A study of vocabulary learning strategies used by excellent English learners

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ABSTRACT: The research tries to identify a variety of vocabulary learning strategies adopted by some excellent English learners in the lengthy process of vocabulary learning and consolidating. It first of all, introduces some theoretical study of vocabulary learning strategies conducted by some scholars in relevant fields; then an experiment is conducted to show some common vocabulary learning strategies adopted by three postgraduates who prove to be successful vocabulary learners. Moreover, it tries to explore the relationship between the number of vocabulary learning strategies and the level of vocabulary. Finally, the research provides some advice on vocabulary learning on the basis of research results and analysis.

Keywords: vocabulary learning strategy; excellent English learners; relationship

1 INTRODUCTION

As one of the essential elements of the language system, vocabulary serves as the very basis of language development. Vocabulary is known as the building blocks of language and no language acquisition can take place without the acquisition of vocabulary. Foreign language acquisition is generally deemed to be closely associated with vocabulary study and many scholars prove that lexical deficiency constantly interferes with the daily communication. Simultaneously, many second language learners generally believe that it is vocabulary, rather than grammar that obstructs them from reading, listening, speaking, writing as well as exchanging information with others in a foreign language. They hold that vocabulary carries the basic information they need to understand and express information. However, the importance of vocabulary learning has never been overemphasized in learning a foreign language and it was not until the 1970s that researches into vocabulary learning started to grab considerable attention. Since then, many teachers, researchers and scholars have devoted themselves to this filed, making remarkable achievements. Vocabulary is of prime concern in second language settings because it plays a dominant role in classroom success. It is generally acknowledged nowadays vocabulary,

grammar and phonetics are the three major components that constitute language knowledge, among which vocabulary turns out to be by far the most sizable and unmanageable component in the learning of any language, whether foreign language or one's mother tongue. Undoubtedly, grammar and phonetics are very important in second language acquisition, but vocabulary plays a more important part just. It is believed while without grammar very little can be conveyed, without vocabulary nothing can be conveyed". Therefore, more researches begin to center around how to improve and promote vocabulary learning on the basis of learning strategies.

2 LEARNING STRATEGIES

As for what vocabulary learning strategies are, many researchers and scholars have given respective definitions to it. From their description of learning strategies, we can figure out the definition of vocabulary learning strategies.

2.1 *Definition of learning strategies*

In China, certain researchers have also researched on language learning strategies. For example, they think learning strategies are measures which the students take in order to study more efficiently. According to

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the New Standard of National Curriculum (2003) in China, learning strategies are defined as various actions and procedures that students take to learn and develop their English effectively.

Based on the above mentioned definitions, learning strategies can be ascertained as a sequence of techniques, tactics, approaches or specific behavior which are consciously adopted by learners to ensure effective learning. It involves two aspects: the purpose of using learning strategies is to enhance learning efficiency and the essence of learning strategies is behavior, not simply thoughts of learners.

Source	Definition
Stern, 1983	Strategy is best reserved for general tendencies or overall characteristics of the approach adopted by the learners of language; learning techniques are the term used to mean specific forms of observable learning behavior.
Weinstein & Mayer, 1986	Learning strategies are nothing but the behaviors and thought which a learner engages in in the process of learning and which aim at influencing the learners' encoding process.
Chamot, 1987	Learning strategies include approaches, techniques as well as deliberate actions taken by students so as to promote the learning as well as the recollection of the linguistic information.
Rubin, 1987	Learning strategies are defined as those which can contribute to the development of the language system constructed by the learners and meanwhile affect learning directly.
Oxford, 1989	Learning strategies are behaviors employed by learners to make language learning more successful, self-directed and enjoyable [11].

2.2 Classification of learning strategies

A lot of endeavor has been made to categorize learning strategies and there are so many different ways of defining them. Therefore, vocabulary learning strategies vary a lot. The following classifications are commonly accepted.

Cohen, A.D. & Aphek, E. (1981) divided the learning strategies into language learning strategies and language using strategies. The former involves identifying the material for learning, distinguishing it from other material, grouping it for easier learning, having repeated contact with the material, and formally committing the material to memory.

Language using strategies include retrieval strategies, rehearsal strategies, cover strategies, and communication strategies. Cohen's classification is very vivid and clear, and his description aims to improve the learners' learning and using of a second language through conscious actions. But it fails to identify metacognitive strategies which are very important to vocabulary learning or the learner's clear-cut understanding of vocabulary learning.

According to the relationship between learning strategies and the target language learning, Oxford divided vocabulary learning strategies into two types: direct strategies and indirect strategies. Direct strategies consist of memory strategies, cognitive strategies and compensation strategies. In contrast, indirect strategies "provide indirect support for language learning through focusing, planning, evaluating, seek-

ing opportunities, controlling anxiety, increasing cooperation and empathy and other means" (Oxford, 1989).

Cohen and Aphek (1981) based their study on learning strategies on information-processing model of learning. They classified learning strategies into three types: metacognitive strategies, cognitive strategies and social/affective strategies. Metacognitive strategies are higher executive skills than the other strategies which consist of planning, monitoring, analyzing, evaluating the success of a learning activity. Cognitive strategies are involved in more specific learning tasks and operate directly on incoming information, manipulating it in ways that enhance learning. Social / effective strategies represent a broad grouping that involves either interaction with another person or ideational control over affect.

2.3 Vocabulary learning strategies

Vocabulary learning strategies are based on the theoretical framework of language learning strategies, and are important components of the language learning strategies. In this paper, vocabulary means the total number of words that make up a language and accordingly vocabulary learning strategies refer to the methods and techniques used by learners with the purpose of learning vocabulary well.

Cohen and Aphek (1981) categorize the vocabulary learning strategies into the cognitive strategy, meta-cognitive strategy and social /emotion strategy. The author thinks that this classification is quite reasonable and adopts it throughout the paper.

2.4 Research into vocabulary learning strategies

The strategies employed by language learners have drawn more and more attention among teachers and researchers alike. It is generally agreed that successful language learners are likely to apply strategies appropriate to their own language learning needs. There do exist some researches into vocabulary learning strategies in the west.

Researchers like Craik and Lockhart (1975) defined Depth of Processing as "a series or hierarchy of processing stages where greater 'depth' implies a greater degree of semantic or cognitive analysis" [5]. This whole processing takes place in different stages. In a recent study conducted by West (1980), it is suggested that learning through incidental learning is effective when students know how to take advantage of it [14]. Meara (1980) thinks it is words that make up a language; considerable evidence shows that a learner's vocabulary size highly predicts his general language ability [7]. Cohen and Aphek (1981) investigate seventeen English-speaking students learning Hebrew, among whom nine were beginners and six were at intermediate level and two were advanced learners [4]. Brown & Palinscar (1982) hold that the strategies that

are connected with the learning process, planning for learning, management of comprehension or production in the process of vocabulary learning and self-evaluation after the learning activities are classified as the Metacognitive strategies [2]. Oxford (1989) regards learning strategies as external activities and gives such a definition "language learning strategies are behaviors or actions which learners use to make language learning more successful, self-directed and enjoyable."

Then Ehrman & Oxford (1990) consider language learning strategies as the "often conscious" behaviors that learners use to facilitate their learning [6]. Brown & Perry (1991) say that learners can be taught explicitly as for how to enlarge their vocabulary in all appropriate vocabulary learning strategies training rather than simply let to learn vocabulary in their own way [3]. Studies indicated that using dictionary can aid both comprehension and improve vocabulary acquisition (Knight, 1994) [9]. Though individual vocabulary learning strategies have been increasingly researched (Avila & Sadoski, 1996), only a few researchers have investigated vocabulary-learning strategies as a whole [1].

Gu & Johnson (1996) applied two dimensions of vocabulary learning strategies for their study: meta-cognitive and cognitive strategies, which involved guessing, consulting a dictionary, note-taking, rehearsal, encoding and activating, all of which can be further subcategorized [8]. The total number of strategies in their study totaled up to Wenden (1998) gives estimation about the importance of knowledge of vocabulary in text Comprehension [13]. He states that it is estimated that if over 10 percent of the words in passage are beyond one's knowledge, the reader will get frustrated and tend to give up.

Laufer (2003) conducted three experiments to examine the two important ways used in vocabulary learning: reading and productive activities [12]. Nassaji (2003) studies the use of strategies and knowledge sources in second language lexical inferencing as well as their relationship with inferential success [10].

The studies at home and abroad described different aspects of vocabulary learning strategies and all the researches show that there is still a great shortage in this filed; What's more, participants of these studies are mostly college students and there are few studies on excellent English postgraduates. So a study into this group of English learners is in urgent need.

3 A RESEARCH INTO VOCABULARY LEARNING STRATEGIES

3.1 *Purpose of the research*

This research aims to identify common vocabulary learning strategies shared by representative excellent English vocabulary learners for the sake of those who devote much time and energy to vocabulary learning but achieve little satisfactory effect so that they may be greatly enlightened to get twice the result with half the effort in the course of learning vocabulary.

Besides, the research is intended to explore and discover the relationship between vocabulary learning strategies and level of vocabulary.

3.2 *Research questions*

(1) Do excellent English learners adopt some strategies in vocabulary learning?
(2) What seems to be the relationship between learning strategies and level of vocabulary?
(3) What are the similarities in terms of vocabulary learning strategies shared by representative excellent English learners?

3.3 *Subjects*

To constitute a representative sample of excellent vocabulary learners, 3 English postgraduates from the Foreign Language School of Hubei University are selected: 1-Lv Qi; 2-Huang Xin; 3-Hu Jianhua. They all turn out to have passed TEM 4 and 8 without a hitch. They are often found to read a large variety of profound English reading materials without constantly resorting to dictionaries and to be quite familiar with the words they have learnt so far whenever they are consulted about them. Table 1 presents some basic personal information about them.

Table 1. Basic personal information about the three subjects

Subject	Sex	Age	TEM8	Estimated vocabulary level
1	Male	26	74	Over 10000
2	Male	24	62	7000-9000
3	Male	23	67	8000-9000

3.4 *Research method*

The researcher adopts the case-study approach which belongs to qualitative research and aims at providing an in-depth, detailed description of the learning strategies of the subjects.

There are three subjects in all included in the research .The researcher studies the three subjects individually and tries to ascertain the inventory of the individual vocabulary learning strategies under the framework of J. Michael O'Malley Anna Uhl Chamot before classifying them.

3.5 *Instrument*

The instrument includes a questionnaire and an interview.

(1) Questionnaire
This part contains 22 statements concerning vocabulary learning strategies; each has 5 scales, ranking

Table 2. The questionnaire

Classification	strategies	Specific strategies	1	2	3	4	5
Meta-cognitive strategies	a. Advanced organizers	1. Planning a schedule					
	b. Selective attention	2. Paying more attention to key words					
		3. Paying attention to frequently appearing words					
	c. Self-monitoring	4. Reviewing words regularly					
		5. Self-checking words regularly					
	d. Self-evaluation	6. Summarizing the errors					
Cognitive strategies	e. Repetition	7. Remembering words by reading					
		8. Remembering words by writing repeatedly					
		9. Reciting word-lists					
	f. Resourcing	10. Ascertain various meanings of a word					
	g. Practice	11. Word practice					
	h. Transfer	12. Memorizing collocations					
		13. Memorizing words in context					
	i. Translation	14. Memorizing words with mother tongue					
	j. Inferencing	15. Guessing word meaning by its components					
		16. Guessing on the basis of syntactic relations					
	k. Elaboration	17. Association by means of pronunciation, shape and meaning					
	l. Reading	18. Extensive reading after class to enlarge vocabulary					
	m. Keyword method	19. Remembering a word with a keyword					
	n. Grouping	20. Remembering a word by deduction					
Social mediation	o. Cooperation	21. Remembering words by cooperating with others					
	p. Self-stimulation	22. Stimulating yourself					

from never / seldom / sometimes / often / always. And these 22 statements are divided into three parts.

According to O'Malley and Chamot (2001) (See Table 2), metacognitive strategies involve advanced organizers, selective attention, self-monitoring and self-evaluation. Cognitive strategies involve repetition, resourcing, practice, transfer, translation, inferencing, elaboration, reading, keyword method and grouping. Social mediation involves self-stimulation and cooperation.

(2) Interview

The other instrument for data collection adopted by the researcher is structured interview, which is based on a series of systematic and relevant open-ended interview questions defined from the start—interview schedule. They are designed to elicit the vocabulary learning behavior and experience of the interviewees. To guarantee the reliability of the interview, the same questions are asked to the interviewees in the same order for the purpose of guaranteeing adequate reliability. The whole process of the interview is audio-taped and then the data is transcribed.

Interview conducted between the researcher and subject Lu Qi goes like this:

R: What did you mainly attribute your success in TEM 4 & 8 to?

L: A large vocabulary and constant practice concerning reading comprehension

R: How large is your vocabulary according to your gross estimation?

L: More than 10,000. Perhaps 10000-12000.

R: Many students find it boring to memorize words and show little interest in it, and what about you?

L: I am anxious to expand my vocabulary for communication, so I show great interest in it.

R: In what way do you manage to learn vocabulary?

L: Firstly, I would emphasize on those words which I am anxious and interested to know. Then, I would selectively give priority to those usually involved in oral communication. Besides, I often focus on those key words often involved in tests, such as TEM4, TEM 8, TOEFL, etc.

R: How do you often deal with the new words that you come across in reading materials?

L: I often appeal to the available information; I mean the context, to guess meanings of new words. Then after the reading, I sometimes refer to the dictionary to check my guess and to consolidate my impression upon the new words. Sometimes, I choose to consult my classmates for the information or explanation of the new word so that I can remember it better.

R: Excellent! Apart from all the above-mentioned ways of learning new words, what other measures do you often take?

L: Well, in my opinion, immersing myself in a large number of vocabulary exercises related to TEM4 & 8 also proves to be an effective way to expand vocabulary. Those exercises where I made mistakes will further strengthen my impression upon the new words. Sometimes, I ask my classmates to give a dictation to me!

R: Many students often complain that they are prone to forget the newly learnt words even if they try to memorize them constantly, so how do you handle this problem?

L: I used to be entangled by this problem. However, I then learnt to put them to the real life situations for practice repeatedly. Again and again, they become part of life and will not be forgotten easily. Meanwhile,

I repeatedly write and read sentences with the words I've recently acquired. And I also refer to the glossary book to check my memory of the words I'm not sure and put them in a word-list made by myself so as to remind me of their existence.

R: Terrific! Then how do you often deal with the words that are easily confused and misused?

L: As for the former, I often make meaningful personal associations with the easily confused ones. For example, meat and meet are easily confused, then I can associate meat with eat by saying eat meat. The two letters "e" in "meet" are associated with two persons......

Interview conducted to Huang Xin and Hu Jianhua is done in the same way and some data are collected. (The process is omitted here)

3.6 Data analysis

3.6.1 Data analysis of the questionnaire

Normally, to evaluate the reliability of the questionnaire, the Cronbach a coefficient for the scale can be examined. A result that exceeds 0.70 is considered to indicate that the research undertaken is highly reliable.

The Cronbach a coefficient for the scale of this research was 0.874 (see Table 3), indicating reliability well in excess of benchmark of 0.70. All the other items correlated with the whole questionnaire. This questionnaire proved to be highly effective.

Table 3. Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.874	.875	22

According to Table 4, it's obvious that excellent English learners adopt some strategies in vocabulary learning. Some of the strategies are frequently adopted by them. Rather than rely excessively on flexible deductive or inferencing strategies like guessing, students with large vocabulary tend to use more mechanical cognitive techniques like writing repeatedly (M=3.667), remembering the word lists (M=3,6310) and remembering words by reading (M=3.5000). Based on Table 2, we can also see excellent students are able to combine somewhat mechanical cognitive learning strategies with general and macroscopic metacognitive strategies such as selective attention (pay more attention to the frequently appearing words). This indicates that cognitive and metacognitive strategies should be adopted in combination in the course of vocabulary learning. This can also account for fact that those who just learn words by rote all day long without adopting any metacognitive strategies always end in poor vocabulary. So those non-English majors without the background knowledge of cognitive and metacognitive strategies often have a smaller vocabulary than the English majors with a command of these strategies. Therefore, the students must adopt more vocabulary learning strategies so as to improve their English study.

Table 4. Five frequently used strategies adopted by the students

N	Strategy	Mean	S.D.
1	Frequently appearing words	3.4881	1.0666
2	Remembering words by reading	3.5000	1.1425
3	Remembering words by writing repeatedly	3.6667	1.1460
4	Reciting word-lists	3.6310	1.1137
5	Self-stimulation	3.3512	1.1743

Self-stimulation (M=3.3512.) is relatively low among the five most frequently used cognitive strategies. The phenomena may be ascribed to the learning habits and conventions of Chinese students, who are educated to work hard from early childhood. They firmly believe that as long as they work hard and learn by rote, they will achieve satisfactory grades in their study. "Self-stimulation" may embody Chinese students' diligence to a great degree. On the other hand, Chinese students turn out somewhat too "shy" to ask questions, and on many occasions are reluctant to exchange and share their viewpoints with peers in group work. They are often anxious about "losing face" if their idea is wrong or meaningless, or just may not believe the strategy is helpful to their study.

3.6.2 Data analysis of the interview

After the questionnaire the researcher summarized the specific strategies the three subjects used and classified them under the framework of O'Malley and Chamot concerning learning strategies.

From Table 5, we can easily find that subject 1 has employed the largest number of vocabulary learning strategies which ranks the first among the three subjects. Meanwhile, the metacognitive strategies that subject 1 has adopted exceed those of subjects 2 and 3 in number. All this is in line with his level of vocabulary. Namely, subject 1 has used the largest number of vocabulary learning strategies and accordingly, he has obtained the highest level of vocabulary among the three all. In contrast, subject 2 has employed fewer learning strategies than subject 1 on the whole, with the fewest metacognitive strategies among the three. Incidentally, he has got the lowest level of vocabulary of the three. Subject 3 has the medium level of vocabulary in the three and the number of his total strategies and metacognitive strategies also rank the middle of three. It's a good indication that the number of vocabulary learning strategies which one applies to learning vocabulary has something to do with the number of learning strategies that he employs, with the metacognitve learning strategies playing the most fundamental part. The more strategies one uses in vocabulary learning, the larger his vocabulary is likely to be. The metacognitive strategies exert more effect upon the learners' vocabulary than the other two kinds of learning strategies.

Table 5. The specific strategies the three subjects used

Name / Strategy	Metacognitive (6)	Cognitive (14)	Social mediation (2)	22
Lv Q	3 50%	10 71%	1 50%	14 64%
Huang X	1 17%	6 43%	1 50%	8 36%
Hu JH	1 17/%	10 71%	1 50%	12 55%

4 RESEARCH FINDINGS

Excellent language learner's vocabulary level tends to be in positive proportion to the number of his vocabulary learning strategies, with metacognitive strategies playing a most influential and decisive role.

The common metacognitive strategies shared by excellent vocabulary learners prove to be: selective attention. The cognitive strategies the three learners share are repetition and the social mediation strategies they have in common is self-stimulation. All the 3 excellent English learners adopt a variety of learning strategies which include: metacognitive, cognitive and social meditation. This indicates that three different types of learning strategies should be used in combination rather than in isolation if satisfactory learning result is to be achieved in vocabulary learning process.

5 SUGGESTION

If Chinese English learners want to gain a large vocabulary and memorize the words they have tried to remember well enough, they should employ a large number of vocabulary learning strategies, including the metacognitive, cognitive and social mediation under the framework of learning vocabulary.

What's more, vocabulary learners should be aware that different strategies should be used while coping with different tasks，rather than attempting to use the "one strategy fits all" approach．

6 LIMITATIONS

Due to limited time and energy, the researcher failed to get more subjects for interview. The data collected is not representative enough to guarantee its external validity. Meanwhile, due to the difficulty in controlling some intervening variables, the internal validity of the research needs to be further improved.

CONFLICT OF INTEREST

The authors confirm that this article content has no conflicts of interest.

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