EXPLORING VOCABULARY LEARNING BELIEFS AND
STRATEGIES OF HIGH- AND LOW- ACHIEVING
NON-ENGLISH MAJORS
AT SOUTHWEST JIAOTONG UNIVERSITY
EMEI CAMPUS, CHINA

JUNYAN HE

A THESIS SUBMITTED
FOR THE DEGREE OF MASTER OF ARTS IN
ENGLISH LANGUAGE TEACHING
MA-ELT

GRADUATE SCHOOL OF ENGLISH (GSE)
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Thesis Title	EXPLORING THE BELIEFS ABOUT VOCABULARY LEARNING METHODS AND THE VOCABULARY STRATEGIES ADOPTED BY NON-ENGLISH MAJORS AT SOUTHWEST JIAOTONG UNIVERSITY
Name	Ms. Junyan He
Advisor	Dr.Elizabeth Waltor-Echols
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The Graduate School of Assumption University has approved this final report of the twelve-credit course, 7000 Thesis, submitted in partial fulfillment of the requirements for the degree of Master of Arts (ELT/ELL)

Approval Committee:

Elizabeth Walter-Echols

(Dr.Elizabeth Waltor-Echols)
Advisor

P Sripicham

(Dr.Passapong Sripicham)
External Examiner

(Prof.Dr.Joseph Foley)
Chairman

PLAGIARISM STATEMENT

Statement: *I certify that all the material in this study which is not my own work has been identified and acknowledged, and that no material is included for which a degree has already been conferred upon me.*

Signed: Junyan He

Date:

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ABSTRACT

This study investigates vocabulary learning strategies adopted by non-English majors in China, as well as their beliefs about how vocabulary should be learned. It aims to get a better understanding of the differences in vocabulary learning beliefs and strategies between high- and low-proficiency students.

Although some studies have explored the Chinese learners' beliefs and strategy use in vocabulary learning by employing a quantitative approach, consensus is still lacking. To gain further information, the researcher used a combination of quantitative and qualitative approaches to conduct the current study. The data for the study was obtained through three instruments: an English vocabulary placement test, questionnaires with both closed and open-ended questions, and interviews. Based on their scores in the vocabulary placement test, 80 second-year non-English majors, including 40 high-achievers and 40 low-achievers, were drawn from Southwest Jiaotong University, Emei campus. The questionnaires were aimed at eliciting information about beliefs and strategies adopted by the participants, and interview data were used to supplement the findings from the questionnaires.

The results indicate that the differences in vocabulary learning beliefs between high-achievers and low-achievers were significant only in the 'acquisition belief', but not in the 'memory belief' and 'learning belief'. Most of them believed that vocabulary learned should be put to use and many of them took a negative view of the belief that vocabulary must be learned by memorizing wordlists. The acquisition belief that vocabulary can be picked up through extensive reading was held more strongly by the higher level learners than the lower level learners. However, not many of them believed that there was a single method for learning vocabulary effectively. They held that it is better to combine different methods in vocabulary learning.

Significant differences between the two groups of learners were found in the use of

six categories of vocabulary learning strategies. The most striking difference lay in the fact that most high-achievers consciously accessed various sources to learn vocabulary, while low-achievers relied too much on textbooks and wordlists. Both groups of learners were found to use memory strategies frequently, but high-achievers employed more complex and thoughtful memorization than low-achievers. High-achievers used more strategies more frequently than their lower level counterparts. Even so, they failed to apply a wider range of strategies, and their strategies mainly served to help them achieve high marks in examinations. There was hardly any correlation between the participants' learning beliefs and their test results, but strong correlation was found between their vocabulary learning strategies and their test results. The correlation between the vocabulary learning beliefs and vocabulary learning strategies was also found to be positive but relatively weak.

It is expected that knowing learners' strategies will enable teachers to make training in strategy use a part of a vocabulary development programme, thereby strengthening the learners' study of English.

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Chapter One

Introduction

1.0 Introduction

This chapter presents an introduction to the research project, which focuses on ways of learning English vocabulary of Chinese students as well as their problems encountered in learning vocabulary. The chapter will describe the background of the study (1.1), the present situation of vocabulary learning in China (1.2), rationale of the study (1.3), the significance of the study (1.4), research questions (1.5), definitions of terms used in this study (1.6), and lastly, the organization of the thesis (1.7).

1.1 Background of the study

Vocabulary is one of the indispensable components of the language system. Words are "basic building blocks of language" (Brown 1994: 365). Except for rare occasions, we cannot communicate without vocabulary. That is why vocabulary acquisition is considered by many to be an important aspect of foreign language learning. As Wilkins (1978: 111) asserts, "Without grammar, little can be conveyed; without vocabulary, nothing can be conveyed". In other words, without a solid mastery of vocabulary, other language skills will be like attics in the air. In many cases, language teachers may find that "getting learners to do language tasks when their vocabulary is inadequate for the task is a frustrating experience" (Nation 1990: 2). The importance of vocabulary knowledge in learning a foreign language is summed up by McCarthy, who in an interview for *Cambridge Connection* explained why he was interested in vocabulary:

> Vocabulary forms the biggest part of the meaning of any language, and vocabulary is the biggest problem for most learners, so I've always been interested in ways of helping learners in building up a big vocabulary as fast and as efficiently as possible.
>
> (McCarthy 2001: 2, cited in Fan 2003: 222)

As a result of "the growing awareness that aptitude was not the governing factor in language learning success" (Schmitt 1997: 199), more and more researchers have agreed that the success of language learning depends mainly on the learners and their learning strategies. There is a lot of evidence that the use of learning strategies is closely related to learning achievement and that "good language learners use a variety of strategies to assist them in gaining command over new language skills" (O'Malley and Chamot 1985: 557). A number of studies have explored learners' strategy use in lexical acquisition (e.g. Cohen and Aphek 1980, 1981; Carter and McCarthy, 1988; Brown and Perry, 1991; Lawson and Hogben, 1996; Schmitt 1997, 2000; Nation 1990, 2001). These studies provide the approaches for investigating and assessing student learning strategies dealing with vocabulary learning. However, "despite the renewed interest in lexical acquisition, consensus is still lacking over central issues such as the conceptualization of the vocabulary acquisition process, the role of context, the role of individual differences in lexical acquisition, and the effectiveness of various vocabulary learning strategies" (Kojic-Sabo and Lightbown 1999: 176). To gain further information on some of these issues, surveying what EFL learners actually do to facilitate their vocabulary learning seems to be a fundamental step.

Following research in the West in the field of second language acquisition, research

into EFL learner strategies in vocabulary learning in China has also been conducted. (e.g. Gu 1994, 2002; Gu and Johnson 1996; Wu and Wang 1998; Wang Wenyu 1998; Zhang 2001). Wu and Wang (1998) investigated vocabulary learning strategies of 202 non-English majors and found that there were statistically significant differences between good and poor learners in strategy use. Gu and Johnson (1996) reported that their subjects used a wide variety of strategies and stated that adult Chinese learners did not rely on memorization strategies for vocabulary learning, contrary to a prevalent concept about Asian learners. However, Wang Wenyu (1998) argued that Chinese college students did not believe that vocabulary could be acquired naturally. Instead, they believed that vocabulary must be learned intentionally and used a series of memory strategies to do it. Because of the different subjects, objectives and classifications, some of their results were not in agreement with each other. In addition, much of the research employed only a quantitative approach, which might have failed to reveal the respondents' individual beliefs and strategy use. Therefore investigation is still needed by using a combination of quantitative and qualitative approaches to confirm what strategies are often used by college students in China as well as their beliefs about how vocabulary should be learned.

1.2 Present situation of vocabulary learning in China

With the development of economic globalization and international cooperation, English has begun to play an important role in China and is more and more widely used. English is regarded as an indispensable tool for academic and career advancement in China and is a compulsory course at every university. At the end of

their second year, all non-English majors are required to take the College English Test (CET) Band 4, a nation-wide standardized English proficiency test. Passing CET4 is the minimum requirement for students getting a Bachelor's degree in key universities.

According to the College English Syllabus, a university student should have mastered at least 4500 words after two years of studying at university. With the growing awareness of the need for communicative competence, along with the washback of the CET examination, Chinese college learners are increasingly concerned about the effectiveness of their vocabulary learning. However, the English vocabulary is not only huge in terms of the number of words, but it is also very complex because there are many aspects of vocabulary knowledge that must be attended to. In addition, a typical EFL environment is characterized by learners who "frequently encounter unknown words in text materials and need to learn and retain the meanings of some of these words for later use" (Lawson and Hogben 1996: 103). Many Chinese college students make great efforts to enlarge their vocabulary size, only to find that unknown words are still a barrier for their reading comprehension, and that their writing and speaking look simple, colorless and monotonous due to the poor mastery of vocabulary. The frustration of reading a student's writing, thinking "I know what you mean, but that's not the way to say it" (Lewis 1997: 259) is a painful experience teachers often suffer. Thus, college students in China need to broaden their vocabulary to express themselves more clearly and appropriately in a wide range of situations.

1.3 Rationale of the study

Southwest Jiaotong University, Emei Campus (SWJTUEM), where the researcher works and conducted the study, is one of the key national universities directly under the administration of the Ministry of Education in China. One of the questions most frequently asked by students was "*Are there any effective strategies for us to increase our vocabulary size?*" A usual reply from many teachers would be "*Try your best to read more and put the vocabulary into context.*" In practice, systematic vocabulary learning strategy instruction had never been carried out. Some teachers devoted considerable time in class to explaining the dictionary meaning of each word in the word list at the end of each text, after which students were expected to memorize these words by themselves. Other teachers, however, went to another extreme. They spent little time in class explaining vocabulary and required the students to learn by themselves outside class by consulting a dictionary. Vocabulary acquisition, which plays a crucial role in English learning, was a neglected area of research at SWJTUEM. Due to the lack of research, little was known about what learning strategies had been adopted by the students. To offer better vocabulary instruction requires a good understand of learners' beliefs and strategy use in terms of vocabulary learning. Therefore, this research was conducted to gain information on the vocabulary learning strategies learners actually use to facilitate their learning, as well as their beliefs about how vocabulary should be learned. Although some previous studies have revealed that 'good' and 'poor' learners employed different strategies in vocabulary learning (e.g. Ahmed 1989, Sanaoui 1995, Gu and Johnson 1996), there

still lacks a relatively comprehensive study of what Chinese college high- and low-proficiency learners do with their English vocabulary learning. This study used both quantitative and qualitative approaches to compare the differences between high- and low-achievers in vocabulary learning beliefs and strategy use and analyzed the possible relationship between their learning beliefs, strategies and their vocabulary proficiency.

1.4 Significance of the study

To understand the students' use of and beliefs about vocabulary learning strategies will be beneficial to both teachers and learners at SWJTUEM. Firstly, we can get a general picture of students' beliefs and strategies in vocabulary learning. They may be using some learning strategies without being aware of it, or they may not be aware that other strategies exist that could be more effective. Based on the information gained from the study, the teachers will be able to know the strategies used by both successful and unsuccessful learners, integrate strategy training into their classroom teaching accordingly and "expose students to possible strategies which they may discover feel right for them" (Sokmen1997: 256). Secondly, with facilitative vocabulary learning strategies, the students will be able to broaden their vocabulary in an effective way. They will also be clear about their use of strategies and make proper adjustments on their strategy use to facilitate their vocabulary learning. In the long run, the students may develop useful skills to continue to acquire vocabulary on their own. In addition to the practical significance mentioned above, this research has

investigated two important aspects which had been understudied. One is the *sources*

category for encountering new words in the process of learning; the other is the

strategies used to deal with *lexical phrases*.

In the Chinese education context, for many students and teachers, coursebooks are

considered as the only authority. Also, to serve the practical aim of completing the

syllabus within the stipulated time, many teachers are required to strictly follow the

coursebook from beginning to the end. Consequently, textbooks become the main

source for students encountering new words. We know little about whether students

make use of other sources outside the classroom to get more exposure to vocabulary

in a meaningful context. That is why Fan (2003: 226) said that "sources for

encountering new words are very important in the process of learning, but this

category of strategies has seldom been investigated in its own right".

Many current studies highlight the fact that "vocabulary items are often not single

orthographic units, but rather multi-word units" (Schmitt and McCarthy 1997: 5). As

Lewis (1993:121) suggests, the mind uses 'chunks' of prefabricated language because

these are easier to process and use than an equivalent number of individual words that

have to be strung together via syntactical rules. Although it is widely acknowledged

that collocations are indispensable and should play an important part in second

language teaching, they are also problematic for language learners. Little is known

about how the students deal with lexical phrases in vocabulary learning, so it is

important to investigate whether learners pay attention to these chunks, which may help them develop fluency. Therefore, a category of strategies used to deal with *lexical phrases* was established for this study.

1.5 Research questions

The major issues that the study aims to investigate are the following:

1) What are the beliefs among high-achievers about how vocabulary should be learned?

2) What are the strategies often used by high-achievers in vocabulary learning?

3) What are the beliefs among low-achievers about how vocabulary should be learned?

4) What are the strategies often used by low-achievers in vocabulary learning?

5) Are there any differences in vocabulary learning beliefs and strategies between the high-achievers and low-achievers?

1.6 Definitions of the terminology

Listed below are some important terms used in the thesis:

Vocabulary: Traditionally, "The term vocabulary refers to a list or set of words for a particular language or a list or set of words that individual speakers of a language might use" (Hatch and Brown 1995: 1). But according to Schmitt (2000: 2), vocabulary can be defined as a set of lexemes (or lexical items) that "functions as a single meaning unit, regardless of the number of words it contains." In this thesis, the term "vocabulary" refers to all the lexical items, which "may be individual words, or full sentences---institutionalized utterances---that convey fixed social or pragmatic meaning within a given community" (Lewis 1997:255). So, vocabulary, words, lexical

items and phrases will be used interchangeably in this thesis.

Vocabulary learning strategies: Vocabulary learning strategies (VLS) are methods or techniques that learners use to acquire vocabulary. They are defined by Oxford as "specific actions taken by learners to make vocabulary learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (Oxford 1990: 8). In this thesis, VLS include the techniques used by students to facilitate vocabulary learning both inside and outside the classroom.

Vocabulary learning beliefs: Vocabulary learning beliefs refer to the learners' attitudes towards vocabulary learning, which is developed during the process of learning vocabulary both through self-experience and the outside world's influence. In this thesis, vocabulary learning beliefs indicate students' assumptions about how to learn vocabulary and about the approaches they believe to be useful.

Cognitive strategies: 'Cognitive strategies' refers to processes and behavior which learners employ directly to help them improve their ability to learn or remember something. In this thesis, they refer to the following strategies: guessing an unknown word's meaning from the context; memory strategies such as written and oral repetition, associating the word with some previously learned piece of knowledge; and strategies used to deal with lexical chunks.

Metacognitive strategies: According to Schmitt (2000: 136), "metacognitive

strategies involve a conscious overview of the learning process and making decisions about planning, monitoring, or evaluating the best ways to study". In this thesis, they refer to the following strategies: planning ways of vocabulary learning; deciding on methods of review; finding ways of practice; and improving access to input.

Lexical phrases: According to Lewis (1997: 255-260), "language consists broadly of four different kinds of lexical items, the constituent 'chunks' of any language. Each chunk may be placed on a generative spectrum between poles ranging from absolutely fixed to very free, including *Polywords, Collocations, Institutionalized utterances*, and *Sentence frames and heads.* Polywords consist of more than one word; they are restricted to those (usually short) phrases that have a degree of idiomaticity, such as 'by the way' or 'on the contrary'. Collocations are some pairs or groups of words that co-occur with very high frequency. Institutionalized utterances are typical of the spoken rather than of the written mode; they tend to express pragmatic rather than referential meaning; they may be full sentences or sentence heads which can be learned and used as a whole, such as 'It's nothing to do with me', 'If I were you, I'd...'. Sentence frames and heads are the written equivalents of institutionalized utterances. In this thesis, lexical phrases include idioms, set phrases, collocations and idiomatic expressions.

Corpus: A corpus is a large collection of samples of a language held on a computer. According to Tomlinson (1998: ix), "corpus is a bank of authentic texts collected in

order to find out how language is actually used". The samples can come from anywhere the language is used, in speech and in writing. A corpus helps us to understand more about the language and see how people use it when they speak and write.

1.7 Organization of the thesis

This thesis consists of five chapters. Chapter One presents a general introduction to the study, including the background of the study, the rationale and significance of the study, research questions, and definitions of some key terms used in the thesis. In Chapter Two, a literature review provides an overview of the general situation of research into vocabulary acquisition as well as vocabulary learning strategies, which thus lay a solid theoretical foundation for the present empirical research. Chapter Three deals with the details of how the study was conducted. The chapter starts with the restated research questions and information about the subjects, then presents the instruments used to collect the data and the procedures for data collection and analysis. Chapter Four reports the results of the data collection and presents the analysis and discussion of the findings arising from the analysis. Chapter Five provides the conclusions from the study, points out a number of pedagogical implications and limitations and offers suggestions for further research.

Chapter Two

Literature Review

2.0 Introduction

This chapter discusses in more detail some of the theoretical underpinnings which guide the thesis. It first reviews studies on vocabulary acquisition (2.1), including the complex nature of vocabulary learning and approaches to vocabulary learning and acquisition. Then it presents studies on the relationship between learning beliefs and learning strategies (2.2). Next, it focuses on research into vocabulary learning strategies (2.3), including background, classification and some common vocabulary learning strategies, and major findings concerning Chinese EFL learners' beliefs and strategies. Lastly, this chapter looks at research into the vocabulary learning approaches of 'good' and 'poor' learners (2.4).

2.1 Studies on vocabulary acquisition

The importance of vocabulary in the ESL/ EFL learning process has been widely recognized and well-established. Many researchers, such as Wilkins (1978), Lord (1974), and Richards (1976), put forward the idea that vocabulary should no longer be the 'Cinderella' of language teaching. Rather, vocabulary should be viewed as "a skill in which the learner is actively involved, and a concern with what and how the learner might learn" (Carter and McCarthy 1988: 43). Due to the complex nature of vocabulary learning, McCarthy (2001, cited in Fan 2003: 222) points out that vocabulary is a prime difficulty to overcome for most learners.

2.1.1 The complexity of vocabulary learning

The complexity of vocabulary learning involves, first, the many aspects of knowing an L2 word. According to Nation (1990: 30-32), word knowledge includes vocabulary knowledge under four dimensions, *form, position, function* and *meaning*. Under the dimension of form, one needs to learn both the spoken form and the written form of a word. Position refers to the knowledge of its specific grammatical properties and collocations. Function means that when we know a word we need to know whether it is a frequently occurring word or a rare one. More importantly, we need to know whether it is being used appropriately in a certain context. The meaning of a word includes being able to see which shade of meaning is most suitable for the context in which it occurs. In addition, knowing the meaning of a word may include being able to make various associations with other related words. Furthermore, each aspect consists of receptive and productive knowledge. Being able to understand a word is known as receptive knowledge and is normally connected with listening and reading, while productive vocabulary can be recalled and used appropriately in speaking and writing. There is a general assumption that, in one's lexicon knowledge, receptive vocabulary is much larger than productive vocabulary. However, no clear gap exists between the two; there is some interaction between receptive and productive skills in the process of learning a language.

The complexity of vocabulary learning also involves its "incremental nature", to use Schmitt's (2000: 4) term. According to him, "Words are not instantaneously acquired,

at least not for adult L2 learners. Rather, they are gradually learned over a period of time from numerous exposures". Studies show that "it requires five to sixteen, even more, repetitions for a word to be learned" (Nation 1990: 44). As noted by Nation (1990: 45), if we neglect recycling, many partially known words will be forgotten, leading to the waste of all the efforts put into learning them.

For many EFL learners, to learn about how words behave and the relationships they form in real-life communication makes vocabulary learning complicated. Since words do not exist in isolation, it is important to study the complex and varied types of relations that exist between words. Computer-aided research gives us vast amounts of information to the effect that the near-synonym has different collocates or grammatical/structural patterns. According to Lewis (1997: 255), "Language consists broadly of four different kinds of lexical items, the constituent 'chunks' of any language. Each chunk may be placed on a generative spectrum between poles ranging from absolutely fixed to very free". For example, idioms and some phrasal verbs are absolutely fixed. Many learners find the learning load in the case of idioms particularly heavy because there is little or no clue as to the meaning of the idiom from the meaning of each individual word on which it is built. In China, some researchers, such as Wang and Zheng (2004: 83), urge that "Teachers should teach students collocations. Scientific students in particular should learn collocations and chunks, because technical language has a greater tendency (than creative writing, for example) to use fixed chunks".

In short, the complexity of vocabulary learning lies at least in the fact that lexical knowledge is made up of different kinds of word knowledge and that not all of them can be learned simultaneously. Each word-knowledge type may be receptively or productively known regardless of the degree of mastery of the others. In addition, large number of unanalyzed chunks exists in English, and idiomaticity seems to present a big obstacle to fluent comprehension, even in advanced learners. While designing the vocabulary placement test and the questionnaire, the researcher tried to take the complex nature of vocabulary learning into consideration. During the interviews, the researcher tried to find out what difficulties the learners might encounter in the process of vocabulary learning.

2.1.2 Approaches to vocabulary learning and acquisition

Conflicting views exist among language professionals concerning the relative superiority of two approaches to learning second language vocabulary: learning words in context / incidental learning vs. learning words out of context / intentional learning. Nation (2001: 222) explains that learning from context is taken to mean the incidental learning of vocabulary while the main focus of the learners' attention is on the message of the text. It includes learning from extensive reading, learning from taking part in conversations, and learning from listening to stories, films, television or the radio. It does not include deliberately learning words and their definitions or translations, even if these words are presented in isolated sentence contexts. Convictions are strong among many language professionals that contextualized vocabulary learning is more effective than learning words in lists. Oxford and

Scarcella (1994: 231-243), for example, observe that decontextualized learning (word lists) may help students memorize vocabulary for tests, but students are likely to rapidly forget words memorized in this way. McCarthy (1990) argues that a word learned in a meaningful context is best assimilated and remembered. Schmitt (2000: 150) stresses that "reading is considered a key means to vocabulary development".

However, some studies have failed to produce findings favoring context-dependent vocabulary learning. For example, Hulstijn (1992: 122), conducting several studies of adult L2 learners, concluded that "the retention of word meanings in a true incidental learning task is very low indeed". Nagy (1997: 75) also argues that "context plays a relatively less important role, and explicit instruction a relatively greater role in the vocabulary growth of second-language learners". Moreover, in recent literature dealing with vocabulary acquisition, increasing advocacy can be seen for explicitly teaching words out of context at an early stage of language acquisition, with more context-based vocabulary learning taking place at later stages of language development. (e.g. Coady, 1997; Meara 1997; Nation and Newton 1997).

In recent years, a potentially effective approach to teaching vocabulary emerging through research findings is to combine decontextualized vocabulary instruction with contextualized learning. According to Schmitt (2000: 121), "The consensus is that, for second language learners at least, both explicit and incidental learning are necessary, and should be seen as complementary". As far as the different vocabulary learning

approaches are concerned, what do Chinese adult learners believe to be effective? In this study, the participants' beliefs about how vocabulary should be learned have been investigated.

2.2 The relationship between learning beliefs and learning strategies

In recent years, more and more teachers and researchers have realized that learning process and learner factors play a critical role in language learning. Learners bring to learning their own beliefs, goals, attitudes, and decisions, which in turn influence how they approach their learning. According to Richards (1994: 52), "Learners' belief systems cover a wide range of issues and can influence learners' motivation to learn, their expectations about language learning, their perceptions about what is easy or difficult about a language, as well as the kind of learning strategies they favor." Studies have shown that some beliefs are probably shaped by students' previous experiences as language learners or influence from other people, while other beliefs are probably shaped by students' cultural background (Wenden, 1987; Horwitz, 1987).

Research on the relationship between language learning beliefs and strategies has suggested that beliefs would be likely to be an underlying factor in the use of strategies. Beliefs may positively promote one's language learning or impede learning activities. For example, in Gu and Johnson's (1996) study, a very small group of the best students believed in learning through natural exposure, as in reading and careful study, rather than memorization, so they sought words that they considered to be useful and dealt with words in context. On the contrary, the least successful students

were "the passive strategy users", who strongly believed in memorization and employed few other strategies. Yu (2007: 58-61) made a survey on the relationship between learning beliefs and learning strategies and reached the conclusion that "There are significant correlations between learning beliefs and strategies. However, not all correct beliefs can be transformed into corresponding strategies. Beliefs are affected by factors such as learning environment, learners' personalities and previous learning experience."

These findings can be seen to be of value to the present study in that they have motivated the researcher's interest in looking at the beliefs and strategies used by successful and unsuccessful learners at SWJTUEM. This has, in turn, determined the formulation of the research questions as well as the correlation analysis between beliefs and strategies.

2.3 Research into vocabulary learning strategies
2.3.1 Background

In the last two decades, the field of second language acquisition (SLA) has seen "the reemergence of interest in one area of language study, vocabulary, and the appearance of a newly recognized aspect---learner strategies" (Schmitt 1997:199). Research into the area of language strategies began in the 1970s as part of the movement away "from exclusive focus on the improvement of teaching to an increased concern for how learners go about their learning tasks in a second or foreign language" (Oxford 1990: vii). Meanwhile, researchers and teachers have shown an increasing interest in

determining what distinguishes successful from less successful learners, particularly in their use of learning strategies.

2.3.2 Classification and some common vocabulary learning strategies

With the rising interest in vocabulary learning and acquisition within the field of second language acquisition, there have been a number of attempts to develop taxonomies of vocabulary learning strategies. One of the first attempts at providing a comprehensive overview of language learning strategies can be found in Oxford (1990:17). She identified two distinct approaches to language learning: *direct* (memory / cognitive / compensation) and *indirect* (metacognitive/ social/ affective) strategies. At more or less the same time, O'Malley and Chamot (1990: 44-45) proposed three types of strategies: *metacognitive, cognitive*, and *social/ affective strategies*. The latter researcher stresses an important role that the metacognitive strategy plays in second language learning.

In the area of VLS taxonomy development, Schmitt (1997) has made the most notable efforts in terms of the range of strategies considered. His goal was to develop a comprehensive inventory of individual VLS, and classify them along two dimensions with 58 items. However, as Schmitt (1997: 204) says, "In practice, it was quite difficult to decide where to draw the line between different strategies and their numerous variations." Other notable classification schemes have been proposed by Nation (2001: 218) and Gu and Johnson (1996). Nation distinguishes strategies relating to the *planning* of vocabulary learning from strategies involving access to

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sources of vocabulary knowledge, and *learning processes*. Based on O'Malley and Chamot's classification, Gu and Johnson (1996) have developed a vocabulary learning strategies questionnaire containing a considerable number of strategies, divided into the following major categories: *beliefs about vocabulary learning, metacognitive regulation, guessing strategies, dictionary strategies, note-taking strategies, memory strategies* and *activation strategies*. Although "this is a substantial and comprehensive study with important messages for teachers and learners" (Nation 2001: 227), it fails to investigate students' *sources* of vocabulary knowledge, which is important in the process of learning. In the largest scale project ever conducted in Hong Kong concerning the learning of English vocabulary by Cantonese speakers, Fan (2003: 222-239) developed nine categories of vocabulary learning strategies: *management, sources, guessing, dictionary, repetition, association, grouping, analysis,* and *known words*. As to the taxonomies of vocabulary learning strategies, Fan makes the following comments:

In fact, no classification is perfect, and any individual strategy may fall into one category or another, depending on the aspect in focus. What is beyond dispute is that strategies may broadly be divided between those that are 'more directly related to individual learning tasks and entail direct manipulation or transformation of the learning materials,' that is, the *cognitive strategies*, and those that are connected with 'the learning process, planning for learning, monitoring of comprehension or production while it is taking place, and self-evaluation after the learning activities have been completed,' that is, *the metacognitive strategies*.

Fan (2003: 223)

2.3.2.1 Metacognitive strategies

"Metacognitive strategies involve a conscious overview of the learning process and

making decisions about planning, monitoring, or evaluating the best ways to study"
(Schmitt 2000: 136). They are generally broad strategies and concerned with how to
make the learning process more efficient, such as deciding on the most efficient
methods of study/review. O'Malley and Chamot (1990: 8) hold that "students without
metacognitive approaches are essentially learners without direction or opportunity to
plan their learning, monitor their progress, or review their accomplishments and
future learning directions."

For vocabulary acquisition, research has shown that most forgetting occurs soon after
the end of a learning session. After that major loss, the rate of forgetting slows down.
Taking this into account, the principles for expanding rehearsal suggest that learners
should review new material soon after they encounter it, and then at gradually
increasing intervals (Baddeley 1990, cited in Nation 2001: 77). Nation (2001:219)
proposes planning repetition. He says that planning can involve a schedule for
reviewing previously studied items.

This point of view coincides with traditional Chinese cultural values relating to
education. Confucius encouraged his students to make an effort to learn and
advocated planning and reviewing while learning. In order to investigate how the
students made decisions on ways of planning, reviewing and practicing in vocabulary
learning, the researcher established a *management* category in the questionnaire.

Metacognitive strategies also "include improving access to input" (Schmitt 2000: 136). To acquire an L2 efficiently, it is crucial to get maximum exposure to it. With English becoming a global language, the pervasiveness of English-medium books, magazines, newspapers, movies and songs offers a rich resource for language learners. Studies have shown that the input environment is different between EFL and ESL students. Kojic-Sabo and Lightbown (1999: 189) conclude that "exposure to English outside the classroom places ESL students in a better position to initiate independent learning activities geared to vocabulary acquisition. EFL students may need to go somewhat 'out of their way' to create for themselves opportunities to encounter and practice new English words." The English learning environment is inadequate for students in China. Gu (2003: 73) mentions that China is an "input-poor" EFL environment. In order to investigate how the participants expose themselves to English materials and thus maximize exposure to vocabulary, the researcher established a *sources* category in the questionnaire.

2.3.2.2 Cognitive strategies

Cognitive strategies refer to processes and behavior which learners use to help them improve their ability to learn or remember something. Some cognitive strategies are related to decontextualized learning, such as rehearsal and elaboration. The rehearsal strategy involves saying or writing something over and over again and includes "repetition and using mechanical means to study vocabulary" (Schmitt 2000: 136). Elaboration involves making links between new information and what one already

knows, or between different parts of new information. Other cognitive strategies are related to contextualized learning, such as guessing the word meaning from context.

Repetition or rote memorization strategies are applied by EFL students in many parts of the world. In ancient China, Confucius believed in using repetition to strengthen knowledge, as illustrated by an old Chinese proverb, 'Learn 300 Tang poems by heart and one becomes a poet.' This traditional learning style for L1 (Chinese) has transferred to learning L2 (English). Concerning the effectiveness of repetition, consensus is still lacking. Rote memorization has been considered an "undesirable" way of learning and "out of fashion" in communicative language teaching (Read 2000:39). Crow (1986: 242-250) criticized the misconception that teaching vocabulary meant presenting word lists to be memorized. He states, "Rote learning is one of the most ineffective applications of human cognitive facilities." Yet Schmitt (1997: 133) holds that "L2 learners of English are inclined toward using more mechanical strategies." Hulstijn (1997: 219) states that "rehearsal will remain necessary for the many words that L2 learners do not see or hear frequently enough through regular reading and listening". Nation (2001: 76) also points out that the significance of the repetition strategy lies in its being able to strengthen the quality and quantity of word knowledge. The findings of some empirical studies are contradictory in terms of whether Chinese adult learners frequently rely on memorization. For example, Gu and Johnson (1996: 668) argue that adult Chinese learners do not rely on the memorization strategy for vocabulary learning. However,

Wang Wenyu's (1998: 49) findings show that college students in China use a lot of memorization strategies. Given the conflicting findings from previous research, the researcher has made a special attempt to examine the use of repetition strategies by the students in this study.

According to Nation (2001: 104), "Knowing a range of associations for a word helps understand its full meaning and helps recall the word form or its meaning in appropriate contexts." New words can be linked to L2 words that students already know. Usually this involves some kind of sense relationships that can facilitate the memory, such as coordination, synonymies, or opposites. Association involves learners more deeply in the process of learning and can therefore help them to retain more words than simple repetition. Cohen and Aphek (1981, cited in Fan 2003: 224) noted that native English-speaking students reported using meaning, sound, and image association strategies in order to enhance memory of Hebrew words. One kind of association strategy that has been intensively researched is the keyword technique. This strategy, which associates the meaning, sound, and image of the L1 and L2, has been found to improve retention (Hulstijn, 1997). But it has some limitations because it can only function when concrete words are involved in learning. With abstract words and keywords of low imageability, it is difficult to use. Since Chinese and English belong to quite different language systems, it is hard to associate the meaning, sound, and image of the L1 and L2. Thus, this technique may not be suitable for Chinese students. But in vocabulary instruction, other association strategies, such as

synonym and antonym, or making word maps, are often introduced by teachers. An *association* category was established in the questionnaire to see whether the participants often adopted these strategies.

Another strategy at cognitive level is *guessing*, which is related to establishing the meaning of words in context. When learners do not know a word, they must discover its meaning. They can gain knowledge of a new word by guessing from their knowledge of the language, guessing from context, guessing from an L1 cognate, or using reference materials. Guessing an unknown word's meaning from context has been widely advocated in the last two decades as "it has been seen to fit more comfortably with the communicative approach than other, more discrete, discovery strategies" (Schmitt 1997: 209). The incidental learning theory proposed by Krashen (1989:440-464) claims that vocabulary is best acquired incidentally by guessing meanings of the unknown words from context during the reading process. But Nation (2001:233-240) poses some questions which need further experimental investigation, for example: "What proportion of unknown words can be guessed from context? How much vocabulary is learned from context? What can be learned from context?" According to Schmitt,

> The considerable research on textual inferencing shows that guessing can be a major way of acquiring new vocabulary, but that it also has prerequisites. First, the learner must have a certain level of language proficiency in order to use this strategy. The learner must also have adequate background knowledge of the subject and the strategic knowledge of how to effectively go through the inferencing process. In addition, the context itself must be rich enough

with clues to enable guessing, with the most easily utilizable clues being in
close proximity to the target word.

(Schmitt 1997: 209)

In China, reading skill training is one of the main focuses in the curriculum of education, so in the textbooks, there are exercises designed to teach students how to deal with unknown words by using guessing strategies. In Gu and Johnson's (1996) study, positive correlations were found between test scores and contextual guessing. In this study, the researcher has investigated how students with different levels of proficiency made use of clues in context to determine the meaning of unknown words.

To sum up, as far as the effectiveness of each strategy is concerned, the discrepancy in the findings obtained in these studies is perplexing. "In reality, however, learners tend to use a variety of strategies in combination and consistent employment of certain types of strategies forms an approach to vocabulary learning that may considerably influence the outcomes of L2 learning (e.g.Ahmed 1989; Gu 1994; Sanaoui 1995)" (Gu and Johnson 1996: 646). Therefore, "how different learners combine different strategies and how this affects their learning outcomes warrant studying as much as, perhaps more than, the effects of individual strategies" (Gu and Johnson 1996: 647). In this study, the researcher has compared the extent to which successful and unsuccessful learners adopt the following categories of strategy: *management, sources, guessing, repetition, association* and *strategies dealing with lexical phrases.*

2.3.3 Major findings concerning Chinese EFL learners' vocabulary learning beliefs and strategies

Language educators have long recognized that "students consistently adopt types of strategies based either on their beliefs about vocabulary and vocabulary learning (e.g. Abraham and Vann 1987; Horwitz 1987) or on other preexisting cognitive or social factors" (Gu and Johnson 1996: 647). Students have been found to hold a variety of beliefs about how an L2 is best learned. Learners' beliefs are influenced by the social context of learning and can, in turn, influence their attitude toward both the language itself and toward language learning in general (Tumposky 1991, cited in Richards 1994: 52).

In China, some researchers have conducted studies of the vocabulary learning beliefs and strategies adopted by college students. With regard to the belief about whether vocabulary should be learned by memorizing, consensus is still lacking. Findings from Gu and Johnson (1996: 643-679) as well as Wu Xia and Wang Qiang (1998: 23-25) show that participants in both studies seemed to have negative beliefs about the use of rote learning and accepted the belief that vocabulary must be learned and put to use. Gu & Johnson (1996) used a questionnaire to elicit 850 Chinese students' beliefs about vocabulary learning and their self-reported vocabulary learning strategies. Beliefs about vocabulary learning in Section 2 of the questionnaire included 17 statements representing 3 dimensions of beliefs: *vocabulary should be memorized*; *vocabulary should be picked up naturally*; and *vocabulary should be*

studied and used. Gu and Johnson's study profiled the beliefs and strategies of adult

Chinese learners about learning EFL vocabulary. Contrary to popular beliefs about

Asian learners, the participants believed that they generally did not dwell on

memorization, and reported using more meaning-oriented strategies than rote

strategies in learning vocabulary. Results for the three types of beliefs in this study

show that, overall, these learners predominantly believed that vocabulary should be

studied and used. Two years later, Wu and Wang (1998) investigated vocabulary

learning beliefs and strategies of 202 non-English majors. They found that the

participants predominantly believed that vocabulary should be carefully studied in

context and took a negative view of rote learning. Their participants used a wide range

of metacognitive and cognitive strategies for vocabulary learning; there were

correlations between vocabulary learning strategies and the quality and quantity of the

subjects' vocabulary knowledge; and there were statistically significant differences

between good and poor learners in strategy use.

However, findings from Wang Wenyu (1998: 47-52) contradicted those mentioned

above. Wang Wenyu (1998) also employed a quantitative approach to investigate the

relationship between vocabulary learning beliefs and strategies and the retention of

English vocabulary, with 50 Chinese university students as her subjects. Half of the

participants were English majors and the other half were non-English majors. This

study indicated that Chinese EFL learners believed that vocabulary was deliberately

learned by heart instead of being acquired naturally; students were found to use a

series of strategies to facilitate retention while learning English vocabulary items. There was a significant correlation between students' achievements in a vocabulary recall test and their use of memory strategies.

In spite of the fact that these studies reached different conclusions in terms of the beliefs held by their participants, they all suggest that learners' beliefs about vocabulary learning were consistent with their strategy use. However, Fan (2003: 222 −241) indicates that learners in Hong Kong believed: 1) certain strategies were useful, but they did not often use them; or 2) some learners did not believe the strategies they often used were helpful.

The value of these studies for the present research lies in the collection and analysis of quantitative data specifically related to vocabulary learning beliefs and strategies. Parts of both Gu and Johnson's questionnaire and Fan's questionnaire were adapted for the present study. However, the inconsistency in the findings obtained in these studies seem to suggest that the approaches to vocabulary learning used by different subjects were so various that a simple structured questionnaire may not be able to account for them. In order to gain further information, the researcher decided to use open-ended questions and interviews to complement the questionnaire data.

2.4 Research into the vocabulary learning approaches of 'Good' and 'Poor' learners

Other vocabulary learning strategy research has attempted to identify the way in

which 'good' and 'poor' learners approach lexical learning. In a study involving 300 Sudanese learners of English, Ahmed (1989, cited in Kojic-Sabo and Lightbown (1999: 177) found that good learners not only used more vocabulary learning strategies, but also relied more on different strategies than did poorer learners. Generally, the underachieving learners used a smaller range of strategies than the good learners and tended to avoid active practice.

Sanaoui's research (1995: 15-28, cited in Nation 2001: 228) identified two distinctive groups of learners: those who structured their vocabulary learning, independently engaged in a variety of learning activities and practiced target words, and those that did not. Learners with a structured approach were shown to be more successful than those who followed an unstructured approach, regardless of level of instruction or type of instruction received.

Comparing the strategy use of good and poor students, Lawson and Hogben (1996:123) came to the conclusion that "the single feature most obviously distinguishing the two groups is the total amount of strategy use. The high-scoring group recorded more than twice the number of word-by-strategy instances". Moreover, their research shows that successful students not only used more strategies on average but also employed a wider variety of procedures and used them more consistently than their less successful peers.

In Gu and Johnson's study (1996: 664-666), two groups of learners were identified based on their attitudes towards strategy use. They were the active strategy users and passive strategy users. The first group of learners was found to have applied as many strategies as they knew and spent extra time studying English. They were characterized as flexible in using all sorts of strategies. The second group of learners, the passive strategy users, spent much less time in studying English. Besides, they barely employed any strategy, for example, not even visual repetition, for vocabulary learning. This group of learners generally had not developed ways and concepts of how to learn a language.

In a later study, Kojic-Sabo and Lightbown (1999: 176-192) grouped learners according to the vocabulary learning strategy or set of strategies that dominated the learners' approach. Learner independence and time were shown to be associated with the vocabulary learning profiles of the two most successful groups.

As researchers have reached consensus on the important roles of self-awareness, self-monitoring, organization, and active involvement on the learners' part, their studies have advanced our knowledge of students' vocabulary learning strategies. However, these studies reveal little about whether successful learners pay more attention to the learning of lexical phrases in their vocabulary learning than the poor learners do. Thus the present investigation has also analyzed how differently the high-achievers and low-achievers deal with lexical phrases.

To summarize, this chapter has provided an overview of theories and empirical studies of vocabulary learning strategies. It consists of various research theories in vocabulary acquisition and learning, as well as some empirical studies in learners' vocabulary learning beliefs and strategy use. The next chapter will present the methodology employed for this small-scale research.

Chapter Three

Research Methodology

3.0 Introduction

This chapter presents detailed information on the research methodology employed to seek answers to the research questions. In particular, the methodology is discussed in five sections: restatement of the research questions (3.1), instruments for data collection (3.2), participants chosen for the research (3.3), research design (3.4), and data analysis procedure (3.5).

3.1 Restatement of the research questions

The main aim of the research, as stated in Chapter One, was to find out the beliefs about how vocabulary should be learned and the strategies often adopted by non-English majors at SWJTUEM in China. In particular, a comparison has been made between high- and low-achievers in their use of vocabulary learning strategies. Furthermore, the correlations between the vocabulary test results and their beliefs and strategy use were analyzed to reveal to what extent their beliefs and strategy use had an impact on their test results. The following research questions have been formulated:

1) *What are the beliefs among high-achievers about how vocabulary should be learned?*

2) *What are the strategies often used by the high-achievers in vocabulary learning?*

3) *What are the beliefs among low-achievers about how vocabulary should be learned?*

4) *What are the strategies often used by low-achievers in vocabulary learning?*

5) Are there any differences in vocabulary learning beliefs and strategies between the high-achievers and low-achievers?

3.2 Instruments for data collection

Three research instruments were adopted to gather the data for this study. The first instrument, designed to select 40 successful and 40 unsuccessful vocabulary learners who constituted the sample of this research, was a vocabulary placement test. The second instrument was a questionnaire in three parts — personal information (Part I), the students' beliefs about how vocabulary should be learned (Part II), and the strategies the students often use in vocabulary learning (Part III). The third instrument was a semi-structured interview with a small selection of respondents to obtain more information mainly about the students' reported use of vocabulary learning strategies. A brief description of each instrument is below.

3.2.1 Vocabulary placement test

To ensure reliability and validity, the vocabulary placement test (see Appendix 1) was carefully selected. It was composed of three parts. All items in Part I (54%) were selected from those in CET Band 4, which is a criterion-referenced proficiency test for tertiary level students in China and is prepared under the guidance of the Chinese State Education Commission. CET 4 in China has been in official operation for more than a decade. The scores are widely used and frequently interpreted by associated parties or score users for academic or occupational purposes. The 27 multiple-choice items in this part were chosen from the examination papers of the latest 10 years. These items were used to test the respondents' understanding of the meaning of the

selected words, collocations and set phrases, as well as their ability to recognize appropriate words for the context. Part II (36%) was selected from The Vocabulary Level Test (Nation 1990: 269-271). The original measure 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. This test has been adopted by a number of L2 researchers (e.g. Fan, 2003; Fan Lin and Wang Qinghua 2002). For this study, the items of the university word level were adopted. Part III (10%) was selected from exercises in the students' coursebook. In this part, students should have the ability to use the correct form of the given words to fill in the gaps in a passage. In short, different types of items were selected to provide an objective and direct measure of the students' vocabulary learning outcome.

3.2.2 Questionnaire on students' vocabulary learning beliefs and strategy use

The main aim of the questionnaire (see Appendix 2) was to have a better understanding of the beliefs and strategies adopted by high- and low-achievers at SWJTUEM respectively. Gu and Johnson's (1996: 643-679), as well as Fan's (2003: 222-241) questionnaire have been adapted for this study. The number of questions was reduced by leaving out many of those that overlap. Based on the objectives of this study, questions have been added relating to the strategies used to deal with lexical phrases.

The questionnaire comprised three parts. Part I involved some basic information of the students, such as name, gender, major, age, years of learning English and their

score on CET 4, if they had already taken it. This information provided some background experience about the participants. Part II, which sought data on the participants' beliefs about how vocabulary should be learned, consisted of statements representing three dimensions of beliefs: *vocabulary must be learned by memorizing wordlists*; *vocabulary can be picked up through extensive reading*; and *vocabulary should be studied and put to use*. The grouping was based on the findings of previous work on vocabulary learning beliefs related to Chinese students (Gu and Johnson, 1996; Wang Wenyu, 1998). For this section, students were asked to respond on a 5-point Likert scale, ranging from *strongly disagree* (1), *disagree* (2), *have no idea* (3), *agree* (4) to *strongly agree* (5). In this part, an open-ended question was included to build up confirmatory evidence to support the data gained from the close-ended questionnaire as well as to gain more detailed information about the participants' beliefs. Part III of the questionnaire, which contained 32 statements grouped into 6 categories, aimed to investigate the frequency with which students used the different vocabulary learning strategies. The six categories of strategies are listed in Table 3.1.

Table 3.1: The six categories of vocabulary learning strategies

Categories of Strategies	Number of Items	Item Number
Management	6	Item 1-6
Sources	6	Item 7-12
Repetition	4	Item 13-16
Guessing	6	Item 17-22
Association	4	Item 23-26
Lexical phrases	6	Item 27-32

(Adapted from Fan's (2003) questionnaire)

Among them, *management* is a category of metacognitive strategy concerning how the students manage or plan their vocabulary learning. The *sources* category was established to investigate how the students access vocabulary both inside and outside the classroom. *Guessing* is related to establishing the meaning of vocabulary in context. *Repetition* and *association* are memory strategies, of which the former has generally been considered a mechanical technique, whereas the latter is regarded as a strategy involving deep processing. The category of *lexical phrases* is related to strategies dealing with lexical phrases and has never before been explored on its own.

For each of the items in this section, students were asked to respond to the question: *How often do you use the strategy stated?* They responded on a 5-point scale with the choices "very often", "often", "sometimes", "seldom" and "never". These choices were assigned values of 5, 4, 3, 2 and 1 respectively. There were also two open-ended questions in this part, which were used to elicit the students' own summary of their vocabulary learning strategies and allow them to write down any strategies they often used, but that were not mentioned in the questionnaire.

The questionnaire was written in English and not translated into Chinese because it was found from a pilot study of the questionnaire (see Section 3.4.1) that it was comprehensible to the participants. In addition, the teachers were available to answer any questions related to the questionnaire.

3.2.3 Semi-structured interview

In order to obtain qualitative data about the students' reported use of vocabulary learning strategies and get further information to confirm the findings from the questionnaire, ten students from each group were selected to be interviewed about their actual use of vocabulary learning strategies. The interviews were conducted as semi-structured interviews, which have "a structured overall framework but allow for greater flexibility within that, for example in changing the order of questions and for more extensive follow-up responses" (McDonough and McDonough 1997: 183). That is to say, the interviewer sets up a general structure by deciding in advance what ground is to be covered and what main questions are to be asked. This leaves the detailed structure to be worked out during the interview. The person interviewed can answer at some length in his or her own words, and the interviewer responds using follow-up questions to get the interviewee to clarify or expand on the answers. In this study, the interview contained the following five basic questions for both groups of students: 1) *What role does vocabulary play in your English learning? 2) What do you think is the best way to learn vocabulary? 3) How do you learn vocabulary? 4) What difficulties do you have in vocabulary learning? 5) Do you have any expectations about how vocabulary should be taught?*

3.3 The participants chosen for the research

The sample for this study was 80 second-year non-English majors drawn from the college where the researcher teaches, Southwest Jiaotong University, Emei campus (SWJTUEM). Presently, there are 7 disciplines, covering the major fields of civil

engineering, transportation, electrical engineering, mechanical engineering, computer engineering, pharmacology and tourism.

Every year, about 1500 high school graduates who have passed the National College Entrance Examination are enrolled at this university. The students come from different provinces of China. After admission to SWJTUEM, all the students are required to take a series of courses titled College English I, II, III and IV for four semesters. The courses are intended to develop students' skills in listening, speaking, reading, writing and translation.

On entering the university, the students must take part in an English placement test. Based on their performances on the test, they are streamed into three levels of classes. A small number of top students, who can skip College English I and start from College English II, are assigned to Class A. Another small number of weak students are assigned to Class C and have to take the Basic English course before going on to College English I. The majority, who remain in the middle and start their English learning from College English I, are assigned to B group classes.

For purposes of this study, a vocabulary placement test (see Section 3.4.2 for more details) was given to 130 second-year students, including 39 students in Class A, 40 students in Class C and 51 students from a B level class. Based on their scores in the test, the top 40 students (39 from Class A plus 1 from Class B) were identified as

high-achievers in English vocabulary proficiency, while the bottom 40 students (9 from Class B plus 31 from Class C) were identified as low-achievers. Students in Class A and C were chosen from various university-wide majors, while the class in the B-group was chosen from the Civil Engineering Department, which is the biggest department in our university. This made for a good sampling because overall, the groups represented different departments and different levels of English proficiency at SWJTUEM. (see Section 4.1 for detailed information of the participants)

3.4 Research design

In this study, the researcher used a combination of quantitative and qualitative approaches to answer the research questions in order to provide more comprehensive information. The research design was quantitative because the data which were obtained from the responses to the closed questions in the questionnaire could be entered into the SPSS package (13.0 version) to compute descriptive statistics. The design was also qualitative, since some of the data used to support the study were gathered from the responses to the open-ended questions and individual interviews concerning the subjects' beliefs about how vocabulary should be learned and about their practical use of strategies.

3.4.1 Piloting the questionnaire

The questionnaire was first evaluated by three lecturers at Assumption University to ensure the face validity and a few items which might be ambiguous or confusing to the respondents were eliminated. Then a pilot study was conducted on a sample of 10

students chosen randomly from the three groups of learners described above, including 3 students from Class A, 3 students from Class B and 4 students from Class C. The pilot study was conducted to check whether the language used in the questionnaire was comprehensible and clear to the students. The time needed for the completion of the questionnaire was also checked. All the students were encouraged to ask any questions that were unclear or confusing to them. Except for the fact that the students from Class C did not know the meaning of a few words, such as 'modify' and 'collocate', they had no problems with the questionnaire. Therefore, the Chinese equivalents of these words were given in brackets. All the students were able to complete it in 40 minutes.

The data collected from the pilot test were put in SPSS Package (13. 0 version). Cronbach's Alpha internal consistency reliability coefficient was used to test the reliability and internal consistency of the items on the questionnaire. The questionnaire proved highly reliable, with a score of .903, as shown in Table 3.2. A score of more than .70 confirms reliability.

Table 3.2: Reliability of the questionnaire statements

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.903	.898	35

3.4.2 Vocabulary placement test administration

Before the actual data collection commenced, a vocabulary placement test was given to the three classes (A, B and C) with a total number of 130 students, to select 40 successful and 40 unsuccessful vocabulary learners, based on the highest or lowest scores they obtained respectively. The test was administrated in three different regularly scheduled classes. The three class teachers explained to the students that the test was only being used for academic analysis and results would have absolutely no influence upon their marks, so that the subjects took the test in a relatively relaxed atmosphere. However, the students were required to take the test seriously because the results would reflect their vocabulary proficiency. During the test, participants were not allowed to consult dictionaries and other reference books. They had to do the test on their own without discussing answers with their classmates. The test took 45 minutes, which was just the length of one class period. Then it was marked by the researcher and the three teachers. The top 40 students consisted of all the 39 students in Class A plus 1 student from Class B, while 9 students from Class B and 31 students from Class C constituted the bottom 40 students. The average test scores of the three groups are represented in Table 3.3.

It can be seen from Table 3.3 that the overall results of the three groups are distinctive. Compared with their performances on the college admission placement test in 2005, the results of the two tests correlated almost perfectly. All the students in Class A still ranked at top of the lists. The majority of the students in Class C remained at the bottom. However, after 20 months studying in university, changes had taken place on

a few students' performance in Class B and Class C. 9 students from the B group fell

into the lowest 40 students.

Table 3.3: Results of three classes in the vocabulary placement test

Class	Score range			Mean
A	60-70	71-80	81-88	72.18
Number	13	21	5	
B	31-40	41-50	51-59	44.33
Number	17	22	12	
C	10-20	21-40	41-55	28.28
Number	9	26	5	

3.4.3 Questionnaire administration

With the help of their three class teachers, the 80 participants chosen by means of the

vocabulary test were assembled in a classroom. Before the students answered their

surveys, the researcher gave a brief explanation of the purposes of the survey and

instructions on how to fill out the questionnaire. The three class teachers walked

around the classroom and told the participants that they could ask any questions if

they found the items hard to understand. Participants were required to respond to the

questionnaire items without discussing the answers with their classmates, because

strategies differ from person to person. Participants were advised that responses

would not affect course grades and were urged to offer their opinions honestly. It took

the participants 45 minutes to finish the questionnaire. The completed questionnaires

were collected right after the subjects completed them. After all the questionnaires

had been collected, the researcher examined the papers and found that all the students

had completed their questionnaires as required except that 4 students from the higher group and 1 student from the lower group did not answer the second open-ended question.

3.4.4 Interview administration

One week later, 10 students from each group were selected to take part in the interview individually in the teachers' office. The interviewees consisted of the five students who did not answer the open-ended question and another 15 students randomly selected. After a brief exchange of pleasantries to set the interviewee at ease, the interview began. All the interviewees were very cooperative, and they described what they usually did when learning English vocabulary. The interviews were mostly conducted in Chinese (interviewees' mother tongue), so that the students could express their thoughts more clearly. However, two students from the group of high achievers felt confident enough to speak in English throughout the interview. All the interviews were tape-recorded; each of them lasted an average of 10 minutes. After the completion of the interviews, the tape recordings were transcribed for analysis (see Appendix 3 and 4 for two complete translated transcripts of the interviews).

3.5 Data analysis procedure

The data of the study were treated using both quantitative and qualitative analyses. After data collection, the data from the closed questions were entered into a computer data file and analyzed using the SPSS package (13.0 version). The questionnaires of the high-achievers and those of the low-achievers were treated separately so as to

obtain two different data sets. The analyses consist of three phases.

Phase one: Descriptive statistics were first calculated to analyze the questionnaires. Descriptive analysis was used to see the overall pattern of vocabulary learning beliefs and learning strategies used by the students of each group by looking at the mean (M) and standard deviation (SD). The average reported frequency of vocabulary learning strategy use across all students was also calculated for each strategy item to see how often the participants used the specific strategy.

Phase two: The differences in the mean scores of the two groups of learners for each category of the vocabulary learning beliefs and of the learning strategies were compared using an Independent Samples T-test to determine significance throughout the study. The researcher used the standard of $p < .05$, which means that a result was considered statistically significant if it could have occurred by chance fewer than 5 times out of 100.

Phase three: The Pearson Correlation Test was used to see whether there was any correlation between vocabulary learning beliefs, vocabulary learning strategies and students' test results.

The data gained from the open-ended questions and the interviews were used as a complement to the quantitative data of the questionnaire. They offered insights that

helped the researcher to interpret the responses to the questionnaires.

To summarize, this chapter has provided information on the research methodology used in the study and has described the subjects in detail. The instruments used for the data collection and analysis have also been explained. The next chapter will concentrate on the analysis and interpretation of the various types of data collected in order to answer the research questions.

Chapter Four

Data Analysis

4.0 Introduction

This chapter presents an analysis of the data collected from the questionnaire and the interviews. The findings from the two research instruments are combined to provide a better understanding of the research questions. This chapter first describes the participants based on the personal information requested on the questionnaires (4.1); next it provides an analysis and discussion of the questionnaire and interview data (4.2); last, it presents conclusions about the findings with reference to the research questions (4.3).

4.1 Description of the participants

4.1.1 Background experience of the high-achievers

Age: between 18 and 21 (the average age was 19.9)

Gender: 19 females and 21 males

Years of learning English: ranges between 7 and 10

English proficiency: All passed the CET Band 4 examination after 15 months of study at university, with their scores ranging from 446 to 619 (out of 710 and with an average score of 529). (The cut off point for passing the exam is 425.) The CET Band 4 is a nation-wide English proficiency test taken each year across China by university non-English majors.

4.1.2 Background experience of the low-achievers

Age: between 19 and 23 (the average age was 20.5)

Gender: 7 females and 33 males.

Years of learning English: ranges between 7 and 10

English proficiency: None had passed the CET Band 4 examination after 20 months

of study at university. Among them, only 24 students had taken part in the CET4, with

their scores ranging from 299 to 398 (the average score was 347.3). The other

students had not yet had enough confidence to take the test.

So, according to the data gained from the first part of the questionnaire, the students

all shared similar background experience in relation to the number of years they had

spent learning English. As a minimum, they had all learned English for 7 years and

were likely to have developed specific learning strategies. The great difference lay in

the fact that their English proficiency varied greatly. Other factors such as age, gender

and major were not taken into consideration.

4.2 Analysis of the questionnaire and interview data

4.2.1 Analysis and discussion of vocabulary learning beliefs

Gu and Johnson's (1996:673-674) categories for the vocabulary learning beliefs have

been used as labels for items in the questionnaire. In this study, the beliefs about how

vocabulary should be learned consist of three items: *memory belief, acquisition belief*

and *learning belief*. The learners who hold the first believe that vocabulary must be

learned by memorizing word lists. 'Acquisition belief' indicates that vocabulary can

be picked up through extensive reading without explicit learning. The students who

hold the 'learning belief' think that words should be first learned and then put to use.

4.2.1.1 High-achievers' vocabulary learning beliefs

Table 4.1 presents descriptive statistics on each category of vocabulary learning

beliefs held by the high-achievers, which address the first research question: *What are*

the beliefs among high-achievers about how vocabulary should be learned?

Table 4.1: Descriptive statistics of vocabulary learning beliefs held by the high-achievers

Statement	Strongly disagree	Disagree	Have no idea	Agree	Strongly agree	Mean
1. Vocabulary must be learned by memorizing word lists.	3 7.5%	15 37.5%	5 12.5%	17 42.5%	0	2.92
2. Vocabulary can be picked up through extensive reading.	0	0	3 7.5%	26 65%	11 27.5%	4.20
3. Vocabulary studied should be put to use before it is finally learned.	0	0	3 7.5%	11 27.5%	26 65%	4.58

By comparing the means for the three statements, we can see that subjects commonly

accepted the *learning belief* (mean=4.58) and the *acquisition belief* (mean=4.20), but

they took a negative view of the *memory belief* (mean=2.92). When frequencies were

looked at in percentages, they showed that none of the subjects held a negative view

of the *acquisition belief* or the *learning belief*. They held the *learning belief* (65%

responded with 'strongly agree') more strongly than the *acquisition belief* (27.5%

responded with 'strongly agree'), whereas their opinions about *memory belief* varied

greatly (42.5% responded with 'agree'; but about the same number--45% total--responded with 'strongly disagree' or 'disagree'.).

This result contradicts that of Wang Wenyu (1998: 47-52). In her study, the mean score of *Memorization* (mean=4.15) is much higher than that of *Acquisition* (mean=2.41). However, it is partly consistent with that of Gu and Johnson (1996: 643-679) and of Wu Xia and Wang Qiang (1998: 53-57). Their findings indicated that the participants did not seem to believe in memorization. Such inconsistent findings may be due to the differences in participants or the context in which the data were gathered and suggest that further evidence needs to be obtained before a reliable generalization can be made.

Responses to the open-ended question and the interview report shed more light on the participants' beliefs about how vocabulary should be learned. The discussion of the students' responses to the open-ended question is as follows.

****
Question: In your opinion, what's the best way to learn English vocabulary?
****

The students' responses to this question are summarized in Table 4.2. They held four different opinions to this question. Not many of them believed that there was a single method for learning vocabulary effectively. Instead, 18 out of 40 respondents (45%) held the belief that the three approaches should be used together to improve

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vocabulary proficiency. Their beliefs were confirmed by the interview reports.

Table 4.2: What's the best way to learn English vocabulary?

Beliefs held by high-achievers	No.	%	Data samples
To acquire vocabulary through extensive reading	8	20%	*Student17: Try your best to read as more books as you can. The more frequently you encounter the words, the easier you can remember them.*
To memorize wordlists	6	15%	*Student16: In my opinion, vocabulary should be learned by memorizing wordlists. I don't think it's wise to learn words only by reading.*
To use what has been learned as often as possible	8	20%	*Student34: Using the words you have learned as often as possible. Otherwise, some words will be easily forgotten.*
To combine the three methods	18	45%	*Student1: To collect the new words from some reading materials like newspapers and novels, watching some movies. In addition, we should recite wordlists such as CET4 or 6 dictionaries for the examination. Then try to use the words we have learned.*

The students being interviewed said that they believed vocabulary learning could be assisted by extensive reading, but those unknown words should be noted down and consolidated by memorizing and using them. They also mentioned that the method of learning vocabulary only through memorizing word lists was boring and ineffective, but sometimes memorizing word lists was necessary because they could increase their vocabulary size in a relatively short time. They argued that they were not in favor of "mechanical memorization without understanding and thinking". They preferred to read more interesting materials than vocabulary handbooks because they could have more opportunity to keep meeting words that they had met before. They stressed that

the three methods should be employed complementarily. This indicates that the participants believed that both explicit and incidental learning were necessary.

Data source:

Interviewee 6	*I think reading more materials outside classroom is useful because the vocabulary can be forgotten easily just by memorizing word lists. If you often read English books, you can encounter the words frequently and naturally you can remember them and know how to use them. However, memorizing word lists can help us enlarge our vocabulary size quickly and remove the barrier in reading. So I think it's better to combine different ways.*
Interviewee 3	*I believe the more frequently you encounter the words, the easier you can remember them. Vocabulary should be learned by both memorizing the word lists and acquiring through extensive reading.*
Interviewee 2	*I find it's necessary to memorize word list for the sake of CET4 and in this way you can store the incoming information for later use. Although it's boring to memorize the word lists every day, it's useful. After memorizing the word list, I felt it's not difficult for me to read English text or write something in English. The combination of repetition, memorization and practice will lead to deep understanding.*

To sum up, the findings from both the questionnaire and the interviews indicate that the high-achievers held clear beliefs about how vocabulary should be learned. They preferred the *learning belief* and *acquisition belief* rather than the *memory belief*. They also held the belief that learning vocabulary by combining the three methods was more effective than using only one method. Possible reasons can be offered as follows:

The prevalence of the belief that vocabulary learned must be put to use may have resulted from the social context in China. With the development of the national economy, in terms of the needs of the employers and society in general, there is an

urgent call for users of English who can not only read and write but also speak and listen. "'Deaf and dumb learners' are rejected everywhere" (Liu and Dai 2004: 5). So the students have realized that their communicative competence can be enhanced by putting what they learn into practice. They may also have learned from previous learning experiences that after making a great effort to memorize a lot of words from wordlists, these words were neither long retained nor correctly used. That is why they took a negative view of rote memorization. Another influence might well be from the traditional Chinese cultural values, which have influenced both teachers and students. For many Chinese students and teachers, books are considered as "an embodiment of knowledge, wisdom and truth. Knowledge is 'in' the book and can be taken out and put inside the students' head" (Maley 1990: 97). As an old Chinese proverb says, "When the time comes to use your knowledge, you will regret how little you have read". Another one puts it, "In books there are golden houses and beautiful girls." What this means is that one can obtain knowledge through extensive reading, and a knowledgeable man can get what he wants, including money and beautiful girls. Thus, teachers always advocate extensive reading in learning both Chinese and English. However, due to the pressure of an examination-oriented education system which emphasizes accuracy, students are also expected to learn what they read by heart. It is possible to speculate that these high-achievers try to learn vocabulary effectively by combining the three methods in order to ensure high marks in examinations as well as communicative competence.

4.2.1.2 Low-achievers' vocabulary learning beliefs

Table 4.3 shows the general descriptive statistics of the low-achievers' beliefs about how vocabulary should be learned, which is related to the third research question:

What are the beliefs among low-achievers about how vocabulary should be learned?

Table 4.3: Descriptive statistics of vocabulary learning beliefs held by the low-achievers

Statement	Strongly disagree	Disagree	Have no idea	Agree	Strongly agree	Mean
1. Vocabulary must be learned by memorizing the word lists.	1 2.5%	10 25%	13 32.5%	14 35%	2 5%	3.15
2. Vocabulary can be picked up through extensive reading.	0	5 12.5%	7 17.5%	22 55%	6 15%	3.73
3. Vocabulary studied should be put to use before it is finally learned.	0	1 2.5%	1 2.5%	18 45%	20 50%	4.43

As indicated in Table 4.3, the *learning belief* (mean=4.43) was the most popular belief among the low-achievers 95% responded with 'agree' and 'strongly agree', which is followed by the *acquisition belief* (mean=3.73), with about 70% of respondents holding a positive view of it. The *memory belief* (mean=3.15) was the least popular belief among the lower group, with only 40% of respondents taking a positive view of it. Comparing the mean scores for the three statements shows that the ranking order is the same as that of the high-achievers. Further information can be obtained through the students' responses to the open-ended question and interview. The participants' responses to the open-ended question are summarized below:

Table 4.4: What's the best way to learn English vocabulary?

Beliefs held by low-achievers	No.	%	Data samples
To memorize wordlists	4	10%	*Student21: If we can stick to memorizing 10 to 15 new words every day, then we can accumulate a lot of vocabulary.*
To combine the memorization of wordlists and extensive reading	16	40%	*Student12: Vocabulary must be learned through memorization. After you learned some words by rote, you need to find some reading materials and encounter those words in context*
To put what has been learned into practice	7	17.5%	*Student24: It's better to have an environment in which we can communicate by using English. It's important to put what have learned into daily communication.*
To combine the three methods	7	17.5%	*Student16: We need to read more and try to remember more words and phrases. Then put what we learned into practice.*
Have no idea about how to learn vocabulary	6	15%	*Student14: I'm not clear about how to learn vocabulary because I am so poor at English and lack interest. I can never remember the English words.*

Table 4.4 shows that the low achievers' beliefs about the best way to learn vocabulary varied a lot. Surprisingly, no one mentioned that vocabulary could be acquired only through extensive reading. Instead, 16 out of 40 students thought that the memorization of wordlists plus extensive reading was effective. This belief ranks at the top of the list. The *memory belief* still ranks at the bottom of the list. Only 4 students (10%) believed that memorizing wordlists alone was best. 7 students (17.5%) emphasized the importance of the learning environment and stated that it was best to put what had been learned into practice. Another 7 students (17.5%) said that

combining the three methods would be better. However, there were 6 students (15%) who said that they were not interested in English and they never thought about ways to learn vocabulary, so they had no ideas about it.

Clarification was reached during the interview concerning why the students held such beliefs. The students being interviewed stated that when they were in middle school, they believed that vocabulary must be learned by memorizing wordlists, but they suffered from poor memory and felt that rote learning was boring. Consequently, they showed a negative attitude toward the memory belief.

After they entered university, reading ability was emphasized by many teachers and reading comprehension was the most important part of CET Band 4, covering 40 percent of the total score. Their teachers often asserted that vocabulary size could be enlarged through extensive reading. However, while reading English materials, they found that their inadequate vocabulary had become the biggest barrier to improving the speed of reading. They could not get any pleasure out of reading due to the large number of unknown words. That is why they suspected whether vocabulary could be picked up only through extensive reading. They assumed that memorization of vocabulary wordlists and extensive reading should be combined.

Like the high-achievers, influenced by the same social context, they were also clear about the importance of developing communicative competence and realized that they

did not use what had learned in daily life, so they believed that it would be better to have an environment in which they could apply what they had learned rather than to learn only through reading and memorizing in the classroom. That is why 50 percent of respondents to the closed questions (see Table 4.3) strongly agreed with the learning belief which emphasized that vocabulary learned must be put to use. Some samples of the students' responses during the interviews are given below.

Data source:

Interviewee 1	*I used to regard English vocabulary learning as the learning of the Chinese equivalents and repetition of the spelling, but my performance was so poor in examination that I don't believe that memorizing wordlists is the best way to learn vocabulary. After I entered university, reading became so important and the teachers often encourage us to read extensively outside the classroom. However, my vocabulary size is too small to understand the text. It took me long time to finish reading one article and I still couldn't remember the words. So I think if we can live in an environment in which everyone has to use English to communicate, we can achieve great improvement.*
Interviewee 3	*I don't know other effective way of learning English vocabulary. I find it so hard for me to remember so many words. Even if I can memorize some words, I can't use them when I am writing or speaking. And very quickly I forget what I have learned. So I don't think rote learning is effective.*
Interviewee 10	*I believe we must make great effort to remember English vocabulary. However, there are so many courses in university and I always suffer from my poor memory. Our teacher said that reading extensively would be better than memorizing wordlists. But I always skip those unknown words in reading texts. So I think we'd better combine memorizing wordlists and extensive reading. The words I have remembered in wordlists can be encountered in reading texts. On the whole, learning English is very difficult for me. I guess if we can use what we learned in our daily life, we can remember a lot of words easily.*

4.2.1.3 Comparison of vocabulary learning beliefs held by high-achievers and low-achievers

The Independent Samples T-test analysis in Table 4.5 was applied to test the

difference in the three categories of vocabulary learning beliefs held by the two

groups of students, which is related to research question No.5: *Are there any*

differences in vocabulary learning beliefs between the high-achievers and

low-achievers?

Table 4.5: T-test results of three categories of vocabulary learning beliefs between

    two groups

Category	Group	Mean	M.D	t-value	Sig. (2-tailed)
Memory Belief	**Higher**	2.92	-.250	-1.113	.269
	Lower	3.15			
Acquisition Belief	**Higher**	4.20	.475	2.882	.005*
	Lower	3.73			
Learning Belief	**Higher**	4.58	.150	1.023	.310
	Lower	4.43			

(Higher Group: N=40; Lower Group: N=40; df=78; M.D=Mean Difference)

Based on the t-value and two-tailed significance, at the .05 level of significance, no

significant differences are apparent between the two groups in *memory belief* (with a

two-tailed significance of .269 which is more than .05, t= -1.113) and *learning belief*

(with a two-tailed significance of .310 which is also more than .05, t= 1.023).

However, a statistically significant difference can be observed in *acquisition belief* at

the .05 level, with a two-tailed significance of .005* which is less than .05, t=2.882.

The t-test results suggest that the participants from both groups held the belief that

vocabulary studied should be put to use, which was the most popular one among the

two groups of students. The least popular belief was the memory belief. In terms of

the acquisition belief, there was a difference between the two groups. The mean 4.20 of the acquisition belief held by the high-achievers, which is much higher than the mean 3.73 of the acquisition belief held by low-achievers, shows that more high-achievers agreed that vocabulary could be picked up through extensive reading than did low-achievers. This difference was also revealed in their responses to the open-ended questions. Few students from the lower group believed that the best way to learn vocabulary was only through extensive reading. Instead, they stressed that it would be better to combine extensive reading and memorization of wordlists. This finding is consistent with Gu and Johnson (1996). In their study the best group of students strongly believed that vocabulary should be picked up through natural exposure and careful study.

This difference may be due to their different proficiency levels. According to Nation (2001: 144), there is a threshold in terms of vocabulary size and successful reading. "If a learner has not crossed the threshold, the chances of comprehending adequately are low. If the learner has crossed the threshold, the chances are on the side of the learner gaining adequate comprehension". The high-achievers were able to read fast with adequate vocabulary. By doing large amounts of extensive reading at suitable vocabulary level, they might have more opportunities to encounter wanted vocabulary than their lower level peers, who read slowly and were usually unable to comprehend accurately with their inadequate amount of vocabulary. In the case of the low-achievers, if the small amount of vocabulary learning was not reinforced by large

amounts of meeting the words in context, they forgot the words learned very soon.

That is why they took a different view of the acquisition belief.

Findings from interviews and responses to the open-ended question also make manifest that the participants from both groups did not reject the memory belief completely, although it was looked upon negatively. They simply thought it was necessary to combine memorizing wordlists with other methods. 45% of high-achievers (see Table 4.2) believed that their vocabulary proficiency could be improved by combining the three methods. 40% of low-achievers (see Table 4.4) stated that it was necessary to learn vocabulary through both memorization and extensive reading. In addition, everyone in the higher group seemed to have a specific belief about how to learn vocabulary. Some students in the lower group, on the other hand, admitted that they did not have any belief about how to learn vocabulary.

4.2.2 Analysis and discussion of vocabulary learning strategies

The results in this section are presented under the following three subheadings, for each group separately:

- Data analysis from Part III of the questionnaire---the students' reported use of vocabulary learning strategies

    ---Overall pattern of the strategies used by participants

    ---Specific strategies often used by participants in each category

- Report from the students' responses to open-ended questions

- Report from the semi-structured interview

4.2.2.1 Vocabulary learning strategies often used by the high-achievers

In order to find an answer to the second research question, the strategies under study were examined first by category and then individually. Descriptive statistics of means and standard deviation were applied to analyze the overall pattern of participants' use of strategies by the six categories. Then the participants' tendency to use a particular strategy in each category was illustrated by statistics of frequency.

<u>**Overall pattern of the higher group's strategy use**</u>

Table 4.6 shows the average profile of the vocabulary learning strategies used by the high-achievers in the study. The mean scores are listed in descending order.

Table 4.6: Overall pattern of the higher group's strategy use by the six categories

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Guessing	40	2.83	4.83	3.8000	.42734
Lexical Phrases	40	2.67	4.83	3.7750	.49578
Sources	40	2.67	4.33	3.7208	.42094
Management	40	1.83	4.17	3.3125	.60528
Association	40	1.75	4.25	3.2750	.51515
Repetition	40	1.75	4.50	3.1750	.64847
Valid N (listwise)	40				

Among the six categories, the three categories of strategies most often used were *guessing, lexical phrases* and *sources*, with all their mean scores above 3.5. The two categories of strategies least often used were *association* and *repetition*. The highest mean score of guessing strategies (mean=3.8000) with low standard deviation (.42734) indicates that most students often used guessing strategies when coming across unknown words in reading or listening or other situations. The lowest mean of repetition strategies (mean=3.1750) with highest standard deviation (.64847), on the

other hand, indicates that the subjects' tendency to use the repetition strategies varied greatly.

To some extent, students' vocabulary learning beliefs contributed to their strategy use. Since they preferred the learning and acquisition beliefs to the memory belief, they adopted more contextualized learning strategies than decontextualized ones. They tried to increase their input from different sources. The high frequency of the guessing strategies may also be due to the fact that students had received good training on how to make use of the different clues in a context to guess the meaning of unknown words, because many teachers regarded this as an important strategy to help the students get high marks in examinations. However, as the students did not reject the memory belief, some of them might also often use the repetition strategy. In order to gain further insight into the vocabulary learning strategies used by high-achievers in this study, it is necessary to look at the use of individual strategies at each dimension in greater detail. In the following, all the categories will be discussed in the order in which they appeared in the questionnaire.

Specific strategies used by high-achievers in each category

When frequencies are looked at in percentages (see frequency tables 4.7-4.12), more details are revealed about the strategies used by the high-achievers in this study. The researcher mainly considered the responses that indicated what the students 'often' or 'always' did in the process of learning vocabulary. The discussions on the five strategies most often used were also based on the combined percentage of responses

to 'often' and 'always'. However, other levels of response are also considered where relevant.

1) Management strategies

Table 4.7: Management strategies used by the high-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
1	I make a plan for vocabulary learning and stick to it instead of working on it by fits and starts.	*2* 5%	*4* 10%	*15* 37.5%	*16* 40%	*3* 7.5%
2	I would modify my vocabulary learning plan if the results are not satisfactory.	*1* 2.5%	*2* 5%	*17* 42.5%	*14* 35%	*6* 15%
3	I review the newly learned vocabulary regularly.	*0*	*5* 12.5%	*3* 7.5%	*20* 50%	*12* 30%
4	I only review vocabulary before examinations.	*2* 5%	*22* 55%	*5* 12.5%	*10* 25%	*1* 2.5%
5	I try to communicate with my classmates and make use of the words I have learned.	*0*	*5* 12.5%	*13* 32.5%	*16* 40%	*6* 15%
6	I write diary in English and make use of the learned words in it.	*6* 15%	*11* 27.5%	*13* 32.5%	*6* 15%	*4* 10%

Management is a category of metacognitive strategy. According to Oxford (1990: 136), "metacognitive strategies are essential for successful language learning". A large majority of students (77.5%), according to the figures presented in Table 4.7, 'sometimes' or 'often' made a plan or modified their plan (item1 and 2) for their vocabulary learning. Most of them (80%) 'often' or 'always' reviewed vocabulary regularly (item 3). 60% responded that they 'never' or 'seldom' waited until the last moments to review what they had learned (item 4). Partly consistent with their belief that vocabulary studied must be put to use, many students tried to consolidate the

vocabulary by applying it to conversation (item 5), but not many students had the habit of diary writing in English (item 6). It is very likely that writing was more difficult for them than speaking.

Thus, the most often used strategy in this category was item 3 (review *what had been learned regularly*), while the least often used was item 4 (*only review before examinations*). This suggests that the students investigated might intentionally attach importance to regular reviewing, which is a common quality of many successful Chinese students who are not crammers. This might be attributable to traditional study methods in China, since from an early age students are taught Confucius' thoughts that "to learn and at due times to repeat what one has learned is of great pleasure" and that "one can obtain new insight from regularly reviewing what one has learned."

2) Sources strategies

With regard to the sources where students encountered vocabulary, the frequencies in Table 4.8 show a significant use of materials found both outside class (items 8, 10) and inside class (items 7, 9) as the participants' sources. Besides textbooks, most of the students were keen on reading English materials such as newspapers and magazines outside the classroom. Apart from the print sources, they tried to obtain some spoken vocabulary from their teachers and classmates in class and other media outside class. The CET Band 4 and 6 dictionaries were another source for their vocabulary learning (item 11), but they did not seem to often seek opportunities to talk with native speakers as a source strategy (item 12).

Table 4.8: Sources strategies used by the high-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
7	My vocabulary is largely from the textbooks.	0	7 17.5%	6 15%	24 60%	3 7.5%
8	I increase my English vocabulary by reading stories, newspapers, magazines, etc. outside class.	0	1 2.5%	1 2.5%	18 45%	20 50%
9	I pay attention to the new words and expressions used by my teachers and classmates.	0	1 2.5%	9 22.5%	26 65%	4 10%
10	I learn new words from all kinds of materials in English outside school, e.g. songs, movies, road signs, and TV programme.	0	2 5%	8 20%	16 40%	14 35%
11	I often memorize the CET4 or CET6 dictionaries.	1 2.5%	7 17.5%	18 45%	10 25%	4 10%
12	I seek opportunities to converse with native speakers in English.	3 7.5%	7 17.5%	12 30%	14 35%	4 10%

It appears that the subjects feel that they can use resources wisely to maximize their exposure to vocabulary. This is somewhat similar to the learners who followed "a structured approach" in Sanaoui's research (1995, cited in Nation 2001: 228). Those learners "used their own initiative in regularly creating opportunities for vocabulary learning by listening to the radio, watching videotapes, speaking with friends, reading and doing self-study". The possible reason might be that these students had much interest and high motivation in English language learning and it was the "motivation and interest" that became "important enabling conditions for noticing and learning vocabulary" (Nation 2001: 63). The enjoyment obtained from reading, the quantity of reading and the growth of vocabulary have formed a "virtuous circle", using Nuttall's term (1982: 127). However, SWJTUEM is located in the western part of China, a

developing region, where English does not play an essential role in social life. The participants seldom had opportunities to speak to native speakers. Therefore, the use of English, especially spoken English, is limited to the classroom.

3) Repetition strategies
Table 4.9: Repetition strategies used by the high-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
13	When I try to remember a word, I write it repeatedly.	6 15%	8 20%	7 17.5%	16 40%	3 7.5%
14	When I try to remember a word, I repeatedly say and spell the word in my mind.	0	2 5%	3 7.5%	14 35%	21 52.5%
15	When I try to remember a word, I repeatedly say it aloud.	2 5%	15 37.5%	11 27.5%	10 25%	2 5%
16	I follow the tape to repeat the words orally and write them at the same time.	8 20%	17 42.5%	9 22.5%	2 5%	4 10%

As shown in Table 4.9, the strategy most frequently used in this category was item 14, *repeatedly say and spell the new word in one's mind,* with 87.5% responding with 'often' and 'always'; while the least frequently used was item 16, *follow the tape to repeat the words orally and write them at the same time,* with 62.5% responding with 'never' and 'seldom'. The most common responses for item 13 and item 14, which related to written repetition or repetition in a silent way, were in the 'often' or 'always' range, whereas the most common responses for item 15 and item 16, which related to oral or auditory repetition, were in the 'seldom' and 'sometimes' range. This indicates that the high-achievers often used mental rehearsal or written repetition to facilitate memory. One possible explanation might be that many students at

SWJTUEM liked to study in the library or classrooms individually and quietly. If they repeated the words by combining auditory, oral and visual repetition strategies simultaneously, other students might be distracted or disturbed. Another reason might be that to say and spell the word in one's mind may happen any time when one has an opportunity. As one interviewee said, "*I could use the time when waiting in a queue, lying in bed, etc. to recall the vocabulary I have learned in my mind*" (student 3)

4) Guessing strategies

Table 4.10: Guessing strategies used by the high-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
17	I make use of examples provided in the text when guessing the meaning of a new word.	0	4 10%	13 32.5%	21 52.5%	2 5%
18	I make use of my common sense or knowledge of the world when guessing the meaning of a word.	0	2 5%	7 17.5%	14 35%	17 42.5%
19	I look for any definitions or paraphrases in the passage that support my guess about the meaning of a new word.	0	2 5%	13 32.5%	21 52.5%	4 10%
20	I make use of the grammatical structure of a sentence when guessing the meaning of a new word.	0	11 27.5%	15 37.5%	10 25%	4 10%
21	I analyze the word parts when guessing the meaning of a new word.	0	4 10%	7 17.5%	22 55%	7 17.5%
22	I check my guessed meaning against the wider context to see if it fits in.	0	2 5%	0	15 37.5%	23 57.5%

From the frequencies shown in Table 4.10, the respondents did use various guessing strategies which "is perhaps the most common vocabulary acquisition skill suggested

by reading texts and reading teachers" (Nation 1990: 163). It is also true that in their textbooks, there are exercises designed to introduce students to guessing skills. As a result, when the students wanted to get the meaning of unknown words, they often made use of their common sense and background knowledge of the passage to guess the meaning of unknown words (item 18). They also guessed word meanings according to word parts (prefix, stem and suffix), examples and definitions or paraphrases in the passage provided by the author (items 17, 19, 21). Above all, a great majority of the respondents (95%) reported they would 'often' or 'always' check the guessed meaning against the wider context to see if it fit in (item 22). It is very likely that they were aware that a word might have different meanings in different contexts, so they would check the guessed meaning against the wider context to avoid incorrect guessing. This echoes what Macaro (2001: 38) says: "Effective learners use the context to make inferences of what bits of text they have selected to sample and check if their inference fits in with their world knowledge." However, with the assumption that students should have mastered all the grammar rules in high school, many teachers in college seldom give grammar instruction. That is probably why only 35% of participants 'often' and 'always' made use of the grammatical structure to guess the meaning of unknown words (item 20).

5) Association strategies

Some previous research shows that "association strategies enhance learning" (e.g., Cohen and Aphek, 1981; Hulstijn, 1997, cited in Fan, 2003: 234).

Table 4.11: Association strategies used by the high-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
23	When I try to remember a new word, I associate it with other English words that sound similar to it.	*0*	*10* 25%	*8* 20%	*16* 40%	*6* 15%
24	When I try to remember a new word, I associate it with Chinese words that sound similar to it.	*11* 27.5%	*18* 45%	*6* 15%	*4* 10%	*1* 2.5%
25	When I try to remember a new word, I associate it with other English words that share the same meaning or have opposite meaning.	*0*	*1* 2.5%	*6* 15%	*19* 47.5%	*14* 35%
26	When I try to remember a new word, I associate it with other words that are related to a particular topic.	*2* 5%	*8* 20%	*8* 20%	*18* 45%	*4* 10%

As for the high-achievers in this study, the most often used strategy in this category was item 25, *to associate the word with other English words that share the same meaning or have opposite meaning*, with 82.5% responding with 'often' and 'always'. They also made other associations, such as words that sound similar (item 23) or words related to a particular topic (item 26), with the most common responses being in the 'often' range. This might result from the vocabulary instruction. Many teachers often present words with similar sounds, or synonyms and antonyms of new words while explaining them. As has been reported before, these students also regard the teachers' explanation as one of the important sources for learning. However, as English and Chinese belong to different language systems, it is very hard to make associations in terms of pronunciations. As a result, the most common responses to

item 24, *making association with Chinese words that sound similar*, were in the 'seldom' (45%) and 'never' (27.5%) range.

6) Strategies used to deal with lexical phrases

Table 4.12: Strategies used by the high-achievers to deal with lexical phrase

No	Statement	Never	Seldom	Sometimes	Often	Always
27	I'm very interested in learning English idioms.	0	7 17.5%	11 27.5%	17 42.5%	5 12.5%
28	When looking up a word in the dictionary, I pay attention to the related words that often collocate with it rather than just get the meaning of the words.	0	0	9 22.5%	19 47.5%	12 30%
29	When reading, I try to be sensitive to collocations and expressions	0	0	6 15%	26 65%	8 20%
30	I like to recite some well-written paragraphs or passages, from which I can learn set phrases or expressions.	0	4 10%	19 47.5%	13 32.5%	4 10%
31	When talking to native speakers, I try to remember the idiomatic expressions they use.	1 2.5%	5 12.5%	4 10%	18 45%	12 30%
32	When writing or speaking, I try to find the appropriate words that can collocate with the word I use.	0	2 5%	12 30%	21 52%	5 12.5%

It appears from Table 4.12 that the respondents did use some strategies to deal with lexical phrases. Almost all the students reported that they tried to be sensitive to collocations and expressions when reading (item 29). Besides, they paid attention to the collocations as well as the meaning of the new words while looking them up in the dictionary (item 28). Many students said that they were interested in learning English idioms and often picked up some idiomatic expressions while talking to native

speakers (items 27, 31). In addition, they were aware that they should try to find the appropriate words when writing or speaking (item 32). 80% of the participants 'sometimes' or 'often' recited some well-written paragraphs or passages to learn some lexical chunks (item 30).

This indicates that these participants viewed collocation as an important aspect of word knowledge. They realized that a lot of set phrases and idioms exist in the English language and that they could not infer the meaning only from the meaning of the separate words. Moreover, the washback of CET 4 also contributed to their awareness of collocations. In the CET Band 4 test, at least one third of items in the *Vocabulary and Structure* part are related to collocations. In the *Writing* part, if they can use some English proverbs, idioms or some idiomatic expressions appropriately, they can achieve higher marks. Probably that is why they tried to learn more such chunks through reading, looking them up in dictionary or even reciting whole passages.

To summarize, when a percentage achieved by calculating the frequency of the responses of 'often' and 'always' was looked at, 21 strategies out of 32 under study were above 50%, which means that more than half of the students often used them. This indicates that the students employed a variety of strategies to facilitate their vocabulary learning. This result is consistent with the outcome of many previous studies (Ahmed 1989; O'Malley and Chamot 1990; Lawson and Hogben 1996; Gu

and Johnson 1996). In general, it was shown in these studies that more successful students used learning strategies more often, more appropriately and with greater variety. The five strategies most often used are listed below in table 4.13.

Table 4.13: The five strategies most often used by the high-achievers

Rank No.	Item No. / Statement	Percentage responses 4(often) & 5 (always)
1	*S8*.I increase my English vocabulary by reading stories, newspapers, magazines, etc. outside class.	95%
2	*G22*.I check my guessed meaning against the wider context to see if it fits in.	95%
3	*R14*.When I try to remember a word, I repeatedly say and spell the new word in my mind.	87.5%
4	*L29*.When reading, I try to be sensitive to collocations and expressions.	85%
5	*A25*.When I try to remember a new word, I associate it with other English words that share the same meaning or have opposite meaning.	82.5%

The data shown in table 4.13 indicates that many high-achievers combined vocabulary learning with extensive reading. During the process of reading, they not only adopted many guessing strategies to deal with unknown words but also checked the guessed meaning against the wider context to ensure correct guessing. Like many good language learners, they were "willing and accurate guessers" (Keith 2001: 147). They also tried to learn collocations from reading. Two memory strategies they often adopted were mental rehearsal and association with the word's synonyms and antonyms.

Report from open-ended questions

At the end of the questionnaire there were two open-ended questions aimed at supplementing the information provided by the closed questions. As for the first question, 4 participants did not give any response, and they were chosen to be interviewed. As for the second question, only one participant provided an answer. The discussion of the students' responses to these two questions is given below.

****

Question: Please list some strategies you often use in vocabulary learning.

****

Most students said that their vocabulary came from many sources they were interested in, such as reading newspapers, magazines, watching English movies, listening to English songs, even playing PC games. When they came across unknown words, they first used guessing strategies, then they would note down the words or phrases that they were interested in or that they thought useful, together with the whole sentence or even a short paragraph in which the words appeared. When they had spare time, they would take out the notes and consult the dictionary to confirm the meaning as well as find any collocations of the word. After that, they would try to remember those words, phrases, sentences or paragraphs by using some memory strategies, such as reading aloud, recalling in one's mind or association.

Data source:

S7	*I have three mini vocabulary notebooks in which I take down some useful words, phrases, well-written sentences, which I read from newspaper or learned while watch English movies. Whenever I have time, I'd like to go through it and naturally I can remember them easily.*

S21	*I have got lots of new words from the materials I'm interested in. I think this is the best way. You're never gonna be a good English learner if you only get vocabulary from the textbooks. I like writing diary in English. After I used the words I have learned, I can make them stay longer in my mind.*
S24	*While I am reading something in English or watching English movies, I quickly write down those words or expressions that I seem to have met before but not ensure about its meaning. Then I try to consult dictionary and put it in my notebook so that I can memorize them regularly. When I am touched by some passages or the words of a song, I try my best to recite it. Consequently, I have learned a lot of new words or expressions, which leave a deep impression to me*

By contrast with the students just discussed, some learners admitted that they would stick to memorizing the CET Band 4 vocabulary handbooks before taking part in the examination. Two students also stated that they had never thought about the learning strategies carefully, so they did not use any strategies in vocabulary learning.

Data source:

S36	*Memorize the word list for half an hour every day and then review them the next day and use those words to make sentences. Reading magazines and newspapers and learn the unknown words by heart.*
S39	*I haven't any strategies in vocabulary learning.*

****

Question: Are there any other vocabulary learning strategies you know but that were excluded in the questionnaire? If *Yes,* please write them out.

****

Only one student provided an answer to this question. She said, "We live in Chinese community and English is a foreign language for us. If we can foster the habit of translating what we see or read in our daily life into English, we can accumulate a lot of vocabulary in our minds. So try to find out how to express what you see in English and practice it." (student 7) This indicates that *translation* was one of the strategies used by a few participants.

Report from the students selected for interviews

The interviews mainly concentrated on the following questions:

1. What role does vocabulary play in your English learning?

2. How do you learn vocabulary?

3. What difficulties do you have in vocabulary learning?

4. Do you have any expectations about how vocabulary should be taught?

A summary of students' responses is given below. A sample of one interview is provided in Appendix Three.

The interview reports from the 10 students demonstrate that all the investigated students attached great importance to vocabulary learning. They believed that a good mastery of vocabulary might create the foundation for other skills of listening, speaking, reading and writing. Probably that is why they tried hard to enlarge their vocabulary size.

(Data source: I find vocabulary plays the most important part in the process of English learning. Our teachers always say that vocabulary is like bricks for building. Without good mastery of adequate vocabulary, other skills are difficult to develop. ....Interviewee 1)

(Data source: It's very important. If you have large size of vocabulary, you can express your feelings easier in another language. It's a magic thing.. Interviewee 3)

With regard to their vocabulary learning methods, there were striking similarities

among these students. In particular, they all emphasized that it was effective and useful to learn vocabulary by putting it into meaningful contexts. They took the initiative in finding various kinds of sources for encountering vocabulary besides textbooks. When coming across new words, they first tried their best to guess the meaning by using different clues in the text. If some words appeared very frequently and they were not sure about their guessed meaning, they would consult the bilingual dictionary. While looking up new words in the dictionary, they often noted down the given example sentences and some verbal phrases, but they were often confused about what kinds of associative links one word might have with other items in the lexicon. They admitted that they often neglected the words' limitations of use according to situation and function.

Several interviewees reported that they insisted on memorizing word lists for the sake of the examination. In addition, when they read some well-written sentences, paragraphs or passages, they appreciate them and tried to recite them. The recitation of long paragraphs was obviously due to the Chinese culture of learning, because many Chinese learners were required to recite lots of Tang poems or other classical literature when they were young. The more they could recite, the more intelligent they were thought to be. Some of them had the habit of keeping a vocabulary notebook and reviewing the words when and where they could. However, some students also said that they had little chance to talk to native speakers, and thus could not speak English fluently and confidently. In their writing, they often felt they could not find

appropriate vocabulary to express themselves accurately. Only two students being interviewed said they had the habit of diary writing in English. At the end of the interview, most of them suggested that teachers should provide more authentic materials in class rather than always follow the textbooks. Some students also suggested that the teacher should create more classroom activities so that they could have more opportunities to use what they learned. Transcripts of some of the students' responses are given below.

(Data source: When I was in middle school, I seldom memorize wordlists in the vocabulary handbooks, since at that time to master the words in the textbook was enough. After I entered university, I found my vocabulary size was so limited that I often read slowly to consult large number of new words in reading texts. So I bought one CET Band 4 vocabulary handbook and began to memorize the wordlist. After a period of time, I found it wasn't so difficult for me to finish reading tasks within limited time and I could encounter many words I have recited in the reading texts. Since I entered Class A, for fear of being left behind, I often read newspapers, such as 21st Century and China Daily. However, I felt it's difficult for me to use the words learned from the textbook into our daily life. I hope that the teachers should not concentrate too much on the words in textbooks because some words in textbooks are seldom used in our daily life. We want to get more vocabulary related to our daily life………… .Interviewee 2)

(Data source: When I was about fifteen years old, I watched English movies almost every week. I also like to write diaries in English because you know everyone has some secrets. If I put it down in English, I wouldn't

worry that my parents read my diary because they don't understand English. Very often I keep a vocabulary notebook with me so that I can review the words and sentences where and when I can. In my notebook, there are also a lot of well-written sentences, paragraphs. I like reciting these beautiful words and then I can use it in my own writing. Although I have a desire to talk to some native speakers, I don't think I am confident enough. However, I try to speak English in class. Sometimes, I even talk to myself in my mind. I hope the teacher can create more activities so that we can use what we learned into communication. ……………………………………………….Interviewee 3)

(Data source: I'd like to learn vocabulary by using some authentic materials, such as newspapers, short stories, movies, songs etc. I often spend several hours in the library reading English magazines. When I came across unknown words, I would note it down in a piece of paper. Then when I had time, I would look them up in the dictionary. After meeting several times, the words can leave a deep impression in my mind. I also like to learn the phrases, collocations of the words. As to the words' limitations of use according to situation and function, I know so little. Maybe that's why I always make some mistakes in writing. Normally, I try to learn some sample sentences or paragraphs by heart. In addition, I insist on memorizing some vocabulary handbook before examination. It's useful although it is somewhat boring. I don't know other vocabulary learning strategies, so maybe the teachers can give us more training……………………………………………….Interviewee 5)

Reports from the open-ended questions and interviews reveal that apart from source strategies and guessing strategies, memory strategies were actually employed at a high level in vocabulary learning. Many students kept a notebook containing some phrases,

sentences and paragraphs for reviewing regularly. However, they still lacked

strategies to turn the receptive knowledge into productive knowledge. They seldom

studied cooperatively. One possible reason is that they had never been exposed to

vocabulary strategy instruction before. Furthermore, there is no "real" English

environment outside the English classroom.

4.2.2.2 Vocabulary learning strategies often used by the low-achievers

With regard to the vocabulary learning strategies often used by the low-achievers,

which address the fourth research question, the discussions on the findings follows the

same pattern as for the higher level learners.

<u>**Overall pattern of the lower group's strategy use**</u>

Table 4.14: Overall pattern of the lower group's strategy use by the six categories

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Repetition	40	1.50	4.25	2.7688	.55582
Guessing	40	1.33	4.33	2.7167	.60175
Association	40	1.50	3.50	2.5875	.52364
Sources	40	1.50	3.33	2.4125	.38302
Lexical phrases	40	1.17	3.67	2.1708	.57424
Management	40	1.17	3.00	2.0125	.40012
Valid N (listwise)	40				

It can be seen in Table 4.14 that among the six broad categories, repetition and

guessing strategies rank at the top of the list, while management and strategies used to

deal with lexical phrases rank at the bottom of the list. That is to say, repetition was

the strategy most often used by lower level students. All the mean scores are less than

3, which indicate that all the strategies were used at a relatively low level. One

possible explanation for this phenomenon is that most of the students were not

learning vocabulary in an active way. They sought little opportunity to use various

strategies to deal with large amounts of vocabulary. They were like the "passive

strategy users" in Gu and Johnson's study (1996: 660, see p.32, Section 2.4), but were

different from them in the fact that the low-achievers in my study did not strongly

believe in memorization.

Specific strategy used by low-achievers in each category

As with the high level learners, in order to gain further information about the

vocabulary learning strategies used by the low-achievers in each category, the

researcher again looked at frequencies in percentages (see Tables 4.15-4.20).

1) Management strategies

Table 4.15: Management strategies used by low-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
1	I make a plan for vocabulary learning and stick to it instead of working on it by fits and starts.	*6* 15%	*20* 50%	*14* 35%	*0*	*0*
2	I would modify my vocabulary learning plan if the results are not satisfactory.	*13* 32.5%	*20* 50%	*5* 12.5%	*2* 5%	*0*
3	I review the newly learned vocabulary regularly.	*13* 32.5%	*17* 42.5%	*10* 25.5%	*0*	*0*
4	I only review vocabulary before examination.	*3* 7.5%	*6* 15%	*11* 27.5%	*15* 37.5%	*5* 12.5%
5	I try to communicate with my classmates and make use of the words I have learned.	*24* 60%	*12* 30%	*3* 7.5%	*1* 2.5%	*0*
6	I write diary in English and make use of the learned words in it.	*32* 80%	*8* 20%	*0*	*0*	*0*

According to Oxford (1990: 136), "The metacognitive strategy of seeking practice

opportunities is especially important". The data shown in table 4.15 indicate that a majority of the participants rarely sought any chance to practice. None of them reported that they had ever written diary in English (item 6) and 90% admitted that they 'never' or 'seldom' tried to communicate with their classmates in English (item5). Additionally, they seldom planned and monitored their vocabulary learning (items 1, 2). 75% of students 'never' or 'seldom' reviewed the newly-learned words regularly (item3). The strategy which was most often used was to review vocabulary only before the examination (item4); responses from 'sometimes' to 'always' were 77.5%.

This might be because the poor proficiency of the students made them lack motivation to learn English vocabulary, so they did not want to spend any more time than necessary on vocabulary outside class. However, the pressure of passing the examination forced them to cram right before the examination. This was further supported by the students' report from the semi-structured interview (see p.90-91).

2) Sources strategies

The sources for many students encountering vocabulary, as Table 4.16 shows, came from the textbooks (item 7), with the most common responses being in the 'often' (55%) and 'always' (20%) range. 75% of them "seldom" or "never" read English materials outside class (item 8). Neither did they frequently learn new vocabulary from other media sources (item 10). Many of them did not pay attention to the spoken words or expressions used by teachers in class (item 9) and 87.5% respondents

'never' sought opportunities to converse with native speakers in English (item 12). The most common responses to item 11, *memorizing CET 4 or 6 dictionaries*, were in the 'seldom' (40%) and 'sometimes' (30%) range.

Table 4.16: Sources strategies used by low-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
7	My vocabulary is largely from the textbooks.	*0*	*7* 17.5%	*3* 7.5%	*22* 55%	*8* 20%
8	I increase my English vocabulary by reading stories, newspapers, magazines, etc. outside class.	*6* 15%	*24* 60%	*9* 22.5%	*1* 2.5%	*0*
9.	I pay attention to the new words and expressions used by my teachers and classmates.	*3* 7.5%	*17* 42.5%	*15* 37.5%	*4* 10%	*1* 2.5%
10	I learn new words from all kinds of materials in English outside school, e.g. songs, movies, road signs, and TV programmes.	*7* 17.5%	*14* 35.5%	*15* 37.5%	*4* 10%	*0*
11	I often memorize the CET4 or CET6 dictionaries.	*7* 17.5%	*16* 40%	*12* 30%	*1* 2.5%	*4* 10%
12	I seek opportunities to converse with native speakers in English.	*35* 87.5%	*5* 12.5%	*0*	*0*	*0*

This finding confirms what Moir (1996, cited in Nation 2001: 229) said，that "less effective learners selected the words to learn from class texts rather than from a range of sources of interest and value to them". The heavy reliance on textbooks for vocabulary learning might be due to the influence of examination-oriented education in China; many teachers and students believe that learning from textbooks is a guarantee for passing the examination. Another possible reason is that these less effective learners have already been trapped in the "vicious circle" for learning that

Nuttall (1982: 127) describes. The less effective learners seldom develop much interest in what they read due to the large number of unknown words. Since they do not enjoy it, they read as little as possible. Deprived of exposure to vocabulary in meaningful contexts, they may learn only a small part of the vocabulary provided even by textbooks. In addition, due to their lack of interest and perseverance, they could not stick to memorizing the word lists in CET vocabulary handbook.

3) Repetition strategies
Table 4.17 Repetition strategies used by low-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
13	When I try to remember a word, I write it repeatedly.	1 2.5%	7 17.5%	16 40%	10 25%	6 15%
14	When I try to remember a word, I repeated say and spell the new word in my mind.	1 2.5%	11 27.5%	14 35%	8 20%	6 15%
.15	When I try to remember a word, I repeatedly say it aloud.	8 20%	16 40%	8 20%	8 20%	0
16	I follow the tape to repeat the words orally and write them at the same time.	11 27.5%	15 37.5%	11 27.5%	2 5%	1 2.5%

As can be seen from table 4.17, the participants adopted some kinds of repetition strategies to learn vocabulary. The most often used was written repetition (item 13); responses from 'sometimes' to 'always' were 80%. Following this is item 14, *to say and spell the new word repeatedly in one's mind*; responses from 'sometimes' to 'always' were 70%. The frequencies of the other two strategies (items 15, 16), which related to oral or auditory repetition, fell very clearly into the negative range. This indicates that these students were concerned about the written form of the words. They might be poor at pronunciation and unwilling to appear foolish when speaking

English. And also, like the high-achievers, they preferred to study individually and quietly.

4) Guessing strategies

Table 4.18: Guessing strategies used by low-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
17	I make use of examples provided in the text when guessing the meaning of a new word.	*0*	*12* 30%	*13* 32.5%	*12* 30%	*3* 7.5%
18	I make use of my common sense and knowledge of the world when guessing the meaning of a word.	*1* 2.5%	*8* 20%	*10* 25%	*18* 45%	*3* 7.5%
19	I look for any definitions or paraphrases in the passage that support my guess about the meaning of a new word.	*4* 10%	*12* 30%	*16* 40%	*6* 15%	*2* 5%
20	I make use of the grammatical structure of a sentence when guessing the meaning of a new word.	*10* 25%	*13* 32.5%	*14* 35%	*1* 2.5%	*2* 5%
21	I analyze the word parts when guessing the meaning of a new word.	*4* 10%	*15* 37.5%	*13* 32.5%	*8* 20%	*0*
22	I check my guessed meaning against the wider context to see whether it fits in.	*4* 10%	*27* 67.5%	*9* 22.5%	*0*	*0*

As indicated in table 4.18, the high frequency for many items mainly fell into the negative range or into the middle 'sometimes'. That is to say, the low-achievers were able to use some of the guessing strategies sometimes, but were not very good at using various clues in the context to guess the meaning of unknown words. In particular, they seldom checked the guessed meaning against the wider context to see

whether it fit in (item 22). This might be closely related to their English proficiency because "proficiency in L2 is a major factor in successful guessing" (Nation 2001: 247). One of the prerequisites for successful guessing is that a learner should at least know 95% words of the whole context. As for the low-achievers in my study, their vocabulary knowledge was not sufficient for them to use a variety of clues in context. Another important reason might be that the respondents seldom actively sought opportunities to read English materials; so naturally, they seldom applied the guessing strategies they learned from textbooks and the teachers to practice.

5) Association strategies

Table 4.19: Association strategies used by low-achievers

No	Statement	Never	Seldom	Sometimes	Often	Always
23	When I try to remember a new word, I associate it with other English words that sound similar to it.	*1* 2.5%	*17* 42.5%	*18* 45%	*3* 7.5%	*1* 2.5%
24	When I try to remember a new word, I associate it with Chinese words that sound similar to it.	*4* 10%	*14* 35%	*11* 27.5%	*10* 25%	*1* 2.5%
25	When I try to remember a new word, I associate it with other English words that share the same meaning or have opposite meaning.	*4* 10%	*16* 40%	*10* 25%	7 17.5	*3* 7.5%
26	When I try to remember a new word, I associate it with other words that are related to a particular topic.	*9* 22.5%	*16* 40%	*12* 30%	*3* 7.5%	*0*

As shown from Table 4.19, many low-achievers did not choose to use association strategies, although they are useful for memorization. The most common responses to

each item were in the 'seldom' and 'sometimes' range. This might be the possible explanation why they always complained about their poor memory. Their habit of learning vocabulary by rote and often resorting to writing repeatedly is very likely to be the reason for the lack of use of association strategies. An implication of the data here is that very little association was involved in their study of the target vocabulary, which could be retained in their short-term memory hence their poor test scores.

6) Strategies used to deal with lexical phrases

Table 4.20: Strategies used by low-achievers to deal with lexical phrases

No	Statement	Never	Seldom	Sometimes	Often	Always
27	I'm very interested in learning English idioms.	9 22.5%	15 37.5%	10 25%	2 5%	4 10%
28	When looking up a word in the dictionary, I pay attention to the related words that often collocate with it rather than just get the meaning of the words.	3 7.5%	23 57.5%	8 20%	5 12.5%	1 2.5%
29	When reading, I try to be sensitive to collocations and expressions	7 17.5%	18 45%	10 25%	4 10%	1 2.5%
30	I like to recite some well-written paragraphs or passages, from which I can learn set phrases or expressions.	13 32.5%	18 45%	8 20%	1 2.5%	0
31	When talking to native speakers, I try to remember the idiomatic expressions they use.	20 50%	11 27.5%	5 12.5%	4 10%	0
32	When writing or speaking, I try to find the appropriate word that can collocate with the word I use	12 30%	17 42.5%	8 20%	3 7.5%	0

Many students admitted that they seldom or never used the strategies listed in Table 4.20. This indicates that these students neglected the learning of chunks. This can, at least partially, be attributable to their study style. Since their vocabulary came largely from their textbooks, often vocabulary was presented via word lists, on which word form and meaning were usually the only foci. Probably, the students were given the impression that meaning was generated only by individual words. Furthermore, they seldom talked to native speakers or learned from other English language media; consequently, they were not aware of the importance of learning English collocations.

To sum up, statistically, on the whole, these students did not employ many strategies. Only three individual strategies out of 32 achieved at a score above 50%, by combining the percentage of the responses of 'often' and 'always', which means that the majority of the strategies were seldom used by the lower level learners. The five strategies most often used by the low-achievers are listed in Table 4.21 below.

Table 4.21: The five strategies most often used by low-achievers

Rank No.	Item No. / Statement	Percentage responses 4(often) & 5 (always)
1	*S7.* My vocabulary is largely from the textbooks.	75%
2	*G18.* I make use of my common sense and knowledge of the world when guessing the meaning of a word.	52.5%
3	*M4.* I only review vocabulary before examination.	50%
4	*R13.* When I try to remember a word, I write it repeatedly.	40%
5	*G17.* I make use of examples provided in the text when guessing the meaning of a new word.	37.5%

Based on the data, tentative conclusions can be drawn. The low-achievers' limited vocabulary came mainly from their textbooks. They devoted less time than necessary to vocabulary learning because they only reviewed before examinations. Written repetition was the memory strategy they often adopted. Probably due to the training in class, they were able to use some guessing strategies to deal with unknown words but not very frequently.

Reports from open-ended questions

As for the first question, all the students except one listed some strategies they actually used in vocabulary learning, but none of them provided an answer to the second question. Their reports on the first question are summarized below:

Based on their answers, the most often used strategies were related to memorization. Many students stated that they often memorized the word lists following each text in their textbooks. They often wrote repeatedly while trying to remember these words. Some students mentioned that they tried reading newspapers in English, but the many new words in the articles made them give up half way. So they just occasionally read some simplified short stories with Chinese translation. When they came across new words, they would look them up in the dictionary. Some students tried to learn vocabulary by doing multiple-choice exercises in the sample examination papers. Also, some students admitted that they were not interested in English, which gave them a headache, so they devoted little time to English outside class. The following are some of their responses:

Data source:

Student9	*Learn the wordlists following each text in the textbook; write them repeatedly.*
Student31	*I like writing vocabulary repeatedly and read silently; I also like reading some bilingual reading materials, such as short stories or magazines.*
Student30	*I tried reading some English books. At beginning, I read it carefully and consulted dictionary to understand every unknown word and noted down the Chinese meaning at the margin, but it was hard to persist and I gave up. I also tried doing some CET Band 4 examination papers, but the same thing happened to me and I gave up. I spend little time remembering English vocabulary unless the days before the examination.*
Student33	*I once tried reading some English newspapers or magazines, but the large number of unknown words made me headache. I begun to look up them one by one in the dictionary, but it was time consuming and interrupted my reading speed. Finally, I gave up reading.*

Reports from the interviews

The interviews with the lower group mainly concentrated on the following questions:

1. What role does vocabulary play in your English learning?

2. How do you learn vocabulary?

3. What difficulties do you have in vocabulary learning?

4. Do you have any expectations about how vocabulary should be taught?

A summary of students' responses is given below. A sample of one interview is provided in Appendix Four.

When interviewed, many participants said that vocabulary played a very important role in language learning, but they complained about their poor memory and claimed that it was very hard for them to remember English words. Two students attributed their poor English to their lack of determination and perseverance. They said that they knew reading extensively might help them improve their proficiency, but the many

unknown words made them lose interest, and consequently they gave up. Several

students stated that due to their poor performance and lack of interest, actually, they

spent little time finding any sources for exposure to English outside the classroom.

Only a few students said that they read some bilingual materials or listened to English

songs occasionally. They did not habitually make any plan for their study. Even

though they did do it sometimes, they were unable to stick to it. They did not know

other effective strategies for learning English vocabulary, apart from memorizing

word lists and guessing. They said that although their teachers often encouraged them

to read more and put what they had learned to use, they did not have much chance to

use the words learned from the coursebooks. They hoped that the teachers would try

to cultivate their interest in learning English and create an atmosphere for them to use

what they learned freely.

(Data source: *I know that vocabulary is very important in English, but I'm poor at*
English since I was in Middle School. I feel frustrated in learning
English. The most difficult thing for me is to memorize words.
Normally, while I try to remember the word, I write it repeatedly. It's
so hard for me to remember them, so English really made me headache.
Naturally, I don't want to spend much time on English outside class. In
class, very often I can't understand the teacher's explanation in
English, so I'm often absentminded. I really hope the teacher can
provide us more games and activities so that the course can be
interesting. ………………………………………………………Interviewee3)

(Data source: *I suffer a lot from my poor memory in learning English vocabulary. I*
try hard to memorize the words in our text, but very quickly they
escape from my memory. Even if I can recognize some words in

reading, I can't use them in writing and speaking. I have lost interest and confidence in English, so I seldom read some extra materials in English. It's so difficult for me to understand the text without looking up the large number of unknown words in the dictionary. I hope the teacher can introduce us some interesting and effective ways to learn English vocabulary……………………………………………..Interviewee 4)

(Data source: I know that I am a lazy student. I don't want to spend time memorizing English vocabulary. We have to memorize so many things that I can't remember them. I once tried doing some reading, but I found it hard to insist on because of my limited vocabulary. I will never touch it unless there is an examination. I don't know other strategies to learn English vocabulary except memorization. When I try to remember a word, I just care about its Chinese equivalence, spelling and pronunciation without thinking about other aspects. We lack an environment to use the language. I hope the teachers can cultivate our interest in learning English and create some atmosphere for us to learn English… …………………………………………………..Interviewee 7)

The students' report from the open-ended question and interviews reveal why the lower level learners employed few strategies in vocabulary learning. Firstly, their limited vocabulary proficiency hindered them in making use of many sources outside the classroom, even though they knew very well the importance of reading, and some of them had even tried to enlarge their vocabulary in this way. Secondly, they were influenced by the examination-oriented system, so they limited their learning to the short-term goals of passing examinations. That is why they only focused on the coursebooks and tried to improve examination skills by practicing doing the

examination papers. One student who was interviewed said that once he had passed the CET Band 4 test, he would never study English again. Thirdly, the lack of vocabulary learning strategy training made them always resort to repetition.

4.2.2.3 Comparison of the vocabulary learning strategies used by the two groups

In order to answer the fifth research question and test whether the differences were of significance, the Independent Samples T-test was carried out to compare the mean scores of the six categories of strategy adopted by the two groups of students. The results of the analysis are presented in Table 4.22.

Table 4.22: T-test results of the six categories of strategies between the two groups

Category	Group	Mean	M.D	t-value	Sig. (2-tailed)
Sources	Higher	3.7208	1.30833	14.539	.000*
	Lower	2.4125			
Lexical Phrases	Higher	3.7750	1.60417	13.373	.000*
	Lower	2.1708			
Management	Higher	3.3125	1.30000	11.332	.000*
	Lower	2.0125			
Guessing	Higher	3.8000	1.08333	9.283	.000*
	Lower	2.7167			
Association	Higher	3.2750	.68750	5.919	.000*
	Lower	2.5875			
Repetition	Higher	3.1750	.40625	3.008	.004*
	Lower	2.7688			

(Higher Group: N=40; Lower Group: N=40; df=78; M.D=Mean Difference)

It can be seen from Table 4.22 that high-achievers and low-achievers do show a statistically significant difference in each category of vocabulary strategy use ($p < 0.05$ in all the cases). The differences are presented here from the largest to the smallest according to their T values. In addition, the mean score of higher group in each category is much larger than that of lower group. This implies that the participants in the higher group employed strategies more often than low-achievers. Taking the findings from the questionnaire and interviews into consideration, the differences mainly lay in the following aspects:

In the **sources** category, many high-achievers reported that they were keen on learning vocabulary from various sources, including textbooks, newspapers, magazines, English movies, songs and even PC games. By contrast, many low-achievers confined their vocabulary to textbooks. Although some of them tried doing some reading outside the classroom, they gave up. Only a few of them occasionally read some simplified English-Chinese reading materials, which indicates that they had to rely on Chinese to understand English.

In the **lexical phrases** category, the biggest difference lay in the fact that many high-achievers were sensitive to collocations while reading and would note down these collocations or expressions in their notebook so as to review when convenient. They tried to learn some idiomatic expressions while talking to native speakers or watching movies. During the interviews, they told me that they tried to recite a

sentence or a paragraph, which was very helpful to learn some lexical chunks. In contrast, far fewer of the lower level students did so.

Among the **management** strategies, 80% of higher level learners often reviewed what they learned regularly, but fewer of the low-achievers did so. Instead, 75% of the low-achievers reviewed vocabulary just before the examination. As they said during the interviews, because they found it difficult to remember the words, they seldom worked hard at vocabulary. In addition, some interviewees from the higher group said that they had a desire to communicate with native speakers when they had a chance, even though they were not very confident. A few of them had the habit of diary writing in English. However, no such students were found in the lower group.

The **guessing** strategy was the only category often used by both high and low achievers. Learners from both groups said they were able to find some clues to guess the meaning of unknown words. However, the difference lay in the fact that high-achievers could make use of more clues than the low-achievers. The most significant difference appears to be that 95% of high-achievers reported that they would check their guessed meaning against the wider context to see if it fit in, while 77.5% of low-achievers seldom or never did so.

High-achievers employed more **association** strategies than low-achievers. 82.5% of students from the higher group reported that they often made associations with

synonyms and antonyms. Some respondents answered to the open-ended questions by saying that they often associated spelling with pronunciation. One student told the researcher during the interview that he created a special association strategy by using Chinese equivalents and a Chinese word that sounded similar to the English word. For example, when he tried to remember the word 'abandon', he made up a sentence in Chinese (yi ge ben dan yao bei fang qi), which means that 'A fool will be abandoned'. He explained that because 'a fool' in Chinese (yi ge ben dan) sounds like 'abandon', and the Chinese equivalents of 'abandon' is 'fang qi', so when he read the word 'abandon', he immediately made the association that 'a fool will be abandoned.' It is very likely that because higher level students employed some association strategies, the memorization of vocabulary was not particularly hard for them. However, the association strategies were not often used by low-achievers.

Repetition, the category with the smallest statistically significant difference, was actually heavily employed by both groups of students. For the low-achievers, repetition strategies were the most often used among the six categories. They often memorized wordlists in textbooks and wrote them repeatedly or silently read them repeatedly. For the high-achievers, there seems to be a contradiction between their responses to the closed questions and their report from the open-ended question. The results from the closed questions show that repetition strategies, with the lowest mean score, were the least often used among the six categories. Unexpectedly, many students responded to the open-ended questions that they often recited sentences and

well-written paragraphs. After they learned some new words, they put them in their notebooks and memorized them when and where they could. Some of the students also tried to memorize the CET Band 4 vocabulary handbook every day. The researcher attempted to get some explanation from the students during the interview. The following is quoted from an interviewee.

(Data source: Now I seldom spend a continuous period of time, saying the individual word repeatedly and writing repeatedly. That's what the beginners did. After I get the meaning and pronunciation of a word from dictionary, I prefer to understand and try to remember the word's usage in a context. That is to say, while reciting a sentence or paragraph, I am thinking and recalling the usage of the word. I am learning by heart rather than learning by rote. …………………………………………………………Interviewee7)

The students distinguished the simple "massed repetition" (Nation 2001: 76) from some other memory strategies which involved a more complicated thinking process. Before they were able to recite the whole passage, they had to understand what they had read in every detail. While reciting, they had to recall the connection between the words and sentences. It is assumed that the traditional way of learning Chinese has transferred to the learning of English.

On the whole, striking differences have been found between the high-achievers and low-achievers in terms of their use of vocabulary learning strategies.

4.2.3 Correlation between vocabulary learning beliefs, learning strategies and scores in the vocabulary placement test

In order to find out how the vocabulary learning beliefs, learning strategies and the students' test scores correlated with each other, the Pearson Correlation test was carried out. If sig.(2-taied)≤0.01, the mark "**" indicates that the correlation is statistically significant at 0.01 level. If sig.(2-tailed) ≤0.05, the mark "*" indicates that the correlation is significant at the 0.05 level. The bigger the R-value is, the stronger the correlation will be.

Table 4.23: Correlation between vocabulary learning beliefs, learning strategies and the vocabulary test score

Correlations

		beliefs	strategies	Vocabulary Test Score
beliefs	Pearson Correlation	1	.280*	.171
	Sig. (2-tailed)		.012	.128
	N	80	80	80
strategies	Pearson Correlation	.280*	1	.822**
	Sig. (2-tailed)	.012		.000
	N	80	80	80
Vocabulary Test Score	Pearson Correlation	.171	.822**	1
	Sig. (2-tailed)	.128	.000	
	N	80	80	80

*. Correlation is significant at the 0.05 level (2-tailed).

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

The output in Table 4.23 shows that the use of vocabulary learning strategies was highly correlated with the test results. The Sig. (2-tailed) was .000 (p≤0.01), which shows strong positive correlation between strategies and test scores at the 0.01 level. The correlation between beliefs and strategies (r =.280*, Sig.(2-tailed) =.012) was also positive at the 0.05 level. But there was hardly any correlation between vocabulary learning beliefs and test scores.

An implication here is that the students' vocabulary test results might have a close relationship with their strategy use, but had no direct relationship with their learning beliefs. However, their learning beliefs may have been one of the factors that had some impact on their choice of strategies. In this study, the vocabulary learning beliefs held by the high-achievers were generally consistent with their strategy use. However, for the low-achievers, hindered by their poor level English proficiency, their beliefs about how vocabulary should be learned were not transformed into practice. Thus, to hold valid beliefs does not guarantee that students are able to choose proper strategies automatically. Teachers should make great effort to help learners improve their vocabulary learning proficiency, among other ways by exposing them to a variety of strategies.

4.3 Summary of the findings with reference to the aims of this thesis

Based on the data presented, its analysis and the discussion presented in the previous sections, the findings are summarized in this section to provide an answer to the research questions as stated in Chapter One.

- **What are the beliefs among high-achievers about how vocabulary should be learned?**

Many high-achievers in this study held the belief that vocabulary, which plays an important role in language learning, should be learned with great effort by combining different methods together. Not many of them believed that vocabulary learning was effective when only one approach was adopted. Most of them strongly believed that

vocabulary studied should be put to use. They also agreed that vocabulary could be acquired through extensive reading. However, most of them took a negative view of the memory belief, which asserts that vocabulary must be learned by memorizing wordlists.

- **What are the strategies often used by the high-achievers in vocabulary learning?**

Consistent with their beliefs, the high-achievers adopted a wide range of strategies to facilitate vocabulary learning at a high level. Among the six categories, the most often used strategies were guessing, lexical phrases and sources. They took the initiative in learning vocabulary from both textbooks and other sources outside the classroom. Many of them were keen readers, willing guessers and regular reviewers. Findings from the questionnaire show that the following two strategies were most often used among the higher level learners. One was that "*I increase my English vocabulary by reading stories, newspapers, magazines, etc. outside class*", and the other was that "*I check my guessed meaning against the wider context to see if it fits in.*" Data from interviews reveal that they adopted many mnemonic strategies, such as recalling the meaning, spelling and pronunciation of a word in their minds, reciting sentences or paragraphs and creating some special associations to facilitate the retention of vocabulary. They argued that 'simple repetition' without thinking and understanding was ineffective.

- **What are the beliefs among low-achievers about how vocabulary should be learned?**

Basically, most low-achievers held the same beliefs as high-achievers. They deemed that vocabulary should be learned through extensive reading and putting it to use. Memory belief was the least popular among them. However, many of them also held that vocabulary must be first learned by memorizing and then consolidated by reading extensively or putting it to use. As to whether vocabulary can be acquired only through extensive reading, they did not provide a definite answer.

● **What are the strategies often used by the low-achievers in vocabulary learning?**

Overall, the low-achievers adopted a very narrow range of strategies in vocabulary learning. Inconsistent with their beliefs about how vocabulary should be learned, the most often used strategies among the six categories were perceived to be repetition, followed by guessing. Their vocabulary largely came from textbooks. Although they were able to make use of some clues in the context to guess the meaning of unknown words, they neglected or unable to check the guessed meaning against the wider context to see if it fit in. They admitted that they were crammers, who review just before the examination. When they tried to remember words, most frequently, they wrote repeatedly or read silently.

● **Are there any differences in vocabulary learning beliefs and strategies between high-achievers and low-achievers?**

The learning belief and acquisition belief were chosen more often than the memory belief by both groups of participants. In spite of the fact that many participants were not in favor of learning by using memory strategies, they accepted it as necessary in vocabulary learning and believed that the combination of memory strategies with

reading extensively and practicing were more effective than clinging only to one method. Some slight differences were found in their attitude towards the acquisition belief, which was held more strongly by high-achievers than low-achievers. In addition, unlike the high-achievers who held specific beliefs about how vocabulary should be learned, a few low-achievers had not formed clear beliefs.

By contrast, distinct differences were found in the learning strategies of high-achievers and low-achievers. High-achievers seemed better at adopting more appropriate strategies than low-achievers. The most striking difference lay in the fact that most high-achievers consciously accessed various sources to learn vocabulary, while low-achievers relied too much on textbooks and wordlists. Secondly, high-achievers were sensitive to collocations while reading, and they might have learned some lexical chunks through reciting paragraphs and passages; but far fewer low-achievers did so. Thirdly, high-achievers reviewed what they had learned regularly, but low-achievers spent little time on English outside class. Fourthly, high-achievers were more skillful in using guessing strategies than low-achievers. Last but not least, high-achievers used more complex memory strategies than low-achievers did. They distinguished simple mechanical repetition from meaningful and thoughtful contextual reciting. Most probably, due to the fact that students applied different strategies in vocabulary learning, the gap between the two groups of participants' vocabulary proficiency became wider and wider.

Chapter Five

Conclusions

5.0 Introduction

This chapter presents overall conclusions about several major findings arising from

the research project (5.1), and presents some pedagogical implications (5.2). It also

discusses the limitations of the study (5.3), and puts forward some suggestions for

further research (5.4).

5.1 Overall conclusions about major findings

This study has generated five major findings regarding Chinese non-English majors'

beliefs and strategies in vocabulary learning.

Firstly, regardless of their English proficiency, both high-achievers and low-achievers

held a strong belief that vocabulary studied should be put to use. All of them regarded

learning vocabulary by purely memorizing wordlists as boring and ineffective. The

acquisition belief was held more strongly by the higher level learners than the lower

level learners. This finding seems to coincide with some previous studies (Gu and

Johnson 1996 and Wu Xia and Wang Qiang 1998), but it contradicts that of Wang

Wenyu (1998), who found that Chinese adult learners strongly believed that

vocabulary must be learned by memorizing wordlists.

However, qualitative data demonstrate that the discrepancy in the findings may be due

to the fact that the simple categorization (memory belief / acquisition belief / learning

belief) failed to capture a range of differences among learners. Actually, many high-achievers believed that the three approaches to vocabulary learning should be used complementarily rather than separately. While many low-achievers thought that to pick up vocabulary through extensive reading was out of their reach -- even though they believed it was an effective way -- they deemed that memorizing wordlists should go before reading and practical use.

Secondly, there were significant differences in vocabulary learning strategies between higher level students and lower level students. Good students used more strategies and more frequently than poor students did. They had developed good metacognitive strategies, such as regular review and access to a wide range of sources to learn vocabulary consciously. They made great effort to learn vocabulary by adopting different cognitive learning strategies such as guessing, association and memorization. They attached importance to lexical phrases including idioms, collocations and set phrases. Generally, they shared common features with the "good learners" in many previous studies. (e.g. Ahmed 1989, Sanaoui 1995, Lawson and Hogben 1996, Gu and Johnson 1996). On the other hand, they were distinctive because they also adopted skillful memorization strategies frequently. For instance, it is probable that they obtained a lot of lexical chunks unconsciously by reciting sentences, paragraphs or passages.

In contrast, the low-achievers used a much narrower range of strategies in vocabulary

learning. Due to their limited vocabulary, which largely came from their textbooks, they lost interest in extensive reading or even in English learning. Under the pressure of examinations, they became crammers, who reviewed vocabulary only before the examination and often resorted to simple repetition. Some of them wanted to give up learning English completely after passing the CET Band 4.

Thirdly, in this study, both high-achievers and low-achievers were found to have used memory strategies at a high level. This finding coincides with that Wu Xia and Wang Qiang (1998) and Wang Wenyu (1998). In their studies, Chinese learners employed rote learning strategies frequently. However, it contradicts that of Gu and Johnson (1996: 668), who held the divergent view that adult Chinese learners no longer dwelt on memorization strategies for vocabulary learning. This inconsistency reveals that some conclusions might have been prematurely overgeneralized before conducting further investigations.

One thing that should not be neglected is that the memory strategies adopted by high-achievers and low-achievers were quite different. For one thing, the high-achievers combined memorization with other active strategies, but the low-achievers relied on simple rote learning. For another, when the high-achievers tried to consolidate vocabulary, they put it in a meaningful context, such as paragraphs or passages. In order to recite the whole passage, they might have needed to go somewhat out of their way to find the connections within a text. However, the

low-achievers often did only some simple repetition of the individual words. Obviously, reciting paragraphs involves much deeper processing of the material than memorizing individual words. This finding suggests that thoughtful memorization and simple repetition should be distinguished. It also confirms that "memorization is useful if it is one of a wide range of actively used strategies" (Nation 2001: 227).

Fourthly, no correlation was found between the participants' learning beliefs and their test results, but there was a highly significant correlation between their vocabulary learning strategies and their test results. In addition, the correlation between the vocabulary learning beliefs and vocabulary learning strategies was also found to be significant though relatively weak. This suggests that besides the learners' beliefs, other factors, such as motivation, learning environment and proficiency level, also have an impact on the learners' choice of strategies.

Lastly, because of a lack of systematic vocabulary strategy training, even the higher level students did not have a large repertoire of strategies in vocabulary learning. Their strategies mainly served to help them achieve high marks in examinations. For example, reading comprehension covers a large percentage (40%) of the CET Band 4 and 6, so the students tried their best to read extensively. In order to improve their reading speed and complete the exercises within a limited time, they used guessing strategies at a high level. Memorizing wordlists in the CET Band 4 vocabulary handbooks also directly served this purpose. During the interviews, some students

said they were sensitive to collocations because many multiple choice items were related to collocations in the CET Band 4 test. Due to the fact that the oral test was not a must in the CET Band 4, the frequency of using the strategies which related to oral communication (Items 5, 12 and 31) was not high for either the high-achievers or the low-achievers.

5.2 Pedagogical implications

The present findings have implications for the teaching and learning of English vocabulary. First, as many researchers (e.g. Oxford, 1990; Cohen, 1998; Nation 1990) suggest, systematic strategy training can be effective when woven into regular classroom instruction to attain the ultimate goal of cultivating and encouraging the students to become autonomous learners, rather than just to pass certain examinations. Hence, teachers should introduce and have learners practice using a variety of alternative vocabulary learning strategies to achieve more effective and independent vocabulary learning in the future.

Second, teachers need to have more flexibility when choosing teaching materials. With regard to the authorized textbooks and course materials, teachers should have the right to decide which to use, or whether they will use them or not at all. They should be encouraged to establish their own resource banks, from which they can choose authentic materials as supplementary teaching tools to complement what the textbooks lack.

Third, explicit vocabulary instruction does not mean spending a considerable amount of time in presenting, explaining, and defining terms, after which students are expected to learn vocabulary on their own without much guidance from teachers. On the contrary, the teacher and student should work together as partners to achieve steady growth of vocabulary and long-term retention. Teachers need to devote more time to designing output activities and creating opportunities for students to encounter and become comfortable using new words in the classroom.

Fourth, teachers of lower level classes need to make a greater effort to cultivate students' interest in vocabulary learning through extensive reading. Students should not only be encouraged but also be guided to access to different sources. Since "rushing students too soon into reading material beyond their present capacity for fluent comprehension with occasional contextual guessing... destroys confidence" (Rivers 1981: 260, cited in Day and Bamford 1998:55), teachers play a crucial role in choosing materials to match the students' capacity. Considering the diversity of the students and the limited class time, it is suggested that a self-access center be established, in which students can access a wide range of materials from very easy to challenging, so that the low-achievers can be "hooked" on reading (Nuttall 1996: 127). Both teachers and higher level learners should be trained to make use of some corpora resources, which can provide them with a wide range of opportunities to observe and participate in real discourse.

Lastly, although rote learning is considered to be ineffective by many, high-achievers do benefit a lot from reciting paragraphs or passages. This kind of rote learning is more active than memorizing a word list. Living in an input-poor environment, if the students can combine this active memory strategy with the wide range of other strategies, they may achieve both accuracy and fluency. Since strategies themselves are not inherently good or bad, and no single strategy will be appropriate for all learners or for all tasks, it is anticipated that students can develop their own strategy use and optimize their learning strategies for themselves as individuals, so as to make them more effective autonomous learners.

5.3 Limitations of the study

There are several limitations to the study. First, the participants in this survey comprise only 40 successful and 40 unsuccessful non-English majors from one university. It is difficult to say whether they represent the non-English majors in other universities in China.

Second, the results of the vocabulary test may reflect only students' receptive vocabulary knowledge, although it is reasonable to assume that there is overlap and interaction between reception and production. In a future study, learners' productive vocabulary knowledge should also be included.

Third, since "questionnaire design should be shorter, to reduce the risk of respondent fatigue" (Bryman 2001:129), there were only three statements in the belief part of the

questionnaire. The simplicity may cause the results to be less generalisable.

Fourth, the structured questionnaire may not have covered all the strategies the students employ in their real learning activities, although the open-ended questions allowed for creativity by inviting them to offer any additional strategies they could think of. In addition, what the students said when answering the multiple choices in questionnaire might not be their real behavior since their multiple choice answers sometimes conflicted with their interview/ open-ended question answers.

Lastly, as with other similar studies, the data for the study were based on self-reports of the participants. Since the extent to which self-reports reflect reality is an issue, in similar research, various research methods should be adopted, such as observation and journals, as long as there is no restriction on time.

5.4 Suggestions for further studies

In the present study, the investigation was conducted with only a small sample at a particular place and point in time. In future research, a larger sample with more diverse backgrounds would be desirable in order to achieve more comprehensive findings. Another suggestion is that research into vocabulary learning strategies can be done by using more qualitative methods. For example, case studies can be done to show more detailed aspects of vocabulary learning strategies, not just the frequency of strategy use. In addition, a better way to observe the development in language acquisition would be to take a longitudinal approach, that is to say, to follow a group

of subjects for three or four years and conduct the investigation at different stages.

The present study merely confirms that students with different levels of language proficiency adopted different strategies. As to the effectiveness of various vocabulary learning strategies, this is still left unanswered. Therefore, a further suggestion for future research is to carry out experimental studies relating to strategy training and then do a comparison between the students' performance before and after training.

5.5 Conclusion

This was an exploratory study that only caught a glimpse of the present status of vocabulary learning by a particular group of Chinese college students at a particular university. The researcher has investigated the students' existing vocabulary learning strategies and their beliefs about how vocabulary should be learned. Although there are some limitations in such a study, the findings do provide a clear picture of students' beliefs and the strategies the students perceived that they use in vocabulary learning. It also reveals their expectations of language teaching. In brief, strategy use and students' test results are highly correlated, so learners should be able to develop a strong awareness of learning strategies and make full use of both contextualized and decontextualized strategies in order to deal successfully with vocabulary learning. Therefore, it is hoped that teachers can be trained to help the students, in particular unsuccessful students, to achieve greater improvement by using more, and more varied, vocabulary learning strategies.

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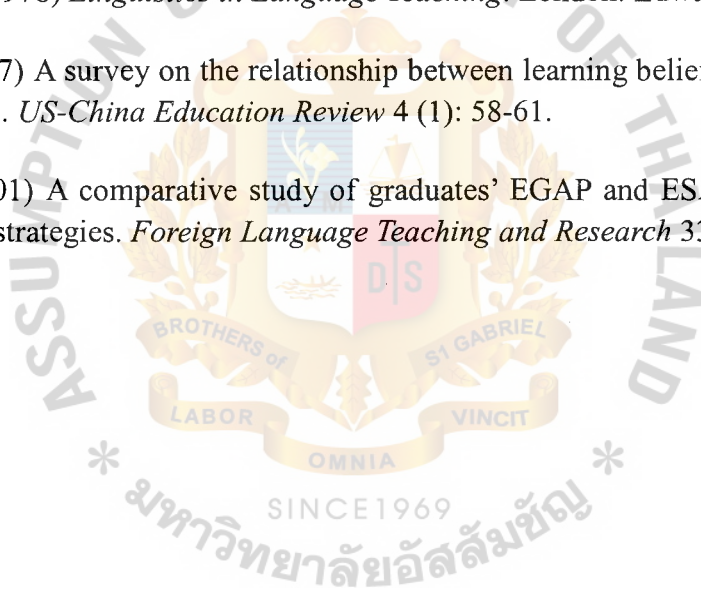
Appendix 1:

English Vocabulary Placement Test

Time allowed: 45 minutes
Total scores: 100%

Name _____ID Number _____ Class _____

Part I (27×2＝54%) Choose the most appropriate word or phrase to complete each of the following sentences.

1. She was caught without a ticket and fined thirty dollars _____.
   A) in a spot   B) on a spot   C) in the spot   D) on the spot
2. If I tell the police I was with you that day, will you _____ my story?
   A) back of   B) back off   C) back down   D) back up
3. There are serious penalties for failure to _____ with the regulations.
   A) consult   B) comply   C) confront   D) identify
4. However, at times this balance in nature is _____, resulting in a number of possibly unforeseen effects.
   A) troubled   B) disturbed   C) confused   D) puzzled
5. According to the American federal government, residents of Hawaii have the longest life _____: 77.2 years.
   A) rank   B) scale   C) span   D) scope
6. A season ticket _____ the holder to make as many journeys as he wishes within the stated period of time.
   A) entitles   B) grants   C) presents   D) promises
7. In recent years much more emphasis has been put _____ developing the students' productive skills.
   A) onto   B) in   C) over   D) on
8. Fifty years ago, wealthy people liked hunting wild animals for fun _____ sightseeing.
   A) rather than to go   B) more than going
   C) other than going   D) than to go
9. Eating too much fat can _____ heart disease and cause high blood pressure.
   A) attribute to B) attend to   C) contribute to   D) devote to
10. Petrol is refined from the _____ oil we take out of the ground.
   A) crude   B) fresh   C) rude   D) original
11. Without proper lessons, you could _____ a lot of bad habits when playing the piano.
   A) keep up   B) catch up   C) pick up   D) draw up
12. Cancellation of the flight _____ many passengers to spend the night at the airport.
   A) obliged   B) demanded   C) resulted   D) recommended

13. All the key words in the article are printed in _____ type so as to attract readers' attention.

   A) dark   B) bold   C) dense   D) black

14. If this kind of fish becomes _____, future generations may never taste it at all.

   A) scarce   B) minimum   C) short   D) seldom

15. She is only 12 years old? I find that completely _____.

   A) credible   B) credulous   C) incredible   D) incredulous

16. Some old people don't like pop songs because they can't _____ so much noise.

   A) resist   B) sustain   C) tolerate   D) undergo

17. The manager lost his _____ just because his secretary was ten minutes late.

   A) mood   B) temper   C) mind   D) passion

18. The strong storm did a lot of damage to the coastal villages; several fishing boats were _____ and many houses collapsed.

   A) wrecked   B) spoiled   C) torn   D) injured

19. Please be careful when you are drinking coffee in case you _____ the new carpet.

   A) crash   B) pollute   C) spot   D) stain

20. The president made a _____ speech at the opening ceremony of the sports meeting, which encouraged the sportsmen greatly.

   A) vigorous   B) tedious   C) flat   D) harsh

21. She was so _____ in her job that she didn't hear anybody knocking at the door.

   A) attracted   B) absorbed   C) drawn   D) concentrated

22. They took _____ measures to prevent poisonous gases from escaping.

   A) fruitful   B) beneficial   C) valid   D) effective

23. The Japanese scientists have found that scents _____ efficiency and reduce stress among office workers.

   A) enhance   B) amplify   C) foster   D) magnify

24. All the students have to _____ to the rules and regulations of the school.

   A) confirm   B) confront   C) confine   D) conform

25. He _____ his head, wondering how to solve the problem.

   A) scrapped   B) screwed   C) scraped   D) scratched

26. The two most important _____ in making a cake are flour and sugar.

   A) elements   B) components   C) ingredients   D) constituents

27. No one imagined that the apparently _____ businessman was really a criminal.

   A) respective   B) respectable   C) respectful   D) realistic

Part II (18×2＝36%) **Choose the right word from the left column to go with each meaning in the right column. Write the number of that word next to its meaning. The following is an example:**

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

Group one

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

Group two

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

Group three

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

Group four

1. anonymous
2. indigenous   _____ without the writer's name
3. maternal   _____ least possible amount
4. minimum   _____ native
5. nutrient
6. modification

Group five

1. elementary
2. negative   _____ of the beginning stage
3. static   _____ not moving or changing
4. random   _____ final, furthest
5. reluctant
6. ultimate

Group six

1. coincide
2. coordinate   _____ prevent people from doing something they want to do
3. expel   _____ add to
4. frustrate   _____ send out by force
5. supplement
6. transfer

Part III.(10×1＝10%）Complete the following passage with an appropriate word given in the box. Change the form if necessary.

treatment	victim	educate	unique	character
child	reduce	commit	parent	behave

There are over 1.5 million violent crimes reported in the United States each year. Most of this violence comes from chronically aggressive people, and nearly anyone could become a 1) _____. This is not a problem 2) _____ to the U.S. Rates of violent crime occur at comparable rates in most developed nations. We are beginning to understand and treat the causes of aggressive behavior, which lead to violent crimes.

Most violent crimes are 3) _____ by chronically aggressive people. Psychologists recognize chronically aggressive people are those whose usual behavior is characterized by aggression. These are distinguished from impulsive aggressive persons who usually 4) _____ without aggression, but who may be prone to aggressive behavior in given situations. The practical reason for this distinction is in the 5) _____ of aggressive behavior. Medications altering serotonin (血清素) levels in the brain were found to be effective in 6) _____ the impulsive and violent behavior in impulsive aggressive persons, but the same medications did not stop aggressive or violent behavior in the chronically aggressive persons. Aggressive behavior has both genetic and cultural components. As in other types of learned behavior, when a child's aggressive behavior becomes a part of its 7) _____, it is not easy to change. Most aggressive children come from families with a history of aggression by one or both 8) _____. If their aggressive behavior continues these children will become adults who in turn will create conditions for aggressive or violent behavior in their own 9) _____.

It is important to try to stop aggression by properly 10) _____ children in non-aggressive behavior. This is not easy, but it can be effective and early attempts are promising.

Appendix 2:

Questionnaire

This questionnaire is designed as a part of a research study entitled *"Exploring the Beliefs about Vocabulary Learning Methods and the Vocabulary Learning Strategies Adopted by Non-English Majors at Southwest Jiaotong University Emei Campus"* of English language teaching, Graduate School of English, Assumption University, Thailand. Your cooperation in completing this questionnaire is highly valued. All completed questionnaires and recorded data will only be used for educational purpose. Your identity and the information you provide will be treated with the absolute confidentiality.

It is extremely important your answer each question **as HONESTLY as you can** since the success of the investigation depends on you.

Thank you very much for your time and cooperation!

Part I Personal Information

Name	_____	Gender	_____
ID No.	_____	Age	_____
Class	_____	Years of learning English (	)
Major	_____	Your score on CET 4 (	)

Part II Your beliefs about how vocabulary should be learned.

Read the statements first and tick (√) the one that suits you best for each statement. For each item, please tick ONLY ONE

5	4	3	2	1
strongly agree	**agree**	**have no idea**	**disagree**	**strongly disagree**

No.	Beliefs about vocabulary learning method	5	4	3	2	1
1	I believe that vocabulary must be learned by memorizing word lists.					
2	I believe that vocabulary can be picked up through extensive reading.					
3	I believe that vocabulary studied must be put to use before it is finally learned.					

Question: In your opinion, what's the best way to learn English vocabulary?

_____
_____
_____
_____
_____
_____

Part III The strategies you often use in vocabulary learning

Please tick （ √) the boxes numbered 1-5. The numbers indicate how often you use the strategies. For each item, please tick **ONLY ONE** box.

5	4	3	2	1
very often	often	sometimes	seldom	never

Management (6 items)	5	4	3	2	1
1. I make a plan for vocabulary learning and stick to it instead of working on it *by fits and starts* (三天打鱼，两天晒网).					
2. I would *modify* (修改) my vocabulary learning plan if the results are not satisfactory.					
3. I review the newly learned vocabulary regularly.					
4. I only review vocabulary before examination.					
5. I try to communicate with my classmates in English and make use of the words I have learned.					
6. I write diary in English and make use of the learned words in it.					
Sources (6 items)	5	4	3	2	1
7. My vocabulary is largely from the textbooks.					
8. I increase my English vocabulary by reading stories, newspapers, magazines, etc. outside class.					
9. I pay attention to the new words and expressions used by my teachers and classmates.					
10. I learn new words from all kinds of materials in English outside school, e.g. songs, movies, road signs, and TV programmes.					
11. I often memorize the CET4 or CET6 dictionaries.					
12. I seek opportunities to converse with native speakers in English.					
Repetition (4 items)	5	4	3	2	1
13. When I try to remember a word, I write it repeatedly.					
14. When I try to remember a word, I repeatedly say and spell the new word in my mind.					
15. When I try to remember a word, I repeatedly say it aloud.					
16. I follow the tape to repeat the words orally and write them at the same time.					
Guessing (6 items)	5	4	3	2	1
17. I make use of examples provided in the text when guessing the meaning of a new word.					

18. I make use of my common sense and knowledge of the world when guessing the meaning of a word.					
19. I look for any definitions or paraphrases in the passage that support my guess about the meaning of a new word.					
20. I make use of the grammatical structure of a sentence when guessing the meaning of a new word.					
21. I analyze the word parts when guessing the meaning of a new word.					
22. I check my guessed meaning against the wider context to see if it fits in.					
Association (4 items)	5	4	3	2	1
23. When I try to remember a new word, I associate it with other English words that sound similar to it.					
24. When I try to remember a new word, I associate it with Chinese words that sound similar to it.					
25. When I try to remember a new word, I associate it with other English words that share the same meaning or have opposite meaning.					
26. When I try to remember a new word, I associate it with other words that are related to a particular topic.					
Strategies dealing with lexical phrases (6 items)	5	4	3	2	1
27. I'm very interested in learning English idioms.					
28. When looking up a word in the dictionary, I pay attention to the related words that often collocate (搭配) with it rather than just get the meaning of the words.					
29. When reading, I try to be sensitive to collocations and expressions.					
30. I like to recite some well-written paragraphs or passages, from which I can learn set phrases or expressions.					
31. When talking to native speakers, I try to remember the *idiomatic expressions* (地道的表达) they use.					
32. When writing or speaking, I try to find appropriate words that can collocate with the word I use.					

Question: Please list some strategies you often use in vocabulary learning:

_____

_____

_____

_____

Question: Are there any other vocabulary learning strategies you know but that were excluded in the questionnaire? If *Yes*, please write them out.

_____

_____

_____

_____

_____

Appendix 3:

Interview with a student from higher level group

(Translated Transcript)

I: Interviewer   *S: student*

I: Thanks very much for giving the interview. How long have you been learning English?

S: I began to learn English when I was in Grade Six at primary school. That was eight years ago.

I: What role do you think vocabulary play in English learning?

S: Humm…I think it plays a very important role in the process of English learning. My mother is an English teacher and she often asked me to make an effort to enlarge my vocabulary size.

I: Have you ever run up against any difficulties in vocabulary learning?

S: In my opinion, as long as you work hard, there shouldn't be any difficulties.

I: Oh, really? What do you think is the best way to learn English vocabulary?

S: Actually, I don't think we can rely on only one method to learn vocabulary effectively. It's better to combine different ways together. If we often read English materials, we can encounter a lot of words naturally. I believe the more frequently you encounter a word, the easier you can remember them. Once you can use the words you have learned, you can never forget it.

I: Do you believe that vocabulary must be memorized?

S: Yes, but I don't like the way of learning by rote. I think we should learn the new words by heart. That is to say, we should put the new words into meaningful contexts. So when I tried to remember a word, I would recite the whole sentence in which the word appeared. In this way, I remembered all the words in a sentence instead of only one word.

I: Have you ever memorized any vocabulary handbooks?

S: Yes. At present, I plan to take part in the TOFEL test, so I've made a plan for myself and try to memorize 40 words every day.

I: Can you stick to it every day?

S: Sure. I bring the handbook with me and when I have time I will take it out to look through.

I: Oh! You mean that you often review the newly learned words regularly, right?

S: Yes, yes.

I: Can you tell me what strategies you have been applying in learning vocabulary?

S: As to strategies, humm.., there are not many. I think I benefit a lot from extensive reading and watching English movies. Since my mother is an English teacher, we had many English story books at home. When I was young, I read a lot of simplified story books and I have developed great interest in learning English. I like

watching English movies, listening to English songs, too. I guess, by doing so, my vocabulary size enlarged a lot.

I: What types of materials do you use for extensive reading now?

S: I like reading English newspapers, such as China Daily, 21st Century, some magazines, such as Crazy English, and stuff downloaded from the Internet. I often go to the library with a pen and a notebook or some pieces of paper, and then stay there for several hours to read the magazines or newspapers.

I: How do you deal with the unknown words in the reading text?

S: Normally, I try to guess by using some guessing strategies the teacher told us, but if the word appears repeatedly and I'm not sure about the guessed meaning, I will note it down together with the sentence. When I have time, I would look them up in a dictionary. After meeting several times, the words can leave a deep impression in my mind.

I: What aspects of word knowledge do you pay attention to while looking up in a dictionary?

S: First of all, I try to find the meaning of the word, and then the pronunciation. I also care about the collocations of the word, especially some set phrases. You know they are an important part in CET Band 4 test. When it comes to collocations, I think that they are the difficult things in vocabulary learning, because they are somewhat arbitrary. I mean you can't explain why these words go together, so the only method is to remember them.

I: Do you think it's difficult to learn collocations?

S: Yes. We can only learn them by rote. And I often made some mistakes in writing or speaking just because I don't know the words' limitations of use according to situation and function. So in order to improve my writing, I try to recite some well-written paragraphs or passages.

I: Is it useful?

S: I think so. I've learned a lot of sentence pattern and idiomatic expressions in this way and I can use them in my writing.

I: Do you have any expectations to your teacher or about how vocabulary should be taught?

S: I find that many words we learned from textbooks cannot be used in our daily life. Sometimes I just don't have the words I need to explain what I want to say. I hope that the teachers can supplement some extra-materials which involve more words related to our daily life than the textbooks. In addition, I don't know other vocabulary learning strategies, so maybe the teacher can give us some instruction.

I: Thank you very much for sparing some time for this interview.

S: You are welcome!

Appendix 4:

Interview with a student from lower level group

(Translated Transcript)

I: Interviewer   *S: student*

I: Thank you for giving the interview. How long have you been studying English?

S: About 7 years.

I: After such a long time of studying English, what role do you think vocabulary plays in English learning?

S: Very important, I think. It plays an essential role, and it is also very difficult for me.

I: What difficulties have you encountered in vocabulary learning?

S: It's very hard to remember so many words. Sometimes I made up my mind to memorize the words we have learned in our text, but I forgot a lot of them when the teacher gave us a dictation the next day. Frankly speaking, I am not interested in English and spend little time on it outside the classroom. So maybe my laziness contributed to my poor performance.

I: Oh, thanks for your frankness. Have you ever think of improving your vocabulary by using some effective methods? In other words, what do you believe is the best way to learn vocabulary?

S: Er…, our teacher often encouraged us to read some English novels or newspapers and said that learning vocabulary through reading is much better than memorizing wordlists. However, when I opened an English book, the large number of unknown words made me headache, so I gave up. I guess that if we can live in an environment where we have to use English to communicate, we can make great achievement. Unfortunately, we cannot find such an environment.

I: Do you often speak English in class?

S: Seldom. Actually, it's hard for me to concentrate on listening to the teacher all the time because I can't understand his explanation in English. Sometimes the teacher asked us to answer questions, but we often kept silence, and then the teacher could do nothing but continue his talking.

I: What strategies do you use in vocabulary learning?

S: The strategies I often use are guessing, memorizing and consulting dictionary. The teacher gave us instruction about how to make use of the clues in the text to guess the meaning of unknown words, but sometimes if there are too many unknown words in the text, this strategy doesn't work.

I: Then how do you deal with the unknown words in reading text?

S: Normally I resort to dictionary, but it's time consuming.

I: What aspects of word knowledge do you notice when you consulting a dictionary?

S: I just try to find the meaning of the word.

I: Do you pay attention to the collocations of the word?

S: Seldom. They are too complicated.

I: Can you tell me what you do when you try to remember a word?

S: I always write it repeatedly and think about the meaning in my mind.

I: Do you like reciting some well-written paragraphs or passages?

S: Oh, no. I hate reciting. It's very difficult.

I: Do you often read some English materials outside the class?

S: Seldom. Sometimes I wanted to find something to read, but usually I gave up just because of the many new words.

I: Do you know some other strategies in vocabulary learning?

S: No.

I: Do you have any expectations about how vocabulary should be taught?

S: I know that we can only rely on ourselves to remember the words, but I really hope that the teacher can make the class more interesting by designing some activities. It is said that "Interest is the best teacher". Once we have interest in learning English, I'm sure we can invest more time in English.

I: So that is to say, you're also willing to improve your English with the help of the teachers.

S: Definitely. And I want to pass the CET 4 as early as possible.

I: Thank you so much for you cooperation.
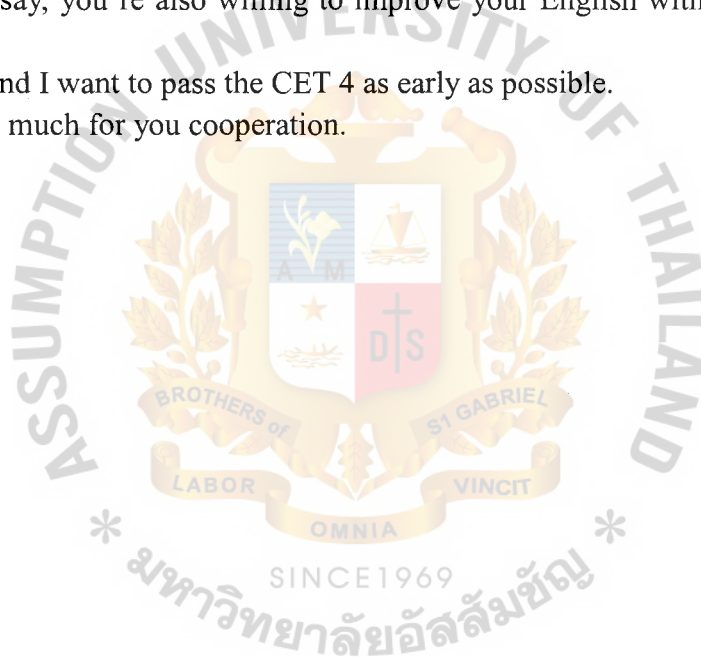
Appendix 5:

Samples of Analysis Done by SPSS 13.0 for Windows

Beliefs held by higher level learners

Belief1: Vocabulary must be learned by memorizing word lists

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	7.5	7.5	7.5
	disagree	15	37.5	37.5	45.0
	have no idea	5	12.5	12.5	57.5
	agree	17	42.5	42.5	100.0
	Total	40	100.0	100.0	

Belief2: Vocabulary can be picked up through extensive reading

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	have no idea	3	7.5	7.5	7.5
	agree	26	65.0	65.0	72.5
	strongly agree	11	27.5	27.5	100.0
	Total	40	100.0	100.0	

Belief 3: Vocabulary studied should be put to use

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	have no idea	3	7.5	7.5	7.5
	agree	11	27.5	27.5	35.0
	strongly agree	26	65.0	65.0	100.0
	Total	40	100.0	100.0	

Strategies used by higher level learners

S1: I make a plan for vocabulary learning and stick to it instead of working on it by fits and starts.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	2	5.0	5.0	5.0
	seldom	4	10.0	10.0	15.0
	sometimes	15	37.5	37.5	52.5
	often	16	40.0	40.0	92.5
	very often	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

S2: I would modify my vocabulary learning plan if the results are not satisfactory.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	1	2.5	2.5	2.5
	seldom	2	5.0	5.0	7.5
	sometimes	17	42.5	42.5	50.0
	often	14	35.0	35.0	85.0
	very often	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

S3: I review the newly learned vocabulary regularly.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	5	12.5	12.5	12.5
	sometimes	3	7.5	7.5	20.0
	often	20	50.0	50.0	70.0
	very often	12	30.0	30.0	100.0
	Total	40	100.0	100.0	

S4: I only review vocabulary before examination.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	2	5.0	5.0	5.0
	seldom	22	55.0	55.0	60.0
	sometimes	5	12.5	12.5	72.5
	often	10	25.0	25.0	97.5
	very often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S5: I try to communicate with my classmates in English and make the best use of the words I have learned.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	5	12.5	12.5	12.5
	sometimes	13	32.5	32.5	45.0
	often	16	40.0	40.0	85.0
	very often	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

S6: I write diary in English and make use of the learned words in it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	6	15.0	15.0	15.0
	seldom	11	27.5	27.5	42.5
	sometimes	13	32.5	32.5	75.0
	often	6	15.0	15.0	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S7: My vocabulary is largely from the textbooks.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	7	17.5	17.5	17.5
	sometimes	6	15.0	15.0	32.5
	often	24	60.0	60.0	92.5
	very often	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

S8: I increase my English vocabulary by reading stories, newspapers, magazines, etc. outside class.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	1	2.5	2.5	2.5
	sometimes	1	2.5	2.5	5.0
	often	18	45.0	45.0	50.0
	very often	20	50.0	50.0	100.0
	Total	40	100.0	100.0	

S9: I pay attention to the new words and expressions used by my teachers and classmates.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	1	2.5	2.5	2.5
	sometimes	9	22.5	22.5	25.0
	often	26	65.0	65.0	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S10: I learn new words from all kinds of materials in English outside the school, e.g. songs, movies, road signs, and TV programme.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	2	5.0	5.0	5.0
	sometimes	8	20.0	20.0	25.0
	often	16	40.0	40.0	65.0
	very often	14	35.0	35.0	100.0
	Total	40	100.0	100.0	

S11: I often memorize the CET4 or CET6 dictionaries.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	1	2.5	2.5	2.5
	seldom	7	17.5	17.5	20.0
	sometimes	18	45.0	45.0	65.0
	often	10	25.0	25.0	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S12: I seek opportunities to converse with native speakers in English.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	3	7.5	7.5	7.5
	seldom	7	17.5	17.5	25.0
	sometimes	12	30.0	30.0	55.0
	often	14	35.0	35.0	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S13: When I try to remember a word, I write it repeatedly.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	6	15.0	15.0	15.0
	seldom	8	20.0	20.0	35.0
	sometimes	7	17.5	17.5	52.5
	often	16	40.0	40.0	92.5
	very often	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

S14: When I try to remember a word, I repeatedly say and spell the new word in my mind.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	2	5.0	5.0	5.0
	sometimes	3	7.5	7.5	12.5
	often	14	35.0	35.0	47.5
	very often	21	52.5	52.5	100.0
	Total	40	100.0	100.0	

S15: When I try to remember a word, I repeatedly say it aloud.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	2	5.0	5.0	5.0
	seldom	15	37.5	37.5	42.5
	sometimes	11	27.5	27.5	70.0
	often	10	25.0	25.0	95.0
	very often	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

S16: I follow the tape to repeat the words orally and write them at the same time.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	8	20.0	20.0	20.0
	seldom	17	42.5	42.5	62.5
	sometimes	9	22.5	22.5	85.0
	often	2	5.0	5.0	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S17: I make use of examples provided in the text when guessing the meaning of a new word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	4	10.0	10.0	10.0
	sometimes	13	32.5	32.5	42.5
	often	21	52.5	52.5	95.0
	very often	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

S18: I make use of my common sense or knowledge of the world when guessing the meaning of a word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	2	5.0	5.0	5.0
	sometimes	7	17.5	17.5	22.5
	often	14	35.0	35.0	57.5
	very often	17	42.5	42.5	100.0
	Total	40	100.0	100.0	

S19: I look for any definitions or paraphrases in the passage that support my guess about the meaning of a new word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	2	5.0	5.0	5.0
	sometimes	13	32.5	32.5	37.5
	often	21	52.5	52.5	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S20: I make use of the grammatical structure of a sentence when guessing the meaning of a new word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	11	27.5	27.5	27.5
	sometimes	15	37.5	37.5	65.0
	often	10	25.0	25.0	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S21: I analyze the word parts when guessing the meaning of a new word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	4	10.0	10.0	10.0
	sometimes	7	17.5	17.5	27.5
	often	22	55.0	55.0	82.5
	very often	7	17.5	17.5	100.0
	Total	40	100.0	100.0	

S22: I check my guessed meaning against the wider context to see if it fits in.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	2	5.0	5.0	5.0
	often	15	37.5	37.5	42.5
	very often	23	57.5	57.5	100.0
	Total	40	100.0	100.0	

S23: When I try to remember a new word, I associate it with other English words that sound similar to it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	10	25.0	25.0	25.0
	sometimes	8	20.0	20.0	45.0
	often	16	40.0	40.0	85.0
	very often	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

S24: When I try to remember a new word, I associate it with Chinese words that sound similar to it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	11	27.5	27.5	27.5
	seldom	18	45.0	45.0	72.5
	sometimes	6	15.0	15.0	87.5
	often	4	10.0	10.0	97.5
	very often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S25: When I try to remember a new word, I associate it with other English words that share the same meaning or have opposite meaning.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	1	2.5	2.5	2.5
	sometimes	6	15.0	15.0	17.5
	often	19	47.5	47.5	65.0
	very often	14	35.0	35.0	100.0
	Total	40	100.0	100.0	

S26: When I try to remember a new word, I associate it with other words that are related to a particular topic.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	2	5.0	5.0	5.0
	seldom	8	20.0	20.0	25.0
	sometimes	8	20.0	20.0	45.0
	often	18	45.0	45.0	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S27: I'm very interested in learning English idioms.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	7	17.5	17.5	17.5
	sometimes	11	27.5	27.5	45.0
	often	17	42.5	42.5	87.5
	very often	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

S28: When looking up a word in the dictionary, I pay attention to the related words that often collocate with it rather than just get the meaning of the words.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	sometimes	9	22.5	22.5	22.5
	often	19	47.5	47.5	70.0
	very often	12	30.0	30.0	100.0
	Total	40	100.0	100.0	

S29: When reading, I try to be sensitive to collocations and expressions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	sometimes	6	15.0	15.0	15.0
	often	26	65.0	65.0	80.0
	very often	8	20.0	20.0	100.0
	Total	40	100.0	100.0	

S30: I like to recite some well-written paragraphs or passages, from which I can learn set phrases or expressions.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	4	10.0	10.0	10.0
	sometimes	19	47.5	47.5	57.5
	often	13	32.5	32.5	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S31: When talking to native speakers, I try to remember the idiomatic expressions they use.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	1	2.5	2.5	2.5
	seldom	5	12.5	12.5	15.0
	sometimes	4	10.0	10.0	25.0
	often	18	45.0	45.0	70.0
	very often	12	30.0	30.0	100.0
	Total	40	100.0	100.0	

S32: When writing or speaking, I try to find the appropriate words that can collocate with the word I use.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	2	5.0	5.0	5.0
	sometimes	12	30.0	30.0	35.0
	often	21	52.5	52.5	87.5
	very often	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

Beliefs held by lower level learners

Belief1: Vocabulary must be learned by memorizing word lists.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	1	2.5	2.5	2.5
	disagree	10	25.0	25.0	27.5
	have no idea	13	32.5	32.5	60.0
	agree	14	35.0	35.0	95.0
	strongly agree	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

Belief 2: Vocabulary can be picked up through extensive reading.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	5	12.5	12.5	12.5
	have no idea	7	17.5	17.5	30.0
	agree	22	55.0	55.0	85.0
	strongly agree	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

Belief 3: Vocabulary studied should be put to use.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	1	2.5	2.5	2.5
	have no idea	1	2.5	2.5	5.0
	agree	18	45.0	45.0	50.0
	strongly agree	20	50.0	50.0	100.0
	Total	40	100.0	100.0	

Strategies held by lower level learners

S1: I make a plan for vocabulary learning and stick to it instead of working on it by fits and starts.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	6	15.0	15.0	15.0
	seldom	20	50.0	50.0	65.0
	sometimes	14	35.0	35.0	100.0
	Total	40	100.0	100.0	

S2: I would modify my vocabulary learning plan if the results are not satisfactory.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	13	32.5	32.5	32.5
	seldom	20	50.0	50.0	82.5
	sometimes	5	12.5	12.5	95.0
	often	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

S3: I review the newly learned vocabulary regularly.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	13	32.5	32.5	32.5
	seldom	17	42.5	42.5	75.0
	sometimes	10	25.0	25.0	100.0
	Total	40	100.0	100.0	

S4: I only review vocabulary before examinations.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	3	7.5	7.5	7.5
	seldom	6	15.0	15.0	22.5
	sometimes	11	27.5	27.5	50.0
	often	15	37.5	37.5	87.5
	very often	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

S5: I try to communicate with my classmates in English and make use of the words I have learned.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	24	60.0	60.0	60.0
	seldom	12	30.0	30.0	90.0
	sometimes	3	7.5	7.5	97.5
	often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S6: I write diary in English and make use of the learned words in it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	32	80.0	80.0	80.0
	seldom	8	20.0	20.0	100.0
	Total	40	100.0	100.0	

S7: My vocabulary is largely from the textbooks.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	7	17.5	17.5	17.5
	sometimes	3	7.5	7.5	25.0
	often	22	55.0	55.0	80.0
	very often	8	20.0	20.0	100.0
	Total	40	100.0	100.0	

S8: I increase my English vocabulary by reading stories, newspapers, magazines, etc. outside class.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	6	15.0	15.0	15.0
	seldom	24	60.0	60.0	75.0
	sometimes	9	22.5	22.5	97.5
	often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S9: I pay attention to the new words and expressions used by my teachers and classmates.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	3	7.5	7.5	7.5
	seldom	17	42.5	42.5	50.0
	sometimes	15	37.5	37.5	87.5
	often	4	10.0	10.0	97.5
	very often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S10: I learn new words from all kinds of materials in English outside the school, e.g. songs, movies, road signs, and TV programme.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	7	17.5	17.5	17.5
	seldom	14	35.0	35.0	52.5
	sometimes	15	37.5	37.5	90.0
	often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S11: I often memorize the CET4 or CET6 dictionaries.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	7	17.5	17.5	17.5
	seldom	16	40.0	40.0	57.5
	sometimes	12	30.0	30.0	87.5
	often	1	2.5	2.5	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S12: I seek opportunities to converse with native speakers in English.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	35	87.5	87.5	87.5
	seldom	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

S13: When I try to remember a word, I write it repeatedly.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	1	2.5	2.5	2.5
	seldom	7	17.5	17.5	20.0
	sometimes	16	40.0	40.0	60.0
	often	10	25.0	25.0	85.0
	very often	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

S14: When I try to remember a word, I repeatedly say and spell the new word in my mind.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	1	2.5	2.5	2.5
	seldom	11	27.5	27.5	30.0
	sometimes	14	35.0	35.0	65.0
	often	8	20.0	20.0	85.0
	very often	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

S15: When I try to remember a word, I repeatedly say it aloud.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	8	20.0	20.0	20.0
	seldom	16	40.0	40.0	60.0
	sometimes	8	20.0	20.0	80.0
	often	8	20.0	20.0	100.0
	Total	40	100.0	100.0	

S16: I follow the tape to repeat the words orally and write them at the same time.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	11	27.5	27.5	27.5
	seldom	15	37.5	37.5	65.0
	sometimes	11	27.5	27.5	92.5
	often	2	5.0	5.0	97.5
	very often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S17: I make use of examples provided in the text when guessing the meaning of a new word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	seldom	12	30.0	30.0	30.0
	sometimes	13	32.5	32.5	62.5
	often	12	30.0	30.0	92.5
	very often	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

S18: I make use of my common sense or knowledge of the world when guessing the meaning of a word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	1	2.5	2.5	2.5
	seldom	8	20.0	20.0	22.5
	sometimes	10	25.0	25.0	47.5
	often	18	45.0	45.0	92.5
	very often	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

S19: I look for any definitions or paraphrases in the passage that support my guess about the meaning of a new word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	4	10.0	10.0	10.0
	seldom	12	30.0	30.0	40.0
	sometimes	16	40.0	40.0	80.0
	often	6	15.0	15.0	95.0
	very often	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

S20: I make use of the grammatical structure of a sentence when guessing the meaning of a new word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	10	25.0	25.0	25.0
	seldom	13	32.5	32.5	57.5
	sometimes	14	35.0	35.0	92.5
	often	1	2.5	2.5	95.0
	very often	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

S21: I analyze the word parts when guessing the meaning of a new word.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	4	10.0	10.0	10.0
	seldom	15	37.5	37.5	47.5
	sometimes	13	32.5	32.5	80.0
	often	8	20.0	20.0	100.0
	Total	40	100.0	100.0	

S22: I check my guessed meaning against the wider context to see if it fits in.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	4	10.0	10.0	10.0
	seldom	27	67.5	67.5	77.5
	sometimes	9	22.5	22.5	100.0
	Total	40	100.0	100.0	

S23: When I try to remember a new word, I associate it with other English words that sound similar to it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	1	2.5	2.5	2.5
	seldom	17	42.5	42.5	45.0
	sometimes	18	45.0	45.0	90.0
	often	3	7.5	7.5	97.5
	very often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S24: When I try to remember a new word, I associate it with Chinese words that sound similar to it.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	4	10.0	10.0	10.0
	seldom	14	35.0	35.0	45.0
	sometimes	11	27.5	27.5	72.5
	often	10	25.0	25.0	97.5
	very often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S25: When I try to remember a new word, I associate it with other English words that share the same meaning or have opposite meaning.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	4	10.0	10.0	10.0
	seldom	16	40.0	40.0	50.0
	sometimes	10	25.0	25.0	75.0
	often	7	17.5	17.5	92.5
	very often	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

S26: When I try to remember a new word, I associate it with other words that are related to a particular topic.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	9	22.5	22.5	22.5
	seldom	16	40.0	40.0	62.5
	sometimes	12	30.0	30.0	92.5
	often	3	7.5	7.5	100.0
	Total	40	100.0	100.0	

S27: I'm very interested in learning English idioms.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	9	22.5	22.5	22.5
	seldom	15	37.5	37.5	60.0
	sometimes	10	25.0	25.0	85.0
	often	2	5.0	5.0	90.0
	very often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S28: When looking up a word in the dictionary, I pay attention to the related words that often collocate with it rather than just get the meaning of the words.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	3	7.5	7.5	7.5
	seldom	23	57.5	57.5	65.0
	sometimes	8	20.0	20.0	85.0
	often	5	12.5	12.5	97.5
	very often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S29: When reading, I try to be sensitive to collocations and expressions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	7	17.5	17.5	17.5
	seldom	18	45.0	45.0	62.5
	sometimes	10	25.0	25.0	87.5
	often	4	10.0	10.0	97.5
	very often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S30: I like to recite some well-written paragraphs or passages, from which I can learn set phrases or expressions.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	13	32.5	32.5	32.5
	seldom	18	45.0	45.0	77.5
	sometimes	8	20.0	20.0	97.5
	often	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

S31: When talking to native speakers, I try to remember the idiomatic expressions they use.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	20	50.0	50.0	50.0
	seldom	11	27.5	27.5	77.5
	sometimes	5	12.5	12.5	90.0
	often	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

S32: When writing or speaking, I try to find the appropriate words that can collocate with the word I use.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	12	30.0	30.0	30.0
	seldom	17	42.5	42.5	72.5
	sometimes	8	20.0	20.0	92.5
	often	3	7.5	7.5	100.0
	Total	40	100.0	100.0	