Student B, a successful learner, female, 20, said,

*"When I prepared for the CET-4, I met a lot of new words, and some of them were very hard to remember. However, I had enough courage and confidence to overcome all the difficulties."*

*"I often try to find out some useful methods to learn new vocabulary, and I will reward myself as encouragement if I make some progress."*

Student E, a less successful learner, female, 20, said,

*"When I read an English passage with many new words or expressions, I may easily get tired and lose patience. Sometimes I just feel frustrated and then give it up."*

*"I am a little afraid of and dislike vocabulary tests, because sometimes the low scores I get from the test may make me feel gloomy. Then I do not know what to do."*

From the above examples, we can see that successful learners are very good at regulating their emotions in VL, especially in self-encouragement. This provides some enlightenment to the less successful learners. Those students, who are not good at encouraging themselves, should try to become braver, especially in front of difficulty. Since the learning effect is greatly influenced by one's emotion and feeling, learners have to make some changes in their performance in VL.

## CHAPTER FOUR

### CONCLUSIONS AND IMPLICATIONS

In conclusion, the correlation analysis indicates that ten in altogether sixteen VLS are significantly correlated with students' learning achievement. Among them, guessing, dictionary use and note-taking strategies have significant positive correlation with V-test scores at the 0.01 level. Repetition strategy has significant negative correlation with V-test scores at the 0.01 level. In addition, planning, reviewing & testing, selective-attention, association, activation, and self-encouragement strategy have significant positive correlation with V-test scores at the 0.05 level. The interviews conducted with successful and less successful learners show that differences do exist between the two groups of students. At a meta-cognitive level, successful learners tend to use both reviewing & testing and selective-attention strategies frequently, while less successful learners are only conscious of the strategy of selective-attention. At a cognitive level, first, both of two groups use guessing, dictionary, and note-taking strategy, but the successful learners use them more frequently and in a more efficient way. Second, successful learners have a strong affinity for association and activation strategy, while less successful learners are more likely to adopt word list and repetition strategy. At social/affective level, successful learners are more willing to use self-encouragement strategy.

Based on the findings of the study, some specific suggestions are provided for students to improve their VL efficiency.

1) The students of N-EM should attach much importance to the metacognitive strategies in VL. They should make plans in advance to select what they should learn, review new words they have learned, and consciously test or evaluate their learning outcomes. Since all the metacognitive strategies are significantly correlated with students learning outcomes, they play a

more important role in VL.

2) The N-EM students should pay more attention to deep level of processing or elaborate processing rather than rote learning. The findings of the study show that deep-processing strategies, such as association, have a significant positive correlation with students' learning achievement. Students can perform elaborating activities in the following ways:

a) Associating the new words with already known words that are similar in some aspects.

The new words can be learned with its synonyms, antonyms, hyponyms, or homonyms.

b) Creating a mental image which associates the word's meaning with its concept, referent, or with the context in which it appears.

3) The students should take full advantage of activation activities by putting new words into use. They can apply new words in making sentences, writing composition, or in oral communication. Although students realize the fact that they can eventually learn new vocabulary by putting them into use, many students do not activate the newly learned words in their study.

4) The students should try to learn vocabulary through extensive reading. This suggestion is put forward for several reasons. First, memorizing new words only by repetition or through word lists makes the students feel dull and tedious, while reading materials is more interesting. Furthermore, according to the result of the study, word list and repetition are not effective strategies for learning new words. Second, extensive reading enables the learners to encounter a new word in different contexts. Through extensive reading, students have more opportunities to get the contextual information about a new word in different contexts, such as its collocation, and other relevant information. This will lead to the deeper understanding of the new word.

The present study also provides English teachers with some practical implications on

English vocabulary teaching.

1) Teachers may emphasize the significance of strategy use in VL for students, especially for N-EM. They can introduce some useful strategies frequently adopted by proficient and successful vocabulary learners, and encourage students to use them. More importantly, teachers should help students to develop effective strategies that are suitable for them.

2) Teachers should help students to choose the reading materials appropriate for their learning proficiency. According to Krashen's input theory of language learning (1985), a FL is learned by understanding messages that are interesting, that do not cause worry for the learner, and that include some unknown language items which are understandable from the context. Students are capable of making good use of VLS when the materials chosen for extensive reading are suitable for their vocabulary proficiency.

3) Teachers should try to create a learning environment pleasing to the students and encourage them to cooperate with each other in learning vocabulary. Cooperation is important in VL. Teachers can design some special activities, for instance, role-play, or debate. Such kind of activities can at least involve the use of cooperation, self-encouragement, reviewing and some other important strategies.

4) Teachers should take the responsibility to combine their vocabulary teaching with strategy training in class. For example, at the beginning of a class, teachers can introduce one useful VLS to students at the beginning of a class, and then choose some new words to teach by using this strategy. This will leave a deep impression on students so that they can learn both the strategy and new words easily at the same time.

5) Teachers should realize that students should be encouraged to seek the ways they find most helpful since their vocabulary possession is very personal and their abilities to exploit its

elasticity are very individual as well. As Gu (2003) in his article *Vocabulary Learning in a Second Language: Person, Task, Context and Strategies* announced, because of such factors as different classifications of VLS, different groups of subjects, different methodologies, etc., the results of studies in this field are not always consistent with each other. Different students have different learning strategies, and the choice of different learning strategies affect learners' proficiency.

To sum up, VL is a complex process that requires efforts from students as well as teachers. Both of them should be involved and make their efforts in this process. China is the country that has the most FL learners in the world, but the width and depth of VLS research does not match the situation. The author hopes that in the coming ten years, we can make more progress in VLS research.

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# Appendix A: Questionnaire

## 英语词汇学习策略调查问卷

### Vocabulary Learning Strategies Questionnaire

词汇是学习中的重点和难点，为了了解同学们词汇学习及策略使用的情况，我们组织了这次关于英语专业学生词汇学习策略的问卷调查。问卷中的每个问题都没有对错之分，请同学们根据自己的**实际情况**填写。

Vocabulary is the key point of English learning. In order to understand the vocabulary learning strategies used by non-English majors, we organized this questionnaire on the non-English Majors vocabulary learning strategies. There is not a right or wrong answer for each question in this questionnaire. Please answer all the questions according to your actual situation.

本次问卷为不记名问卷，其调查结果只用于数据统计分析，请放心填写。非常感谢您的合作与支持！

This is an anonymous questionnaire. The results of its investigation will be used only for statistical analysis. Thank you for your cooperation and support!

注意事项：

- 1.请如实填写；
- 2.请不要漏题；
- 3.如有不理解的地方，请提问。

Note:

1. Please fill out this form truthfully;
2. Please fill all questions;
3. If there is any problem, please ask without hesitation.

第一部分 个人信息

Part 1 Personal Information

性别 \_\_\_\_\_

年龄 \_\_\_\_\_

Sex \_\_\_\_\_

Age \_\_\_\_\_

第二部分 词汇学习策略

Part 2 Vocabulary Learning Strategies

以下是各种词汇学习的策略、方法。请同学们仔细阅读每一句话，然后根据你的真实情况，选择一个适用于你的数字，在该句后面对应的空格内打对勾，表示你在英语词汇学习中使用这种策略的情况。

The following are the variety of vocabulary learning strategies and methods. Please read each items carefully and then choose one option for your real situation. Put a tick (check) in the corresponding sentence to present that you use this kind of strategy in English vocabulary learning.

1 = 我 从不 这样做 ( Never )

2 = 我 很少 会这样做 ( Seldom )

3 = 我 有时 会这样做 ( Sometimes )

4 = 我 经常 这样做 ( Often )

5 = 我 总是 这样做 ( Always )

	1	2	3	4	5
1 制订词汇学习计划和目标 ( 如每天背多少个单词 ) 。 Make a vocabulary study plan and goal (Such as how many words should be remembered per day)					
2 检查自己词汇学习的情况 ,纠正词汇学习和运用中所犯的错误。 Check the situation of vocabulary study by yourself and correct the mistakes which you make during vocabulary learning and using					
3 重点注意老师课堂上讲解的单词。 I would care much about vocabulary items that my teacher					

explains in class.					
4 利用上下文的逻辑关系 ( 如因果关系 ) 来猜测词义。 I make use of the logical development in the context (e.g cause and effect) when guessing the meaning of a word.					
5 利用单词在句子中所做的语法成分来猜测词义。 I make use of the grammatical structure of a sentence when guessing the meaning of a new word.					
6 当一个生词阻碍我理解整个句子 , 甚至整个段落时 , 我才查词典。 When not knowing a word prevents me from understanding a whole sentence or even a whole paragraph, I look it up in the dictionary.					
7 通过查字典 , 找出英语词与词之间意义的细微差别。 I consult a dictionary to find out about the subtle differences in the meanings of English words.					
8 在笔记本上同时记下所查生词的中文意思和英语同义词。 I write down both the Chinese equivalent and the English synonyms of the word I look up.					
9 将所查生词的搭配写在笔记本上 ( 如 arrive 通常和 at 或 in 搭配 ) 。 I take down the collocations of the word I look up. (Such as arrive at, arrive in)					
10 把单词表背好几遍直到不再有生词为止。 I go through my vocabulary list several times until I am sure that I do not have any words on that list that I still don't understand.					
11 当我想记住一个单词时 , 会反复在纸上写这个单词。 When I try to remember a word, I write it repeatedly.					
12 将在拼写上有相似部分的一组词放在一起记 ( 如 assume , consume , presume , resume 等 ) 。 I remember a group of new words that share a similar part in spelling. (Such as assume , consume , presume , resume, etc. )					
13 主动地学习构词法 , 记忆常用的词根、前缀。 I deliberately study word-formation rules in order to remember more words and memorize the commonly used stems and prefixes.					
14 尝试在大脑中建立语义网络 , 并且根据词义分类记忆单词 ( 如表示“漂亮”的单词有哪些 ) 。 I try to create semantic networks in my mind and remember					

words in meaningful groups (Such as listing words which present beauty)					
15 记单词时，结合书中或词典中所给的例句一起记忆。 When I try to remember a word, I remember the sentence in which the word is used.					
16 大量阅读课外文章，从而可以充分运用记过的生词。 I try to read as much as possible so that I can make use of the words I have remembered.					
17 遇到弄不清楚发音、词义或用法的单词，我会向身旁的其他人求教。 I turn to others for help when pronunciation is not clear, acceptation and usage of the words.					
18 经常与同学互相交流，互相检查来记单词，例如以相互提问回答的方式复习单词。 I frequently communicate with the classmates and check each other's notes. For example, we ask each other questions to review the vocabulary.					
19 在学习或记忆单词时，我会针对记单词的进步给予自己适当的鼓励和表扬。 You give yourself some encouragement or comfort for the improvement of vocabulary memorization.					
20 定期复习学过的单词。 I review the learned vocabulary regularly.					
21 学了一些单词或短语后，会进行自测，看自己是否掌握。 I self-test to see if the words are mastered, after learning a few words or phrases.					
22 在所读的段落中寻找相关的定义或解释来证实我猜测的新词词义是否正确。 I look for definitions or expressions in the passage that support my guess about the meaning of a new word.					
23 当猜测词义时，会分析单词的结构(如前缀、词根和后缀)。 I analyze the word structure (prefix, root and suffix), when guessing the meaning of a word.					
24 当我多次看见一个不熟悉的单词时，我才查词典。 When I see an unfamiliar word again and again, I look it up in the dictionary.					
25 如果有的词我认识但却不知如何使用，我就查词典。 When I don't know the usage of a word I already have some					

	knowledge of, I look it up from the dictionary.					
26	<p>当我认为我正在查的这个生词是常用词 ,我就会把它记在笔记本上。</p> <p>I make a note of the meaning of a new word when I think the word I'm looking up is commonly used.</p>					
27	<p>查一个词的时候我记下它的语法内容。</p> <p>I take down grammatical information about a word when I look it up.</p>					
28	<p>对背过的单词本或单词表进行有规律的、有条理的复习。</p> <p>I disciplinary and orderly to review the remembered word notes and lists.</p>					
29	<p>把生词及中文解释重复写很多遍帮助记忆。</p> <p>I write both the new words and their Chinese equivalent repeatedly in order to remember them.</p>					
30	<p>遇到生词时 ,我会想一想这个词的同义词或反义词。</p> <p>When I meet a new word, I search in my memory and see if I have any synonyms or antonyms in my vocabulary stock.</p>					
31	<p>通过分析单词的前缀、词干、后缀来记忆。</p> <p>I analyze words in terms of prefixes, stems and suffixes.</p>					
32	<p>把同义词或反义词放在一起加以记忆。</p> <p>I remember the words together with its synonym and antonym.</p>					
33	<p>通过记住某一单词所在文章的内容来记忆这个单词。</p> <p>I remember the new word together with the context where the new word occurs.</p>					
34	<p>尽量在写作中或口语对话中使用新学的单词。</p> <p>I try to use the newly learned words as much as possible in speech and writing.</p>					
35	<p>经常去英语角 ,通过与别人的交谈学习新单词。</p> <p>I go to English Corner frequently and learn the new words through the conversations with others.</p>					
36	<p>在阅读课外书的时候 ,我会忽略某些生词。</p> <p>I will ignore many new words when reading extracurricular books.</p>					
37	<p>根据整篇文章涉及的内容来猜词义。</p> <p>I guess the meaning of the word according to the content of the entire article.</p>					
38	<p>利用单词的词性 ( 如名词、动词、副词等 ) 来猜测词义。</p> <p>I make use of the part of speech (noun, verb, adverb and so on) of a new word when guessing its meaning.</p>					

39 自己制作并随身携带列有生词和对应汉语意思的生词卡片。 I make vocabulary cards which included the new words and the corresponding Chinese meaning and take them with me wherever I go.					
40 当我想记住一个词时，会大声重复这个词。 When I try to remember a word, I repeat it aloud to myself.					
41 记单词时在头脑中创造一幅图画来帮助记忆。 I create a mental image of the new word to help me remember it.					
42 把单词分类 ( 如天气、动物、乐器等 ) 来记忆。 I group words into categories (e.g. weather, animal, musical instrument and so on) then remember it.					
43 尽量将新学的词用于真实的情境中( 如与他人用英语交流 )。 I try to use the newly learned words in real situations as much as possible (e.g. using English to communicate with others).					

如果愿意，请您留下姓名或联系方式，以便日后深入交流。我们将会对您的个人信息保密：  
Please leave your name and contact information for further communication, so that you may be contacted for a possible follow-up interview. Your answers will be used only by the researchers and your name will not be shared with Chinese or American scholars who are directing the researcher's work. \_\_\_\_\_

## Appendix B: Vocabulary Level Test

### 英语词汇水平测试卷

下面是词汇水平测试，请同学们认真回答。此测试仅仅为了了解大家的英语词汇水平，与你的学业成绩无关。

The following is the vocabulary level test. This test is just to check English vocabulary level, which has nothing to do with your academic performance.

为了保证测试的真实性与研究的科学性，请大家不要使用词典或者与他人交流，自己独立完成测试。

In order to ensure the authenticity of the test and research, please do not use the dictionary or contact others and complete the test by yourself.

请选择与每项意思搭配正确的单词，并把单词的序号写在相对应意思前的横线上（每一组有3个单词是干扰项），请看下例：

Please choose correct word matching each meaning, and write the number of the word on the corresponding line next to the definition (each group has three words constitute interference items), see the following example:

- |             |          |                            |
|-------------|----------|----------------------------|
| 1. business |          |                            |
| 2. clock    | <u>6</u> | part of a house            |
| 3. horse    | <u>3</u> | animal with four legs      |
| 4. pencil   | <u>4</u> | something used for writing |
| 5. shoe     |          |                            |
| 6. wall     |          |                            |

测试开始：Start the Test:

#### The 3000-Word Level

- |                   |       |                               |
|-------------------|-------|-------------------------------|
| 1. administration |       |                               |
| 2. angel          | _____ | managing business and affairs |
| 3. front          | _____ | spirit who serves God         |
| 4. herd           | _____ | group of animals              |
| 5. mate           |       |                               |
| 6. pond           |       |                               |

1. bench

- 2. charity \_\_\_\_\_ part of a country
- 3. fort \_\_\_\_\_ help the poor
- 4. jar \_\_\_\_\_ long seat
- 5. mirror
- 6. province

- 1. coach
- 2. darling \_\_\_\_\_ a thin, flat piece cut from something
- 3. echo \_\_\_\_\_ person who is loved very much
- 4. interior \_\_\_\_\_ sound reflected back to you
- 5. opera
- 6. slice

**The 5000-Word Level**

- 1. alcohol
- 2. apron \_\_\_\_\_ cloth worn in front to protect your clothing
- 3. lure \_\_\_\_\_ stage of development
- 4. mess \_\_\_\_\_ state of untidiness or dirtiness
- 5. phase
- 6. plank

- 1. circus
- 2. jungle \_\_\_\_\_ speech given by a priest in a church
- 3. nomination \_\_\_\_\_ seat without a back or arms
- 4. sermon \_\_\_\_\_ musical instrument
- 5. stool
- 6. trumpet

- 1. apparatus
- 2. compliment \_\_\_\_\_ set of instruments or machinery
- 3. revenue \_\_\_\_\_ money received by the government
- 4. scrap \_\_\_\_\_ expression of admiration
- 5. tile
- 6. ward

**The University Word Level**

- 1. affluence
- 2. axis \_\_\_\_\_ introduction of a new thing
- 3. episode \_\_\_\_\_ one event in a series
- 4. innovation \_\_\_\_\_ wealth
- 5. precision
- 6. tissue

1. deficiency
2. magnitude            \_\_\_\_\_ swinging from side to side
3. oscillation            \_\_\_\_\_ respect
4. prestige                \_\_\_\_\_ lack
5. sanction
6. specification

1. configuration
2. discourse              \_\_\_\_\_ shape
3. hypothesis             \_\_\_\_\_ speech
4. intersection            \_\_\_\_\_ theory
5. partisan
6. propensity

再次感谢您的合作！ Thank you for your cooperation!

## Appendix C: Interview Guide

1. 你认为自己擅长学习英语词汇吗？在哪方面擅长？
  2. 学习生词时你会为自己制定计划吗？你有经常复习所学单词的习惯吗？
  3. 你是否会尽量去记住所遇到的所有生词？
  4. 请你尽可能多的列举自己在词汇学习中经常用到的方法或策略。能否对其中一些策略举例具体说明？
  5. 当你遇到生词时一般会怎样做？是选择猜测还是查词典？你是如何猜测的？/ 如何使用词典的？
  6. 学习生词时你爱记笔记吗？是如何去记的？
  7. 你更喜欢通过不断重复来记忆生词还是通过在日常生活中使用它们来记忆？
  8. 你了解一些构词法或者为单词归类的标准么？
  9. 当你遇到生词时，你会向老师或同学请教么？你喜欢与同学一起学习词汇么？
  10. 在词汇学习中，当你遇到了困难或感到枯燥时，你会怎样做？
1. Do you think you are good at English vocabulary learning? Which aspects you are good at?
  2. Do you have plan when you study new words? Do you regularly review the words which you have learned?
  3. Will you try to remember all your new words which you encountered?
  4. Please list the vocabulary learning strategies or methods which you frequently used as much as possible. And please give some examples for those strategies.
  5. What will you do when you encounter new words? Will you choose to guess it or find it out in the dictionary? How did you guess? / How did you use the dictionary?
  6. Do you like to take notes when you are learning new words? How do you use it?

7. Do you prefer to remember new words through continuous repetition or remember them by using them in your daily life?
8. Do you know some word-building rules or standards of word classification?
9. Will you ask teachers or classmates when you meet new words? Do you like to learn vocabulary with other students?
10. What will you do when you encounter difficulties or feel dull in vocabulary learning?