

Strategies in Vocabulary Learning and Teaching

-A study of vocabulary acquisition in a Chinese University

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1. Introduction

Words are the primary linguistic means to convey meanings. They are the basic units of any language and are vital to linguistic communication. Most native speakers of English acquire their mother language, especially vocabulary, both naturally and systematically without much difficulty. Aitchison (2003) points out that educated native speakers of English can potentially know and use more than 50,000 words in their life. However, it is quite a different case with learners who learn English as a second or foreign language.

In the field of SLA (Second Language Acquisition), previous research focused much more on grammar rather than on word learning. Both researchers and teachers undervalued the importance of teaching and learning of vocabulary and little attention was given to lexical study, the dynamic study of word learning. Not until the Situational Language Teaching Movement was launched by Palmer and Hornby in the 1930s, was vocabulary, for the first time, considered “one of the most important aspects of second language learning and a priority was placed on developing a scientific and rational basis for selecting the vocabulary content of language courses” (Zimmerman, 2005:10). From then on, much attention has been given to the study of vocabulary and research in vocabulary acquisition has shown that various strategies such as association of words by using word-webs, provision of ample input and output, motivation cultivation and so on might lead to vocabulary enhancement if they are used wisely.

However, most learners of English still feel that many of the difficulties in both receptive and productive language use result from an inadequate amount of vocabulary. At universities in China, most learners, who have studied English for at least six years in the middle school, regard it as a huge task to acquire and store enough words for proper use and some are still learning vocabulary with traditional methods. For better acquisition of vocabulary, much more work remains to be done into how humans cope

with vocabulary mentally and into what kind of strategies can promote the acquisition process more efficiently both in vocabulary learning and teaching.

1.1 Aim

The aim of the study is to investigate how different strategies are adopted in both English vocabulary learning and teaching in a Chinese university and the current attitudes of teachers and learners in the university towards the importance of vocabulary and the strategies in vocabulary acquisition. Based on the analysis and findings, this study then attempts to offer some suggestions about vocabulary acquisition.

1.2 Material and method

For collecting ample and reliable information and data, this study includes two questionnaires, separately for teachers and students, and one test of vocabulary. Thirty students and eight teachers were selected randomly to participate in the test and the questionnaires for collecting information. Through detailed analysis and comparison of the responses to the questionnaires, the students' responses to the stimulus words and the distribution of the scores of the multiple-choice test, this study tries to reach sound conclusions.

1.2.1 Participants

The participants of this study include 30 non-English major sophomore students (who do not learn English as their major) from a Chinese university and 8 English teachers from the same university who are teaching English to non-English major students. All of them are native Chinese speakers with some experience of vocabulary learning and teaching. They were willing to participate in the test and the questionnaires and their anonymity was guaranteed.

1.2.1.1 Students as participants

Thirty non-English major sophomore students of three different levels were chosen

randomly as one group of participants. They major in different subjects and their age ranges from 20 to 23. Before entering the university, all of them had experience of learning English for at least six years in the middle school.

The students are of three different levels: a higher level (Level H), an intermediate level (Level I) and a lower level (Level L). The division of the three levels is based on an integration of their overall language ability when they entered the university, with some replacement at the end of each term. Students of the higher level have a solid foundation in the following skills: listening, speaking, reading, writing and translation. They perform excellently in language study. Students of the intermediate level perform the skills well. However, they sometimes make more mistakes than students of the higher level. Students of the lower level have some difficulty in learning English. They have a rather limited knowledge in both vocabulary and the usage of the language.

The University students were chosen firstly because the researcher of this study has been teaching college English for many years and has already got some information about their ways and problems in learning English. Secondly, in China, university students have learned English for at least six years in the middle school. They have acquired a relatively large amount of basic language knowledge and they are cognitively more mature than younger students. Thirdly, they have gone through many different kinds of tests and have a good knowledge of their own strengths and weaknesses in learning English, especially in dealing with the basic part of English: vocabulary. They have mastered some strategies in coping with vocabulary themselves and have compared the different strategies that teachers have adopted during the class periods. Moreover, with three different levels being chosen, the data conveys more comprehensive and detailed information for analysis. Thus the results of the study are more reliable.

1.2.1.2 Teachers as participants

Eight teachers in the university who are teaching non-English major students were invited to participate in one of the two questionnaires. They are colleagues of the researcher. All the teachers have taught English in the university for several years and have rich experience in vocabulary teaching. They have taught many different students and have faced many different problems in teaching English. For example, they often find that both they themselves and students are frequently in a dilemma between a strong passion to teach and learn more and a low efficiency in language acquisition. They know the situations the students are in quite well. Some of them have done some research into how to improve teaching methods from different angles. In addition, through the years of teaching, the teachers together with the researcher have often had discussions on how to improve the teaching effect in different fields, including the vocabulary field. They have offered very constructive suggestions and opinions on language teaching and their answers in the questionnaire have acted as a guide for how to face the problems in learning and teaching vocabulary.

1.2.2 The test of vocabulary

To have some practical knowledge of students' adoption of strategies in acquiring and using vocabulary, a test of vocabulary (see Appendix A) was conducted. Tests can be used to "provide teachers with some form of feedback to set against impressionistic judgments about the effectiveness or otherwise of particular materials, techniques or approaches and to help them in making future decisions about using these" (Parrott, 1993:21). Thus, the test offers some objective information for analysis.

The test includes two parts. Part one, including six words, separately two nouns, two verbs and two adjectives, is an association activity to elicit students' responses to the stimulus words. The reasons for choosing the three classes of words in part one are as follows. Words within each part of speech appear to be organized differently. Among the different parts of speech, nouns (N), verbs (V) and adjectives (A) are the three

major word classes and they are the most active ones in language use. The three word classes belong to content words. According to Aitchison (2003), content words constitute the lexicon proper and among the contents words, nouns, verbs and adjectives constitute the major building block of English. Nouns involve not only parts, but also attributes and functions. Adjectives are less independent than nouns. Their meanings often depend on the nouns that they modify. Verbs are often collocated with different classes of words and play a very important role in sentence structures. All of the three classes have their own characteristic organization and are stored separately in the mental lexicon. Thus, a study of the network of them sheds better light on how different strategies are applied in learning and storing words.

Part two consists of 15 incomplete sentences with four choices given. The students were required to choose the one which is the best answer to make the sentence complete. These items chiefly focus on complex lexical units which are frequently used. Each multiple choice item was selected carefully to provide information on how students deal with complex lexical units in sentences. Complex lexical units are more difficult than single words and they take different forms and a precise use of them involves an integration of a wider and more flexible web of vocabulary together with knowledge of other elements such as cultural information, grammatical information, semantic interpretation and so on. A study of complex lexical units provides a deeper insight into vocabulary acquisition.

The total score of part two is 15 with each point being given to each choice if it is correctly chosen. The score of the students are divided into five ranks for comparison and analysis: A (13-15), B (10-12), C (7-9), D (4-6) and E (0-4). Students ranked A perform well and successfully in vocabulary and make few mistakes. Those ranked B can deal with most of the vocabulary well. However, they make more mistakes than students ranked A. The students ranked C only have some basic knowledge in vocabulary. They can use some vocabulary and make some mistakes. Students ranked D have much difficulty in using most vocabulary properly. The last group of students

knows little about vocabulary knowledge. The vocabulary test was conducted in the classroom and each part was required to be finished within 10 minutes.

1.2.3 Questionnaires

There are two questionnaires involved to obtain both the students' and the teachers' attitudes and opinions towards learning and teaching vocabulary. Questionnaire 1 (see Appendix C) is for students, including 7 questions. Questionnaire 2 (see Appendix D) is intended for teachers, including 16 questions. According to Parrot (1993), questionnaires are often used to provide data about the general and common characteristics and preferences of learners, as well as to elicit the response of learners to specific factors in their learning process. For each of the question, four choices are offered. Participants were required to choose the one or the ones that best represented their thoughts. If they had more opinions or different suggestions, they were welcome to share their opinions in the choice E. Then the information was collected and analyzed in detail to explore the current understanding about vocabulary and the different strategies in dealing with vocabulary. By a detailed and thorough analysis, a deeper insight into different learning and teaching strategies and preferences is reached and an attempt is made to offer some solutions to the problems together with some suggestions.

1.2.3.1 The questionnaire for the students

The questionnaire for the students includes 7 questions. The first two questions intend to get information of students' current situation and problems in learning vocabulary. Questions 3, 4 and 5 investigate students' strategies in acquiring vocabulary. Questions 6 and 7 aim to reveal students' opinions and expectations about vocabulary teaching strategies. Through the collection and analysis of the responses, the students' general attitudes and opinions are apparent. What is more, the information from the questionnaire also provides clues as to how students tackle vocabulary questions in different ways.

1.2.3.2 The questionnaire for the teachers

The questionnaire for the teachers includes 16 questions. Question 1 and 2 investigate the teachers' understanding of the current situation that the students are in. Questions 3 to 6 study how the teachers understand the importance of vocabulary teaching. How the teachers apply different strategies in classroom teaching is indicated in questions from 7 to 13. The teachers' understanding of the influence of strategies is seen in the last three questions. The responses collected from the teachers reflect teachers' beliefs, attitudes and strategies in vocabulary teaching in a way.

1.3 Procedures

This investigation was conducted through a systematical and carefully designed procedure. Firstly, the researcher studied literature review and research on vocabulary acquisition and general strategies involved in learning and teaching vocabulary. Armed with theoretical knowledge, the researcher continued to develop a test of vocabulary for students and two questionnaires, one for students and another for teachers. Both of the questionnaires center on students' and teachers' attitudes and strategies towards learning and teaching vocabulary. With the convenience provided by the internet, the test and the questionnaires were sent to one of the researcher's colleagues by e-mail. Then 30 students and 8 teachers were selected randomly to participate in the test and the questionnaires. With the help of the colleague, the students were gathered together and the test and the questionnaire for the students were administered in the classroom within the time limit. The questionnaire for the teachers was also conducted during the working hours of the teachers. After collecting all the responses to the test and to the questionnaires, the information was sent back to the researcher for analysis by e-mail again.

2. Theoretical background

This section is a literature review of the previous research related to the position of the

lexicon in language and the strategies in vocabulary acquisition and provides the background information for the following analysis. To begin with, the focus will be on the importance of vocabulary in language acquisition. To master vocabulary efficiently, it is better that learners know the different categories of vocabulary and characteristics of different categories such as the characteristics of function words and content words, of individual words and multiple complex units and so on. Therefore, this section continues to explore the previous related concepts and studies on categorizations of vocabulary. After presenting the basic aspects of vocabulary, this section continues to discuss previous studies on different strategies in vocabulary acquisition. Research has shown five strategies deserve special attention and are usually adopted during the learning process. First of all, association by using network between words has been tested to be a very common strategy to enlarge vocabulary and memorize it. Then ample input and output proves an efficient way to strengthen the vocabulary knowledge. Feedback from teachers is another strategy which is useful and which can be adopted by teachers in classroom teaching. Fourthly, research reveals that motivation often leads learners to greater proficiency in language proficiency and vocabulary enhancement. At the end of this chapter, the influence of L1 on vocabulary acquisition in L2 is discussed so as to help both learners and instructors to have a better insight into the relationship between L1 and L2 and the promotion of cultural awareness is a beneficial strategy in helping learners to use vocabulary more precisely.

2.1 The importance of vocabulary in language learning

Vocabulary is the basic element in English learning. It is put in the central place in many linguistic theories. “Language consists of grammaticalised lexis, not lexicalised grammar. Lexis is the core of language” (Lewis, 1993:89). This implies that the importance of vocabulary outweighs that of grammar in language. According to Gass and Selinker (2008), the lexicon is even more important than other components and it may be the most important language component for learners. This concept is also presented by Wilkins (1972:111) who claims that without grammar, very little can be conveyed, while without vocabulary nothing can be conveyed. Thus vocabulary

acquisition is one of the foundations on which various language abilities are built.

The important roles vocabulary plays can be seen in different areas. It is important for language learners in production, in comprehension and in reading. Learners need to have a good command of vocabulary to produce and understand sentences. Gass and Selinker (2008) say that lexicon is an important factor in accounting for the bulk of second language data, because it is the lexicon that drives language production. In addition, especially in communication, lexical errors are often more harmful and disruptive than any other errors such as grammatical ones, structural ones and so on. Communication is frequently interfered with by lexical problems and misunderstanding generally occurs when learners do not use the proper words or lack the necessary words.

In language use, words can often be divided into different categories on the basis of different standards: their frequency; their forms: individual words or multiple-word units; and their meanings and roles in sentences. Since vocabulary plays so essential a role, it might be rewarding that learners and teachers get some information about the different categories and know which words are more useful to learn or to teach and which words are more challenging and deserve more attention and effort.

2.2 The frequency of words

As far as the occurrence of words is concerned, vocabulary is often divided into three groups: high-frequency words, low-frequency words and specialized words. According to Nation (2001:38), “learner can get three clues to the frequency of a word: one from the frequency with which it occurs in the English lessons, one from the frequency of its translation equivalent in the mother language, and one from its form.” High-frequency words cover a very large proportion of words in speech and writing and occur in all kinds of the language. They often cover very common knowledge and are easily related to the topics in daily life. For example the words refer to basic colours such as *blue, red, yellow* and so on are high-frequency words. The wise and sensible

choice of vocabulary in teaching will greatly affect the amount of learning which is expected. For general purpose, priority is often given to high-frequency words to meet both the receptive and productive needs, because learners encounter such words frequently in everyday life in different social walks.

High-frequency words are relatively easy to grasp, because of their active usage and their common occurrence in different contexts. They play an important role in comprehension. Nation (1990:16) claims that a vocabulary comprising the 2,000 most frequent words will cover 87% of the tokens in an average text. However, knowledge of rare words is also a rewarding and valuable goal because it might enable learners of foreign language to access and comprehend speech and written materials much more effortlessly and immediately, without having to spend too much energy and attention decoding the new words or guessing the lexical meaning.

2.3 Categories of lexicon items

Vocabulary presents itself and functions in contexts in different forms. Some lexical expressions are in the form of individual words, but many are multi-word units. According to Ur (1996), a useful convention is to cover all such cases by talking about vocabulary items rather than words. Vocabulary items include not only lexical expressions which consist of only one word, but also those consisting of two or more words. Lewis (1993) claims that if you have a big vocabulary, you have access to a huge store of lexical items. With a large vocabulary and with opportunities of encountering it both receptively and productively frequently, learners get more familiar with and gradually have a better command of different lexical expressions. To master vocabulary in the real sense, learners may need to know the various categories of lexical items, and need to have the ability to identify the meanings of them in different contexts and to put them into use properly.

2.3.1 Lexical items in the form of individual words

The most familiar kind of lexical items and also the most basic one is the individual

words. As is pointed out by Wilkins (1972), vocabulary, in the form of individual words, plays a very important role in English. Individual words are in fact the basic ingredients in language and individual words are to language as bricks are to buildings.

Most individual words contain different meanings in different contexts. For example, the word *make* in the expressions such as *make a good story*, *make it* and *make money* contains different meanings in each expression. To know a word exactly, learners “must know at least three things about a word in order to be able to use it: its meaning, its role in a sentence (whether it is a verb or a noun, for example) and what it sounds like” (Aitchison, 2003:36). Knowing the three aspects generally ensures the precise use of vocabulary both receptively and productively. From the receptive angle of learning a word, mastering a word fully involves mastering the grammatical structures related to this word, being familiar with its common collocations, being able to recall its different connotations when used with other related elements and being able to decide on the proper ones on specific occasions. From the productive angle of learning a word, it means that learners are able to extend the knowledge of the word that is acquired on the basis of the different receptive aspects and put it into use. Thus, to know a word, it means first to know the different meanings, the word class and the sound of the word as a separate unit; then it means to know its semantic meaning: how to decode and use it appropriately and freely in different situations.

2.3.1.1 Prefixes and suffixes of individual words

An advanced learner often has some knowledge of roots and affixes of words. As Aitchison (2003) says, as far as the internal architecture of the individual words is concerned, there are two kinds of them: those seem to exist as wholes and those which are internally complex, containing stems and affixes. For example, the word *book* is a whole word and can not be divided into further bits and the word *unavoidably* contains the stem *avoid* and the prefix *un-* and two suffixes *-able* and *-ly*.

The knowledge in this field can be applied to help the learners to learn the unfamiliar and new words by relating them to known words or to known prefixes and suffixes and can be used to help learners establish a strong web between words and store the roots and their derivations in a better organized way. Additionally such knowledge can be used as a way of checking whether an unfamiliar word has been successfully guessed from context or as a way of checking whether the learners have really grasped the different derivations of the word comprehensively. According to Nation (1990:169), to make use of affixes and roots, learners need to command three skills: the ability to break new words into parts so that the affixes and roots are revealed; the ability to know the meanings of the parts and the ability to see a connection between the meanings of the parts and the dictionary meaning of the new words. In this way, the learners might be said to have a good command of the roots and the affixes and might be able to apply the different derivations appropriately according to the needs of different contexts.

Words are often stored as wholes. However, subconsciously, parallel processing seems to happen in human minds. Learners may both deal with words as wholes and split them up when needed. Aitchison (2003) claims, both prefixes and suffixes are glued firmly onto their stems, but affix stripping occurs in word recognition. Even if words are already assembled and already exist there in the mind, advanced learners can disassemble them when necessary to make or to obtain new words. This might be a way that most experienced learners store and access new and more words.

2.3.2 Multi-word units

The lexicon is considered to include a variety of linguistic knowledge types, not just properties of single words. Besides individual words, there are many other lexical items which are composed of two or more words, each of which exists independently, even though they can be analyzed into constituent parts. Lewis (1993) points out that such lexical items use a great deal of prefabricated and formulaic expressions. These expressions help to facilitate and process speech more rapidly, both receptively and

productively, for most of them can often be treated as single, unanalyzed wholes. Complex lexical items can be sub-categorized. According to Lewis (1993), there are usually three groups of complex lexical items: polywords, collocations and institutionalized expressions. These three groups play active roles in language usage and are essential to the mastery of the target language and there are sometimes some overlaps between them. For example, the fixed collocations such as *on the whole*, *with regard to* and so on are also regarded as one kind of polywords. These three groups of complex lexical units provide the learners with the opportunity of fluent and proficient production and help learners avoid producing deviant and improper language.

2.3.2.1 Polywords

The first one is polywords, which are relatively short, consisting mainly of two or three words and involving different word classes. This is the messiest category mainly because this group includes expressions belonging to different word classes and usually functions like individual lexical items. Examples are *take off*, *on the one hand*, *record player* and so on. Among them, phrasal verbs have often been given priority in language teaching. Aitchison (2003) claims that though there are around three times as many nouns as verbs, every independent English sentence must contain at least one verb. They are actually important in building sentences. However, this does not mean all of them are easy to be grasped. Lewis (1993) points out that one kind of polywords, phrasal verbs, particularly, separable ones, are perhaps the most familiar example of multi-word items that presents a challenge for the simplest reason – learners are frequently unaware of their existence. Often such expressions present learners at low levels with more difficulties for they usually treat them as separate words. Therefore, training in identification of multi-word items, especially phrasal verbs, might provide a new and important activity for teachers.

2.3.2.2 Collocations

Collocation refers to the situation in which a word is very likely to be collocated with the stimulus in connected speech. Traditionally, collocations are regarded as

frequency-based. They are “seen as units consisting of co-occurring words within a certain distance of each other, and a distinction is often made between frequently and infrequently co-occurring words” (Barfield & Gyllstad, 2009:3). Generally, the frequently connected pairs co-occur much more often. For example the pairs such as *long and short* are often more closely related to each other than the expression *long and wide*. At the same time, Barfield and Gyllstad (2009:92) point out that Moon (1987) regards collocation as a level of language use or lexical realisation of the situational context. This means collocations can be and are usually formed according to certain contexts. Collocations include free collocations and fixed collocation. Fixed collocations are also known as set phrases and are one kind of polywords. Idioms are one kind of fixed collocations. Nation (2001:335) argues that “they need to be dealt with as if they were words”. In teaching fixed collocations, it is advisable to give attention to idioms on the basis of their frequency and range of occurrence.

Free collocations are entirely novel and creative according to the necessity of different situations. Nation (2001) argues that free collocations allow some substitutions. For example: *take medicine, little did I know, as a result* and so on. In the expressions above, some parts can be substituted by other words. For example: *take a rest, never did I know, as a consequence* and so on. Among free collocations, de-lexicalised verbs are especially important in both teaching and learning. These verbs have a basic and little meaning when being alone. However, they can be joined with many other words and are commonly used in combinations with nouns or other words, and generate a wide variety of meanings. For example, the de-lexicalised verb *get* can be used in the following expressions such as *get married, get up, get on, get a jacket* etc. and conveys various meanings.

In English, some words are concrete, while others are relatively abstract. In teaching, collocations are frequently used to teach abstract words to help learners to understand the rich meanings. Zimmerman (2005) mentions several linguists (River, 1983; Richards & Rodgers, 1986) who claim that it is better that concrete vocabulary is

explained with labeled pictures and demonstration, while abstract vocabulary is taught through the association of ideas. Thus, during classroom teaching of vocabulary, especially the abstract words, students might learn better if they are encouraged to search related words in their minds for better understanding. This, according to Lewis (1993), will maximize the benefit that students obtain from the input to which they are exposed if teachers teach them to identify collocations, and the underlying patterns which individual examples exemplify. Similarly, in teaching, Nation (2001) claims that very frequent collocations can be the starting point for dealing with the range of related collocates. As a consequence, teaching collocations skilfully is likely to present a beneficial strategy in vocabulary acquisition.

2.3.2.3 Institutionalized expressions

Institutionalized expressions contain different forms and function differently from collocations. Different collocations can be formed to convey different meanings. However institutionalized expressions usually function as separate utterance and are pragmatic in character. Institutionalized expressions, according to Lewis (1993), contain three sub-headings: short hardly grammaticalised utterance such as *just a moment, please*, sentence heads or frames, serving a primarily pragmatic purpose, such as *sorry to interrupt, but can I just say...*; full sentences, with readily identifiable pragmatic meaning, which are easily recognised as fully institutionalized. A good mastery of such institutionalized expressions might very well help learners greatly both in speech and writing, because such expressions can help learners to identify the intended meanings in speech and facilitate their production of the language by providing learners communicative resources rapidly.

2.3.3 Function words and content words

As far as the meaning and the role in sentences are concerned, there are content words and function words. Content words are also known as full words or lexical words while function words known as empty words, grammatical words, or form words. Harley (2006) mentions that content words are mainly the nouns, verbs and adjectives that

form the bulk of our vocabulary and that carry the meat of the message that speakers want to send. They contain substantial meaning even when they are out of context, whereas function words contain little or no independent meaning and have a largely grammatical role. Harley (2006) also argues that the meanings of function words are relatively formal and inflexible. Function words help to fix the sentence structures and content words are used to convey the core meanings.

Function words are few and they reoccur and are used very frequently, so it is relatively easier to store them and to commit them into memory. However, it is perhaps not so easy to use them correctly. For example, Nattinger (1988) points out that learners often feel confused about the proper choice of prepositions in different contexts. For the majority of content words, meanings of them in mind are fuzzy. Nattinger (1988) also points out that content words cannot be ignored because they carry sufficient content to be necessary for learners to understand a text properly, but some are too abstract in meanings and occur too infrequently to be easily remembered. In vocabulary learning and teaching, most problems usually occur as to how to store and retrieve content words, since these words are not so easily pictured.

2.4 Network theories and the increase of vocabulary through association

With all the basic knowledge of vocabulary mentioned above, different strategies might serve different purposes in helping both learners and teachers in vocabulary acquisition. Among the various strategies for vocabulary acquisition, network theories are very popular. Much research has been done into how humans cope with vocabulary mentally. Some word association experiments have shown that people almost always select items from the semantic field of the original word; they nearly always pick the partner if the item is one of a pair, or has an obvious opposite; what is more, adults are likely to respond with a word of the same word class (Aitchison, 2003). For example, facing the stimulus words such as *girl*, *nail* and *long*, the responses are often *boy*, *hammer* and *short* to each of them instead of other words.

In addition, people can locate the words they need nearly in a split second. The large number of words humans know and the quick speed of retrieval suggest that words are highly structured and internally organized instead of being stored randomly in human minds and there is an interconnected system of words or there are semantic webs in human minds, with frequently associated items developing extra strong ties. Aitchison (2003:84) argues that “words are not assembled out of a common store of semantic primitives. Words are linked together in a gigantic multi-dimensional cobweb, in which every entry is attached to scores of others.” People actually acquire, organize, store and process vocabulary in a network of associations.

This indicates that common characteristics of storing and accessing words can be found to help learners enlarge vocabulary and use the language proficiently. Facing the input of vocabulary, strategies to organize, store and access words based on the network theories might very well help learners learn words in a more active, creative and efficient way. In a sense, to know the meaning of a word equals the task of knowing its associations with other words. To teach words more effectively and fruitfully, teachers might apply the network of associations in the classroom teaching.

2.4.1 Associations of words in human minds

With word-webs in peoples’ mind, links between words are strong. According to Aitchison (2003), when people are faced with the stimulus word, there are usually four types of link between the word and the responses: coordination, collocation, superordination and synonymy. Coordinates refer to words clustering on the same level of detail. Collocations, as have been discussed in 2.3.2.2, include two forms: free ones and fixed ones. These two types of link are stronger than the next two and are more commonly adopted by learners. Collocational links cover a wide spectrum and coordinates are closely associated. Superordination often refers to the covering term which includes the stimulus word. Synonymy means a word with the same meaning as the original word. Nation (2001) points out that a superordinate term occurs less often than collocations and coordinates because in most cases a superordinate term is not

always readily available. However, a superordinate term may be easily accessed when the contents of a group are fairly prototypical. The choice of a synonymy is primarily dictated by the surrounding content.

In learning, if pressed further, learners, especially, advanced ones, might think of more responses which may be related to the stimulus word through some other related topics. Arnaud and Bejoint (1992) argue that weak students often experience considerably more difficulties in generalizing from already learned words and word groups to slightly new words and words groups. The occurrence of the new words often contains known features and builds on previous learning. A solid foundation in vocabulary might very well entail a wilder imagination. Such a kind of association often is more demanding and requires more effort and more proficiency in vocabulary knowledge. This often leads to the situation that advanced learners can build a wider word web in their minds and connect words in different fields together.

2.4.2 Prototype theory

People usually cope with the majority of words, the content words, whose meanings are fuzzy and fluid by adopting the prototype theory. According to this theory, categories of words have internal structures. When people categorize common objects, they seem to have some idea of the characteristics of an ideal exemplar – a prototype (Aitchison, 2003). Prototypes are the best examples of a category and prototypical tones would be more easily categorized. Cruse (2004) refers to Rosch (1975) who says that “natural conceptual categories are structured around the ‘best’ examples or prototypes of the categories, and that other items are assimilated to a category according to whether they sufficiently resemble the prototype or not”. This theory is also helpful in explaining how people deal with those examples of a category which are not so typical.

In vocabulary learning and teaching, Cruse (2004) argues that if new words are provided to learners with definitions of words that focus on prototypical instantiations,

instead of focusing on an abstract definition that more accurately reflects the total range of the word's meaning, then, learners will learn new words much more easily. Thus, for those words which are typical examples of a category, it will be better for teachers to activate students' association and motivate learners to link them to the same category members for better mastery. Cruse (2004) also says that prototypicality correlates strongly with important aspects of cognitive behavior such as order of mention, overall frequency, order of acquisition, vocabulary learning and so on. Therefore, it is often the case that faced with the same stimulus, different people will think of different best examples. Prototype theory may help to build a strong link between the family members in learners' minds and the prototypes of words might be different according to different experience both in learning and life.

2.5 The increase of vocabulary through input and output

Ample comprehensible input is very essential for learners to achieve proficiency in language. Lightbown and Spada (2004:39) point out that according to Krashen, "one acquires language in only one way - by exposure to comprehensible input". On the basis of ample input, output helps to reinforce what has been learned. "Just as we are creatures of habit in other aspects of our behavior, so apparently are we in the ways we come to use language" (Nattinger & DeCarrico, 1992:1). Output provides a channel for repetition and practice, through which we form our habits in language use. This is also the case with the acquisition of vocabulary. With ample input and output, learners strengthen and enhance the relationships between words in their mind. One of the efficient ways to have ample input is to read extensively, while production in the form of interaction and practice provides a channel of output.

2.5.1 Extensive reading and the increase of vocabulary

One problem learners face is that many words are of low frequency and these low frequency words can only be found in written texts or reading material. For these low-frequency words, extensive reading might present a good way to increase the chances of meeting them. Thus, extensive reading offers the first advantage: it makes low-

frequency words reoccur frequently. Through the frequent visual input, extensive reading activates memory and retains knowledge and understanding.

On the other hand, while doing reading, learners exert their association and in some cases, try to figure out the meanings of new words based on the contexts. Research shows that the greater the background knowledge a reader has of a text's content area, the better the reader will comprehend the text, and the problem of vocabulary development in a second language is not simply a matter of teaching new labels for familiar concepts; it also involves new concepts (Carrell, Devine & Eskey, 2006). This means more extensive reading may help to promote readers' understanding and thus, in a way, might help them to master some new concepts and grasp some new words. Reading is an active receptive process, in which new information is being decoded and new meanings are being constructed continuously.

What is more, studies have shown that the vast improvement of students' knowledge of vocabulary is not entirely acquired through direct instruction of vocabulary. "It is argued that L2 learners who achieve advanced reading proficiency in a language will acquire most of their vocabulary knowledge through extensive reading rather than from instruction" (Coady, 2005:225). Similarly, Nation (2001) says learners will incidentally gain some vocabulary knowledge from each meaning focused reading of an appropriate text. With more reading work being done, learners' vocabulary may be enlarged gradually. Learners who read extensively might very well know significantly more vocabulary than those who do not.

Extensive reading presents learners with more opportunities of comprehensible and new input of a large number of words, makes learners recall what they have learned and helps to present learners more frequently with low-frequency words. Coady (2005) mentions Nagy and Herman (1987) who argue that teachers should give attention to and promote extensive reading because it can lead to faster and greater vocabulary growth than any program of explicit instruction alone ever could. Extensive reading

plays a role in vocabulary enhancement.

2.5.2 Output in the form of interaction and practice

Interaction and practice are two common kinds of oral output. “Research carried out in recent years indicates that there may also be a role for vocabulary learning either as an incidental goal or as one of the primary goals of a communication activity” (Nation & Newton, 2005:241). When learners are exposed to new vocabulary in a meaningful communicative context and are exposed to activities directed towards communicative work on targeted vocabulary, their vocabulary recognition and use might be improved indirectly.

Oral production activity directed at the targeted vocabulary may also help to recall the words in memory, strengthen what has been learned and reinforce the mastery of the new words. With more and more oral production activity, learners might readjust and reconsider the choice of appropriate vocabulary by consciously or unconsciously keeping the conversation natural and native-like. In addition, according to Ellis (1985), interaction aids SLA by providing the learners with ready-made chunks of speech which can be memorized as ‘unanalysed wholes’. Through interaction, many structures and lexical expressions will be acquired and accessed easily when learners are frequently exposed to them. Thus, output might help to guide learners to use the vocabulary and language in a proper and proficient way.

2.5.3 The relationship between input and output in vocabulary learning

The relationship between input and output is one between the comprehension and production of vocabulary. Firstly, proper and fluent choice of vocabulary is based on learners’ ample lexical input. This involves understanding the meanings of unfamiliar words they learn or encounter at the very start. In production, learners try out what they have learned and, with more experience, they gradually master how to understand and how to use specific meanings in specific situations appropriately. Nattinger (1998) argues that comprehension of vocabulary involves strategies to understand and store

words while production concerns strategies to activate those words in memory appropriately. For a perfect mastery of vocabulary, a combination of comprehensible input and output might be good strategies.

At the same time, communication activities provide an opportunity to have more input of new vocabulary by negotiating the meanings of some of the new words again. By interacting with others, plenty of modified input is available, through which more and more vocabulary which is unfamiliar to the speakers become easily understood and begin to be stored in the memory.

2.6 Feedback from teachers and the influence on vocabulary learning

Feedback has two main distinguishable characteristics: assessment and correction. Ellis (1985:128) argues that feedback “indicates when the L2 utterances produced by the learner are correct and so reinforces them, and it also indicates when the utterances are ill formed by correcting them.” In this way, the provision of feedback influences the learning process and leads learners to form habits in language use. In vocabulary acquisition, the feedback serving the purpose of assessment improves learners’ confidence in their use of words and expressions and strengthens the knowledge, while the corrective feedback is likely to lead to a corrected form of the original utterance. Thus, feedback helps learners to use the target language proficiently.

2.6.1 Corrective feedback and proficiency in vocabulary learning

In English, there are many synonyms, collocations and lexical units which are similar to each other in spelling, writing, meaning and so on, however, with subtle differences in usage. Often learners find it difficult to make a correct choice and most will risk the choice which they are not so sure about, which comes to mind first and which belongs to the same or similar family. Littlewood (1984:22) says language learners “could be viewed as actively constructing rules from the data they encounter and gradually adapting these rules in the direction of the target-language system”. If they construct improper rules and do not receive immediate correction, they will regard their usage of

the vocabulary as acceptable and persist in using such rules in the future. Evidence suggests that “without corrective feedback and guidance, second language learners may persist in using certain ungrammatical forms for years” (Lightbown & Spada, 2004:163). Thus, corrective feedback is necessary when learners make mistakes.

However, it is rewarding that teachers use corrective feedback skillfully. Lightbown and Spada (2004) mention that, according to the research done by Lyster and Ranta (1997), there are usually six commonly used types of corrective feedback: explicit correction, recasts (reformulation of the learners’ erroneous utterance), clarification requests, metalinguistic feedback, elicitation (negotiation of meaning) and repetition. Proper use of these types of feedback is quite beneficial to learners in vocabulary acquisition. Without timely and skillful feedback, learners will pertain to the wrong choice of vocabulary. Teachers are, therefore, advised to adopt the different types of feedback tactfully. For example, teachers can turn more to recitation, recasts and clarification requests and metalinguistic feedback than to explicit correction and repetition, for the former helps to save the learners’ face and lead the learners to find and solve the problems by themselves and the latter sometimes sounds a little rude.

2.6.2 Incidental focus on form and vocabulary enhancement

Now many linguists advocate offering feedback incidentally, especially in meaning-focused classes. Loewen (2005:361) explains that “incidental focus on form overtly draws students’ attention to linguistic elements as they arise spontaneously in lessons whose overriding focus is on meaning or communication”. He holds the opinion that learners might not process the language deeply if they attend to the meaning of L2 only and if they do not need to understand every word and morpheme to get the gist of the utterance. De Bot (1996) (quoted by Loewen, 2005) also argues that producing the linguistic form and making the cognitive connections is a better way than focusing only on forms. Incidental focus on form is a potential way to help learners to integrate meaning-focused and form-focused activities. It is fundamental to language learning by facilitating the cognitive mapping among different aspects. It may enable learners

to pay attention to form, meaning, and use of the target language in separate cognitive events.

In vocabulary acquisition, incidental focus on form can be applied in different situations according to different features of vocabulary. According to Loewen (2005), it is better that recasts are applied more to grammatical and phonological errors, and more negotiation of meaning more applied to lexical errors. With incidental focus on form, learners have a better, clearer and deeper understanding of vocabulary. Incidental focus of form is also a kind of modified input in learning vocabulary and it encourages depth of processing through communicative activities.

2.7 Motivation cultivation and vocabulary acquisition

Motivation is a significant factor contributing to SLA and it is defined as the learner's orientation with regard to the goal of learning a second language. A motivated learner is willing or even eager to expend efforts in learning activities and has a strong desire to progress. Brophy (1998:12) says that "stimulating students' motivation includes encouraging them to use thoughtful information-processing and skill-building strategies when they are learning." With such strategies at hand, learners will learn things with ease and be motivated highly. Learner motivation brings many benefits. It eases the teaching and learning burden and makes the teaching and learning process much more pleasant and much more productive.

Motivation is divided into two basic types: integrative motivation and instrumental motivation, which are two terms coined by Robert Gardner and Wallace Lambert (1972) (quoted by Lightbown & Spada, 2004). Integrative motivation is featured by the learner's positive and active attitudes towards the target language group and culture, and the desire to be a member of the society in which the language is used. In contrast, instrumental motivation contains a more functional and pragmatic connotation. It is often the reason for language learning and is usually characterized by the strong desire to obtain something practical or concrete from the learning of a second language.

“Second language learning is rarely motivated by attitudes that are exclusively instrumental or exclusively integrative” (Brown, 1994:154). Both integrative and instrumental motivations are essential elements of success in learning vocabulary. Learners usually possess a combination of both orientations.

Vocabulary acquisition is the first step to the mastery of the target language. However, for most learners, it is a huge project to prepare themselves with suitable amount of vocabulary for use. Some learners are disturbed or frustrated by situations involving a temporary lack of understanding and confusion. However, the most successful learners are not necessarily those to whom a language comes very easily; they are those who are highly motivated to success. As Ur (1996) says, motivation is very strongly related to achievement in language learning. Thus, teachers are advised to attach great importance to cultivating motivation among students.

2.8 The influence of L1 on vocabulary learning in L2

Surely, during the learning process, learners' L1 will influence the acquisition of L2. There exists the fact that previous experience of dealing with meaning in the L1 can facilitate lexical development in the L2. According to Singleton (2006:48), no matter how great the distance in typological terms between the L1 and L2 is, there will be some degree of cultural overlap between them, which implies that at least some of the concepts which have been lexicalized during L1 acquisition will possibly facilitate the entry into the classification of reality offered by the L2. Thus, in a way, the similar aspects in L1 and L2 will make the acquisition of L2 easier.

However, in some cases, the reverse result will occur. Many of the errors of lexical choice are a simple result of transferring rules from L1 or learners sometimes employ similar strategies they use in their mother tongue. By transfer, learners use previous mother-tongue experience as a means of organizing the second language data. As Larsen-Freeman and Long (1991) point out that the transfer of L1 can lead to errors, overproduction and constraints on hypothesis that language learners are inclined to

make about the L2. When learning vocabulary, learners might apply what they know in L1 and come to a conclusion when they face vocabulary which they are not sure of.

2.8.1 Promoting cultural awareness in vocabulary acquisition

The lexicon is very intricate in nature. The teaching of the intricacy of lexical knowledge is to address words within their cultural contexts, to avoid oversimplification, and not to rely on translation. It is a wise way that teachers try their best to provide learners with opportunities to develop strategies for interpreting and using lexical items as they are actually used by native speakers.

Culture is a learned behavior and language habits are a part of that shared learning. Brown (1994:173) mentions Stevick (1976) who cautions that “learners can feel alienation in the process of learning a second language, alienation from people in their home culture, the target language, and from themselves.” In teaching a foreign language, instructors need to be sensitive to this disadvantage. Especially in vocabulary acquisition, lack of cultural knowledge will impede the proficiency in the usage in vocabulary. Some of the complex lexical units are fixed idioms and should be dealt with as a whole. Such expressions contain specific meanings, and cannot be understood word by word. For these lexical items, cultural knowledge is essential for proper understanding and continuous communication. Nation (2001), claims that learning the meanings of idioms should be enriched by analysis and explanation of their parts and history and some attention should be given to the way they function in discourse. Therefore, teachers had better have some basic knowledge of the different cultural backgrounds concerned so as to achieve optimal efficiency.

3 Analysis and discussion

In this part, the data and information collected from the test and the two questionnaires are compared and analyzed from different angles. The test of vocabulary is analyzed in two aspects: the analysis of the association activity and the analysis of the multiple-

choice items. This is continued by the analysis and discussion of the two questionnaires separately for the students and the teachers. For the test of vocabulary, to have a comprehensive view, firstly, there is an overall discussion of the general situation. Then the research proceeds with a comparison of the results between the different levels in each part. The questionnaires are discussed according to the aspects the questions focus on.

Although this study tries its best to elicit results that are as reliable as possible, there are still some limitations. As far as the test of vocabulary is concerned, Hughes (2000) says that the more items are included in a test, the more reliable a test will be. In this study, six frequently used words covering three major word classes were chosen for the association activity and 15 typical and representative items covering different aspects were carefully selected for the test of complex lexical units. In the following analysis, because of the limited space, three words, one word from each word class, and some multiple choice items are analyzed in detail. Allowing for more samples to be chosen and to be analyzed, the overall results might very well be more reliable. This is also the case with the questionnaires. Allowing for more participants and more questionnaire questions, deeper insights may be reached as to how the students and teachers behave in vocabulary learning and teaching.

3.1 The analysis of the test of vocabulary

For this part, 30 students from three different levels were invited randomly to participate in the test. Among the 30 students, 10 came from higher level (Level H), another 10 from intermediate level (Level I) and the last 10 from lower level (Level L). In each level, half are male and half are female. The equal selection of different genders in this way can help to reach fairer, more comprehensive and reliable conclusions. The participants were required to finish the two parts in this test in 20 minutes. In the first part, the participants were required to write down the first four words that came to their mind to each of the six stimuli including two nouns, two verbs and two adjectives. Then they continued to finish the second part which is a test of

complex lexical items, consisting of 15 incomplete sentences with four choices being given to each. Their responses and choices are analyzed in the following.

3.1.1 Word association activity

There are six stimulus words in this part, including three word classes: two nouns, two verbs and two adjectives. As has been mentioned in 1.2.2, nouns, verbs and adjectives are three major word classes and they are the most active ones in language use. They belong to content words which constitute the lexicon core and constitute the major building block of English. The six stimuli are *friend*, *clothes*, *get*, *enjoy*, *red* and *fat*. These six words are all high-frequency words and are all quite familiar to students. From the results of the test, it can be seen that students are almost equally active in responding to each of them. In this study, because the space is limited, and also because each word is quite representative of the word class it belongs to, one word from each class has been randomly chosen for analysis. These are *clothes*, *enjoy*, and *red*. In order to find out the most common ways that the learners adopt in dealing with, memorizing, accessing and processing individual words, the focus is placed on the most common type of responses given by the participants for detailed analysis. The study continues to analyze the reasons for the phenomenon in depth.

*3.1.1.1 Responses to the stimulus word **clothes***

For the stimulus word *clothes*, theoretically, there should be 120 responses from the 30 students. However, several students gave incomplete answers: one student in Level H gave only two responses; one in Level I gave one response and two in Level L offered one response and two in Level L offered two responses. Therefore, the total number of responses is 105. In the following analysis, only the most common types of link are discussed and only the most common responses among the 105 answers are counted. The detailed responses can be seen in Table 1.

Table 1: The three most frequent types of responses to *clothes*

Stimulus	Types of responses	Examples	The frequency of the occurrence of the responses			Total number
			Level H	Level I	Level L	
Clothes	Collocation (words to modify clothes)	warm	2	1		26
		colorful	2			
		suitable			1	
		beautiful	5		5	
		expensive	1			
		cheap	1			
		dirty	1	1	1	
		new	1			
		nice	2			
		red		1		
		black		1		
		Total number	15	4	7	
	Prototype of clothes	shirt		1	1	23
		sock		2		
		skirt		1		
		trousers		2		
		hat	2	2		
		shoes	1		1	
		coat	2		1	
		jacket		1	1	
		sweater			2	
		dress		1	1	
		uniform	1			
		Total number	6	10	7	
	Other aspects related to clothes	fashion	3			18
		style		2		
		taste	2			
		variety	1			
		size		4		
		cloth	2	3		
		price	1			
		Total number	9	9	0	
	Total number of the three types			30	23	14

From Table 1, firstly, we can see, a wide word web is involved in the participants' association. In the web, the strategies of collocations and the prototype theory are widely adopted, whether consciously or unconsciously. As far as collocations are concerned, participants think of different adjectives to modify the noun *clothes*. These

adjectives are frequently used when describing the functions, characteristics and qualities of one's clothes in everyday conversations when similar topics about clothes are concerned about. For example, comments such as *how beautiful the clothes are* can often be heard in communications between friends or in communications happening in clothes stores. This is in line with what Barfield and Gyllstad (2009) say that collocations are lexical realisation of the situational context. Similarly, Barfield and Gyllstad (2009:4) point out that Moon (1987:91-2) says "collocations uncovered the distinct contextually bound meanings of the item." The responses from the students are quite contextually related.

The second common group of responses reveals that prototype theory has a role in vocabulary acquisition. When it comes to nouns, one of their key characteristics according to Aitchison (2003) is a "potential layered structure". This is because nouns involve various parts, attributes and functions. Different people may have different understanding of them in different contexts or even in the same context. A noun may elicit a series of responses which have family resemblances. However, facing the same noun, people may relate different functions, different parts, and focus on different attributes of it. This is an especially salient feature of content nouns. They often have fuzzy meanings and may stimulate wild imagination. Thus, faced with the stimulus word *clothes*, different participants have different opinions of the best example of the item. This can be seen when *hat, shoes, uniform, jacket, sweater* and so on all appear in the list of the responses. To the individual participants, the family members are of different functions and they choose them to their own preference and to their own learning experience. This is consistent with Aitchison's (2003:53) statement that "some instances of words are more basic than others" to some learners. Characteristic members actually occur differently with different personal experiences. People subconsciously construct mental models for themselves on the basis of their own lives and everything in them.

The third common group reveals that in vocabulary learning, students, especially the

students in the first two levels are actually flying into a wider range of vocabulary in which they think of things belonging to different concepts. They seem to build various contexts in their minds and recall the related words. From their responses, different personal tastes and preference can also be felt. For example, some participants related the word stimulus *clothes* to the words such as *fashion* and *style*, while others focused on other aspects such as *variety*, *size*, *price* and so on. This is in line with what is mentioned by Arnaud and Bejoint (1992) concerning the difference between weak and advanced students when it comes to using their previous word knowledge. Learners in Level H and Level I actually turn out to be more active and imaginative and think of more related words on the basis of their previous knowledge. Students in Level L think of no such words at all.

Comparing the responses from the different levels, we can find what Arnaud and Bejoint (1992) say also applies to the type of responses: collocations. We can see that students in Level H and Level I are more discursive and creative in their thinking. Firstly, students in Level H think of far more adjectives to modify *clothes*. Even if the number of collocations thought of by students in Level L is larger than that of Level I, most students in Level L think of the same word, *beautiful*. However, students in Level I think of four various adjectives. As far as the prototype theory is concerned, it seems that students in Level L can think of more family members than those students in Level H. This may be because students in Level H have a wider word-web in their minds and prefer to associate words from different angles. Students in Level H seem not to be satisfied with being limited in certain popular topics only.

*3.1.1.2 Responses to stimulus word **enjoy***

For the stimulus word *enjoy*, the responses are not complete too: one student in Level I gave one response and two in level L offered two responses and two in level L offered separately one response and three responses. Therefore the total number of responses is 109. In the following analysis, only the most common types of link among the 109 responses are counted and discussed.

Table 2: The three most common types of responses to *enjoy*

Stimulus	Types of responses	Examples	The frequency of the occurrence of the responses			Total number
			Level H	Level I	Level L	
Enjoy	Stripping or adding of affixes	joy	1	3		11
		enjoyable		4	1	
		enjoyment		1	1	
		Total number	1	8	2	
	Collocation (Enjoy + something)	happiness	4			38
		game		3	1	
		nothing			1	
		something			1	
		book	1		1	
		basketball	1		1	
		sleep	1		1	
		holiday	1	1		
		pleasure		1		
		party	2			
		exercise			1	
		sunshine	1			
		freedom	1			
		music	1	1		
		computer			1	
		interest	1	2		
		vocation	1			
		dinner		1		
		singing	1			
		reading	1			
	travelling	1				
	meal		1			
	food	1	1			
	Total number	19	11	8		
	Synonym	love	1	3	5	13
		like			3	
		favor		1		
		Total number	1	4	8	
	Total number of the three types			21	23	18

In Table 2, one thing is very salient, namely that the lexical collocation *verb + nouns* plays a dominant role in the responses. As Zimmerman (2005) has mentioned that concrete vocabulary is better explained with labeled pictures and demonstration, while abstract vocabulary is better taught through the association of ideas. *Enjoy* has an

abstract meaning and does not like verbs such as *run, eat, sit* and so on which are concrete and can be taught by demonstrating the actions. And according to Nation's (2001) explanation of the frequency of words, *enjoy* is a high-frequency word which at least often occurs during the lessons. It is a very familiar word and can be used to collocate with one's hobbies, one's likes or to describe one's feeling about one special event. In teaching, students are often taught to understand and master the word through expressing the related concepts by using *enjoy something* too. Thus, facing the stimulus, students easily think of many expressions. Objects covering a wide range are recalled by participants. Among the 62 responses, various nouns as objects of *enjoy* are offered. Collocations links cover a wide spectrum. Considering the objects, it is evident that they are all the things people usually do and talk about in daily life. This reflects what is said by Moon (1987) (quoted by Barfield & Gyllstad, 2009) that collocations are lexical realization of the situational context. The responses are all frequently used. These words can be related to real events easily. With the high frequency, they are more easily accessed than other words.

The second common type of link is synonymy. The responses offered, *love, like* and *favor*, are interchangeable with *enjoy* in a sense. These three words are all high-frequency words too. In the learning process, they might be frequently taught to the students to express their preference.

The third common type of association is the application of prefixes and suffixes. Facing the word stimulus, the students offer responses such as *joy, enjoyment* and *enjoyable*. This is consistent with what has been pointed out by Aitchison (2003), prefixes and suffixes are attached to the word stems, but stripping and adding of affixes occur in word recognition. This implies that learners may subconsciously deal with words as wholes and at the same time disassemble them or attach bits of words to them when necessary during the learning process.

Comparing the responses from the different levels, it can be found that advanced

students were more active in their associations. They do not seem to confine themselves to a small domain. There is greater variety in their responses especially when a stimulus offers the opportunity for free collocations.

3.1.1.3 Responses to the stimulus word *red*

For the stimulus word *red*, as is the same case with the two words *clothes* and *enjoy* which are mentioned above, the responses from the students are incomplete: one student in Level I gave one response and two students in Level L offered two responses and one in Level L offered three responses. Therefore the total number of responses is 112. Still, in the following analysis, only the most common types of link among the 112 responses are counted and discussed.

Table 3: The three most common types of responses to *red*

Stimulus	Types of responses	Examples	The frequency of the responses			Total number
			Level H	Level I	Level L	
Red	Super-ordination	color	2	2	2	6
		Total number	2	2	2	
	Collocation (red + something)	flag	3	1	2	26
		heart	1			
		blood	2	1	2	
		apple		1		
		sun	3	1	2	
		fire		2		
		flower	1			
		hat		1	1	
		clothes		1		
		light	1			
	Total number	11	8	7		
	Coordination	blue	3	3	3	47
		yellow	2	5	4	
		white	1	4	2	
		green	3	2	4	
		grey		1		
		pink		1		
		black	1	5	3	
Total number		10	21	16		
Total number of the three types			23	31	25	79

In Table 3, one fact that is easily noticed is that collocations and coordination are two quite common types of link between the stimulus word and the responses. This is not the case with superordination. As Nation (2001) has pointed out that in most cases a superordinate term is not always readily available, and it occurs less often than collocations and coordinates. However, a superordinate term still may be easily accessed when the contents of a group are fairly prototypical. This is actually what happened to the stimulus *red*. In this case, *color* is the superordinate while *red* is a fairly prototypical example of *color*. The word *color* is easy to be accessed, but it occurs less frequently.

The responses show that links between coordinates are strong. Nation (2001) argues that coordination often fits into three categories: contrasting coordinates, opposites and semantic cousins. The responses to the word *red* such as *blue, black, white, yellow* and so on fit into the first category. In addition, the easy association can be attributed to the following reasons. Firstly, these color words share similar features and belong closely to the same family. Often when teaching and explaining one of the words, instructors will mention and present the others at the same time. Secondly, they all describe the same thing: the color. Thirdly, while teaching and explaining them in classes, teachers tend to use similar pictures, or objects to help learners to grasp their meaning. In the same way, when learners are learning one of the words, they cannot help thinking about the closely related family members. Thus both in teaching and learning, the color words almost co-exist with one another.

As far as collocation is concerned, a trace of cultural influence is felt. In China, the national flag is red and ever since people were born, they have been taught to show respect to the national flag. Additionally, many popular children songs in China have expressions such as *red sun, red flowers* and so on. Here, experience of everyday things also plays a role. For example, words such *heart, blood, apple* and *fire* occur in the responses.

Comparing the three levels, the same phenomenon can still be seen, namely that advanced students do not want to limit themselves to the most popular words. They think of more collocations covering relatively wider aspects. They appear to be more active and creative in the association activity. Intermediate students also perform a little better than lower-level students in presenting a relatively wider variety in collocations and in presenting more coordinates.

3.1.1.4 A comparison between the three levels

The association activity reveals some of the similarities and difference in the three different levels. This can be seen in Table 4 below.

Table 4: The number of different types of responses from different levels

Stimuli		Clothes	Enjoy	Red	Total 1	Total 2
Responses						
Level H	collocation	15	19	11	45	74
	coordination			10	10	
	prototypes	6			6	
	synonym		1		1	
	superordination			2	2	
	affix		1		1	
	other related	9			9	
Level I	collocation	4	11	8	23	77
	coordination			21	21	
	prototypes	10			10	
	synonym		4		4	
	superordination			2	2	
	affix		8		8	
	other related	9			9	
Level L	collocation	7	8	7	22	57
	coordination			16	16	
	prototypes	7			7	
	synonym		8		8	
	superordination			2	2	
	affix		2		2	
	other related ones				0	
Total		67	62	79	208	

In the association activity, the three stimuli elicit frequent collocations and coordinates.

These two are the most common responses to the stimuli. Such collocations and coordination are quite regular and predictable, because they are easy to be accessed and are almost immediate and frequent collocations in most cases during the teaching process. This is in line with what Nation (2001) has claimed that very frequent collocations are usually the starting point for dealing with the range of related collocates. Thus, students are quite familiar with these popular expressions.

Another characteristic is also shown by the students' responses to the stimulus word, that is, content words actually have fuzzy edges and there is no clear point at which one word ends and another begins. For example, the stimulus word *clothes* elicits a wide variety of family members among which some may be better examples than others according to different opinions. As has been mentioned by Harley (2006), content words carry the meat of the message. Content words are rich in meanings and they even contain substantial meaning even when they are out of context.

On the other hand, it is easy to notice that there exists some difference between the responses from the different levels. In Table 4, it can be found that students in Level H and Level I are almost equally active in the association activity. However, from what has been discussed in Table 1, Table 2 and Table 3, there is still a slight difference. Students in Level H are not very satisfied with being restricted to certain topics. They try to think of more various words and more various topics. The webs of words in their mind are more complex and wider. They are more creative than the students in the other two levels. Students in Level L have a limitation in vocabulary and its usage compared with the other two groups. Although it seems that they produce more collocates to the stimulus *red*, there is a lack of variety in their responses. Most of them offer only the most common words and most offer similar responses.

3.1.2 The multiple-choice test of complex lexical units

This part includes 15 incomplete sentences with four choices being given to each and tests the participants' ability in commanding multi-word units. The test items were

carefully chosen, covering different types of complex lexical items. The total score of the multiple-choice test is 15. To compare and analyze the results more clearly, the scores of the students are divided into five ranks for comparison and analysis: A (13-15), B (10-12), C (7-9), D (4-6) and E (0-4). The distribution of the participants' scores is shown in the following two Figures.

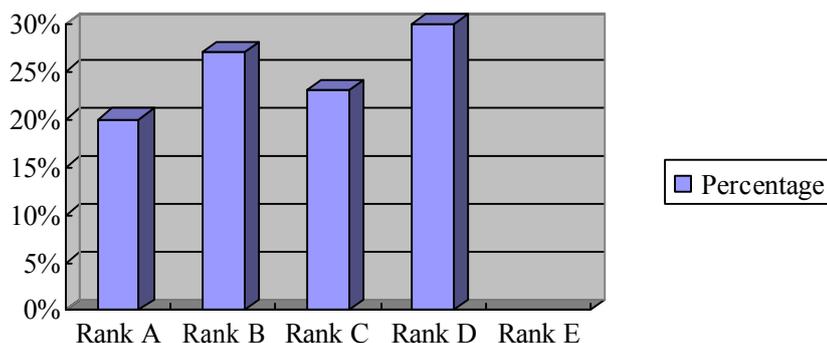


Figure 1: The general distribution of the students' multiple-choice test scores

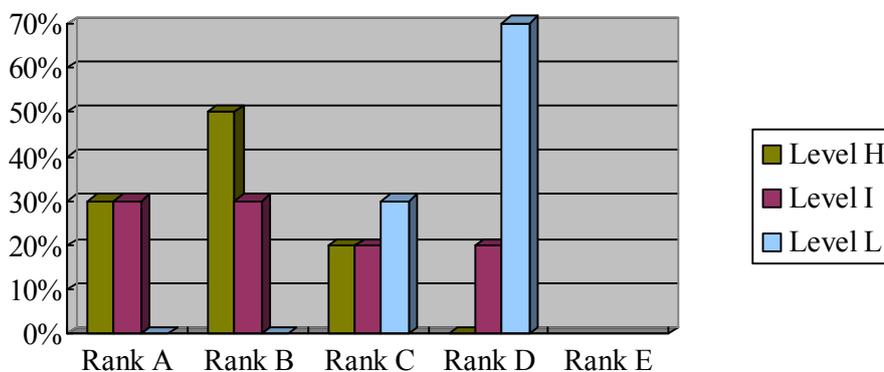


Figure 2: The detailed distribution of the scores of the three levels

As can be seen in Figure 1, 20% of the students perform well and successfully and they are ranked A; 27% of the students are ranked B, which implies they make relatively more mistakes than those ranked A; 23% of the students have only the basic knowledge of vocabulary and are ranked C; 30% have much difficulty in learning vocabulary and got the rank D and none of the students are ranked E.

Just as Figure 1 demonstrates the general distribution of the scores of all the participants, Figure 2 shows the detailed and specific distribution of the scores of the three different levels. The two Figures reflect both the similarities and the differences between the ways in which the participants use different strategies while dealing with complex lexical items and the degrees to which the participants command the lexical items.

3.1.2.1 The general characteristics of the mastery of complex lexical items

Figure 1 and 2 reveal, firstly, that at least all of the students have got a certain knowledge of complex lexical items. For example, the majority of the students made a correct choice in items 7, 8 and 11. The following are the three items:

7. A _____ to this problem is expected to be found before long.
A) response B) solution C) settlement D) result
8. _____ you work hard, you are going to do well in your exams.
A) As long as B) Not until C) Even if D) Unless
11. The weather in Britain is _____ too cold in winter _____ too hot in summer.
A) either; or B) both; and C) neither; nor D) or; and

Item 7 involves two free collocations, *a _ to* and *_ to the problem*, and although the choice *response* is also acceptable in the first slot, it is not a suitable one for the second slot. The word *solution* is always fixed readily to problem. *A solution to a problem* has almost become a very regular collocation. Item 11 involves three fixed collocations *both...and*, *neither...nor* and *either...or*. Though the three are grammatically correct, semantically, the choices A and B are not suitable, for the word *too* in the sentence implies a negative sense. Therefore, for the two items, regardless of the interference from other choices, most students still chose the correct answers: *solution* in item 7 and *neither...nor* in item 11. Item 8 tests students' command of the polywords *as long as*. Twenty-three students made correct the choice. Thus, the results in a way indicate that the meaning and usage of some complex lexical items are widely accepted by students.

Secondly, a clue as to how students deal with content words and function words can also be found from the students' responses to items such as 10 and 11. The students' responses to item 10 are quite consistent with what has been mentioned by Nattinger (1988) who says that the proper choice of certain function words such as prepositions will cause difficulties to learners. For some function words, it is perhaps not so easy to use them correctly. For example, in item 10, 17 students from the three levels could not make a clear distinction between the two prepositions *for* and *of* and chose the wrong option C (*to make a plan of*) instead of the correct one A (*to make a plan for*). However, still most function words reoccur and are used frequently, so it is relatively easy to commit them into memory and to command the usage of them. For example, in item 11, the majority of students made the correct choices *neither...nor*.

In vocabulary acquisition, most problems are still with storing and retrieving content words, since the meanings of these words are not so easily pictured, as has been mentioned by Nattinger (1988). Just take item 13 as an example. In item 13, the preposition *to* is given to the students. The students were required to make a choice among the four choices *favourable*, *suitable*, *preferable* and *proper* which more or less have some overlaps in meanings, despite the fact that there is still much difference in their meanings and usage. For example, *favourable* and *proper* are generally followed directly by nouns they modify, while the other two are usually used in the expressions such as *be suitable for* and *something is preferable to something else*. With the interference from the rich meanings of the four words, 24 students made a wrong choice by choosing improper words *favourable*, *suitable*, and *proper* instead of the correct choice *preferable*. This is also what happened to most of the other wrong choices which involve the collocations of content words.

Thirdly, institutionalised collocations seem to be more easily grasped than free collocations. This is shown in item 10. Item 10 has two slots with the first slot testing the students' knowledge in institutionalised collocations and the second one testing their knowledge in free collocations. Among the 30 testees, only 11 of them made a

completely correct choice by choosing A. Nineteen of them made a wrong choice, and among these students, 7 are students from Level H. The following is item 10:

10. It is necessary ___ me ___ my studies before a new term.

A) for, to make a plan for B) of, making a plan for

C) for, to make a plan of D) of, making a plan

Among the 19 who made a wrong choice, the majority of them chose C. This means they are quite familiar with the institutionalised collocation: *It is necessary for somebody to do something*. The word *plan* can be followed by both *for* and *of*, however with different meanings in different contexts. This confuses the students. Therefore, free collocations might need more attention and effort in teaching.

Finally, Figure 1 also shows that too many scores converge on rank D and the smallest number of students are ranked A. This suggests that the greatest number of students gets scores lower than 6 and commands less than two fifths of the items and the smallest number of students commands most of the vocabulary. The results indicate that the present situation of the mastery of complex lexical items is still far from being satisfactory. Lewis (1993) mentions that lexical items usually use a great deal of prefabricated and formulaic expressions. Therefore, they should be dealt as a whole. However, the results imply that some students may still treat some complex lexical items word by word, instead of dealing with and understanding them as a whole. This might be the main reason why some students made wrong choices to some of the items.

3.1.2.2 The differences between the three levels

Although the two Figures reveal some of the similarities in the way that participants access complex lexical items and command complex lexical items, the results show that there is also much difference between different levels in their understanding, usage and the degrees of proficiency of the multi-word units.

On the one hand, as far as the distribution of scores is concerned, the results show that

students with advanced knowledge have a more solid control over complex lexical items. All of the students in Level H perform successfully and get scores higher than 7. Among the 10 students, 80% of them are in the first two ranks, A (13-15) and B (10-12). This is in sharp contrast with the students in Level L, none of whom get scores higher than 9 and 70% of whom get scores lower than 6. The average score of students in Level H (11.4) is higher than that of level I (10.5) and far higher than that of Level L (5.8). The scores of students in Level I are distributed almost evenly among the first four ranks. Among students in Level I, 30% are in the highest rank and 20% are in rank D. This means that students in Level I have the potential to make great progress and to keep up with the students in Level H. However, at the same time, some students do not have a solid knowledge of vocabulary and they will fall behind if they do not pay enough attention to vocabulary acquisition. On the other hand, as far as the detailed choices are concerned, the results show some weaknesses and strengths of college English learners' use of the complex lexical items.

Firstly, weak students seem more likely to grasp only partial knowledge of a word. As has been mentioned by Aitchison (2003), learners must know at least three things about a word in order to be able to use it: the meaning, the role and the sounds. Learners need to integrate the three aspects well. In this way, they might be able to use words better and in an appropriate way. For example, in item 4, the choice A) *adapt* and D) *adopt* are similar in spelling and have a slight difference in sound. However, they are different in their meanings and their collocations are quite different. Most students in Level L chose A instead of the correct choice B to form the inappropriate collocation *adapt a child* in certain contexts.

Secondly, students at a low level show a large gap in cultural understanding. This can be seen through the choice of item 15 made by students of Level L. Item 15 involves the understanding of a fixed expression *to beat around the bush*. Only three students in this level made a correct choice. Three others chose the option *move around the bush and beat it with something* even if a clue, *come to the point*, is given in the stem

sentence to imply the possible meaning of the expression. Nation (2001), claims that learning the meanings of idioms should be enriched by analysis and explanation of their parts and history and some attention should be given to the way they function in discourse. With the specific cultural background related to the teaching of certain expressions, learners may learn such expressions more deeply and avoid understanding them superficially.

In addition, especially to students at Level L, there is an evident negative interference from L1. There is improper transfer. As has been pointed out by Larsen-Freeman and Long (1991), a learner's proficiency level seems to be a relevant factor in determining when transfer will occur. Larsen-Freeman and Long (1991) also mention Kellerman who says that transfer is a strategy to compensate for lack of L2 knowledge. Weak students usually have poorer knowledge in L2 and thus are likely to make more improper transfers. This can be seen in the choice to item 5 by students at Level L.

5. Last time I ran across Jack, my roommate in high school, by _____.
A) accident B) action C) incident D) luck

Chinese people often use *luck* to express something (often pleasant) which happens suddenly and unexpectedly. However, an *accident* in Chinese is something terrible and undesirable. Facing this item, most students at the lowest level do not have commanded the polywords *by accident* and still understand the expression word by word and chose the wrong word *luck* instead of the correct one *accident*.

3.2 The analysis of the questionnaire for the students

The questionnaire for the students includes 7 questions. The questions are intended to get the students' responses in three aspects: their current situation in learning vocabulary (questions 1-2); the strategies they adopt in acquiring vocabulary (questions 3-5) and their expectations about vocabulary teaching strategies (questions 6-7). The same students who took part in the vocabulary test were invited to participate

in the questionnaire.

3.2.1 Students' attitude towards vocabulary learning

The students' attitude towards vocabulary learning can be seen through Figure 3.

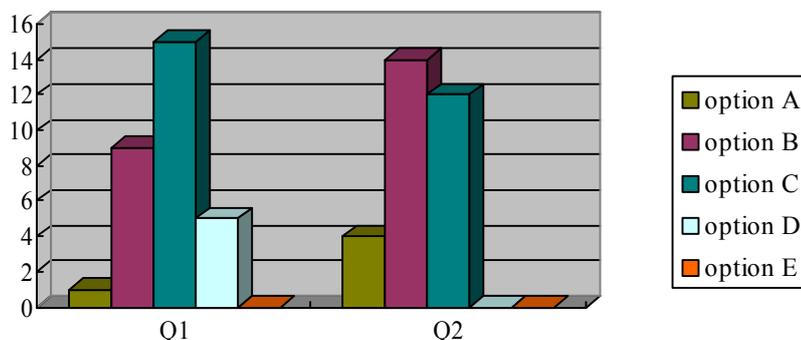


Figure 3: The students' responses to questions 1 and 2 (Q for question)

In Figure 3, from the students' responses to question 1, it can be found that half of the students chose the option C and think that their vocabulary knowledge is limited, 9 students think that their vocabulary just meet the demands at the current stage. The responses to question 2 reveal that although some students chose C and think that it is not so difficult to learn words, more students chose B which says learning words is a difficult thing to them. Relating the responses to that to the test of complex lexical items, it can be found that even though students in Level H do quite well and successfully in the test and show a relatively more solid knowledge in dealing with complex lexical items, they admit it is still difficult for them to acquire vocabulary. Therefore, it is widely acknowledged that learning vocabulary presents a big challenge to most students. There is a lack of vocabulary knowledge among most students.

3.2.2 The strategies adopted by students in learning vocabulary

While learning vocabulary, different learners may attach different importance to different aspects of vocabulary and prefer some ways to others in dealing with it. Figure 4 gives some clues as to how the students learn vocabulary and what they focus on while learning.

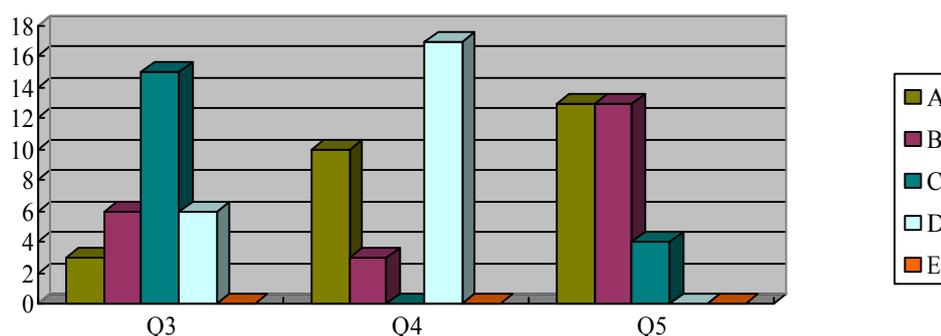


Figure 4: The students' responses to questions 3, 4 and 5 (Q for question)

Figure 4 shows that half of the students chose C as their response to question 3. This indicates that 50% of the students learn vocabulary by combining the two methods: association and a rote fashion. However, students in different levels think differently. The greatest number of students in Level L chose D. These students say that they have no idea as to how to learn vocabulary, this is in accordance with their performance in the vocabulary test. The greatest number of students in Level H chose C, and this in a way explains why students in Level H are more creative in the word association activities.

A complete knowledge of a word depends on the mastery of the three essential aspects of it: meaning, sound and usage. This has been emphasized by Aitchison (2003). Most of the students agree to this point, which is shown in their choice of D to question 4. However, 30% of the students still pay much attention to meaning only. This might be because, traditionally, students in China are required to do more written work than oral work.

The responses to question 5 reveal that a little more than 40% of the students chose B and this shows that they are aware of the importance of input in the form of extensive reading. The same number of students attaches importance to oral output in the form of communication. As Coady (2005) and Nation (2001) have mentioned that extensive reading is an additional way for learners to enlarge vocabulary and learners obtain new

vocabulary knowledge from reading, students know well that vocabulary knowledge and reading comprehension are closely related to each other. Responses to question 5 show that oral productivity also receives the same attention during students' learning process. Oral productivity provides opportunities for retrieval and reinforcement as well as opportunities for new, modified and more comprehensible input. As Nattinger and DeCarrico (1992) have claimed it helps to form correct habits in language usage. Thus teachers had better give attention to and promote extensive reading and oral practice in vocabulary teaching for they have a role in vocabulary enhancement.

3.2.3 Students' expectation towards classroom vocabulary teaching

To enlarge vocabulary, efforts from both learners themselves and instructors are necessary. Thus learners have much anticipation towards classroom teaching. This is shown in Figure 5.

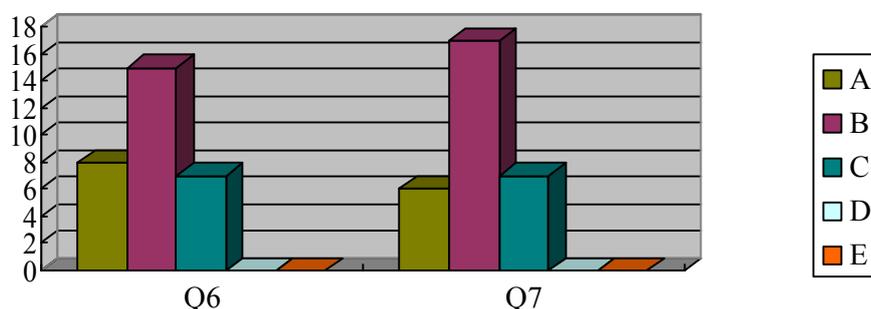


Figure 5: The students' responses to questions 6 and 7 (Q for question)

In Figure 5, results show that half of students chose B as their response to question 6. They think it is necessary for teachers to teach vocabulary in classes. Eight out of 30 think it is very necessary, especially the students in Level L. Among the 8 students, half of them are students from the lowest level. Students who are not so good at English and have difficulties in learning the language might need more help from teachers. Responses to question 7 show that more than half of the students think it is necessary for teachers to set aside time in each class for them to practice the words and expressions they have learned.

From the responses, it seems that students have noticed the importance of vocabulary learning and the importance of classroom vocabulary teaching. Traditionally, students have finished almost all the basic grammatical knowledge in the middle school. They have the structures at hand, but now what they lack is the basic elements, the words which bring life to the structures. They know quite well the saying: practice makes perfect. Thus, they think there is a need for teachers to set aside certain time to put what they learned into practice. They need guidance and practice in vocabulary learning.

3.3 The analysis of the questionnaire for the teachers

The questionnaire for the teachers consists of 16 questions. The questionnaire involves research into the following aspects: teachers' understanding of the current situation that university students are in while learning vocabulary (questions 1 and 2); teachers' understanding of the importance of vocabulary teaching (questions 3-6); the application of different strategies in classroom teaching (questions 7-13) and teachers' understanding of the influence of strategies (questions 14-16).

Eight teachers, five female ones and three male ones, who teach English to non-English major students in the university, were invited to participate in the questionnaire. Their teaching experience varies from 3 years to 19 years.

3.3.1 The understanding of general situation

Responses to questions 1 and 2 give some clues as to how the teachers understand the general situation about university students' vocabulary and vocabulary learning.

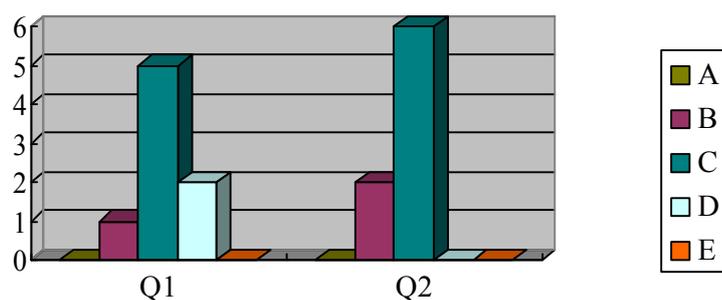


Figure 6: The teachers' responses to the questions 1 and 2 (Q for question)

It can be seen in Figure 6 that when it comes to students' knowledge in vocabulary, the teachers' opinions are quite similar to students' opinions. Most teachers chose C to question 1 and think that the students' knowledge in vocabulary is poor and limited. None of the teachers who took part in the questionnaire thinks that there are students who have a vocabulary that is larger than the demands. Responses to question 2 indicate that most teachers chose C and hold the opinion that most students in their classes learn vocabulary passively. There might be some connection between the two choices. Lightbown and Spada (2002) mention Peter Skehan (1989) who points out that it is not sure whether learners are more highly motivated because they are successful, or whether they are more successful because they are highly motivated. Judging from the current situation, it is also not easy to know whether learning vocabulary presents such a big challenge because students take a passive attitude, or whether they learn passively because vocabulary is so difficult to be mastered.

3.3.2 Opinions about the importance of classroom vocabulary teaching

Different teachers might have different opinions towards the importance of vocabulary teaching in classes. This is revealed by the responses from the teachers to questions 3 to 6 in Figure 7.

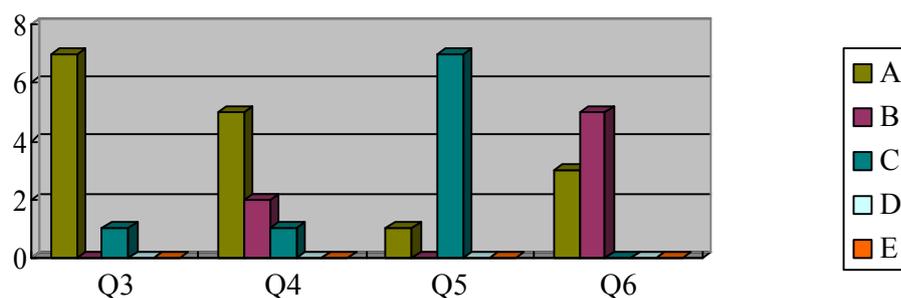


Figure 7: The teachers' responses to questions 3 to 6 (Q for question)

In Figure 7, it can be noticed that the overwhelming majority of the teachers chose A to question 3 and they think a lack of vocabulary will certainly affect students' learning language. It will impede the students' achievement in different aspects such as listening, speaking, reading and writing. Vocabulary knowledge is the basic ingredient to the proficiency of English.

Most teachers think it is very important for teachers to teach vocabulary in language instruction. In 3.2.3, the students' responses to question 6 show that they think it is important, however not very important to teach vocabulary in classes. By comparing teachers' responses to students' responses, it can be found that teachers put even more emphasis on classroom vocabulary teaching. This might be because, firstly, teachers have a better understanding of the importance of vocabulary and know that vocabulary is the essence of language. In addition, from their teaching experience, the teachers know the students better than students know themselves, and they have a clearer understanding of the students' weaknesses and strengths.

From the teachers' responses to question 5, it is easy to notice that the overwhelming majority of the teachers hold the opinion that though vocabulary instruction is important and necessary in classroom teaching, it is by no means enough for students to enlarge their vocabulary. Responses to question 6 reveal that five teachers think it is necessary to adopt some strategies in teaching vocabulary. Three regard it as very

necessary. If teachers are provided with only one method in classroom teaching, they will be unprepared for change and will not have the flexibility needed to new situations. They need various strategies on the basis of different needs in learning.

3.3.3 Strategies adopted by teachers in vocabulary teaching

Different teachers may have different teaching styles and they may turn to different teaching strategies. This can be seen in Figure 8.

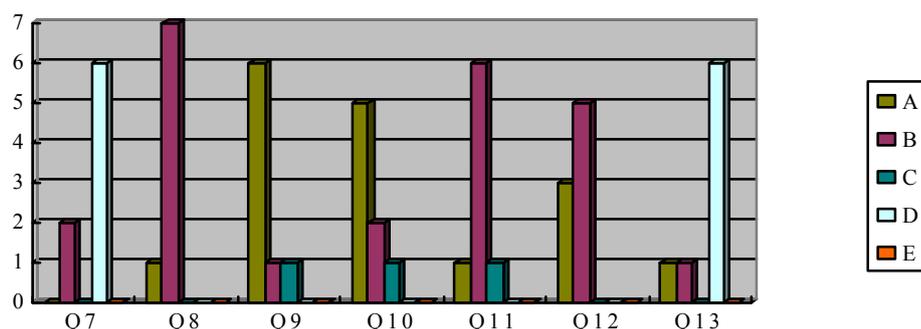


Figure 8: The teachers' responses to questions 7 to 13 (Q for question)

The responses in this part reflect in a way what teachers focus on when teaching vocabulary. From the responses to question 7, it can be noticed that most teachers emphasize that learners need to master all of the aspects of a word: meaning, usage and sound. This is in accordance with what Aitchison (2003) says about the elementary aspects of mastering a word wholly. In this way, learners will be able to use and understand words appropriately in different contexts. This idea is also accepted by the students, which is shown in their responses to question 4 in Figure 4 in 3.2.2. The responses to the following three questions show that most teachers attach importance to the strategies of association in teaching vocabulary and collocation is the most widely used one. They acknowledge there is more difficulty in dealing with content words than dealing with function words.

Because language acquisition is, in a way, a habit formation, which is also emphasized by Nattinger and DeCarrico (1992), most teachers set aside time during the classes for

students to practice what they have learned. This is shown by their responses to question 11. Most teachers set aside some time during the classes for students to practice what they have learned. Practice provides learners with the opportunity of imitation and reinforcement through which learners learn to form habits in using and producing language. Teachers know this quite well. At the same time, practice is a kind of output which is based on ample comprehensible input. Learners first need to be immersed in an environment full of input. Extensive reading has turn out to be a good way to get access to ample input. Thus, most teachers attach much importance to it. This is reflected in their responses to question 12. Most teachers chose B and think extensive reading can efficiently accelerate students' vocabulary acquisition.

During the learning process, especially when learners practice what they have learned, mistakes are unavoidable. However, how to deal with errors efficiently is quite demanding. The errors, it is said, could become habits (Lightbown & Spada, 2004). Direct interruption whenever errors occur may discourage learners greatly. Therefore, teachers need to strike a balance between the six types of corrective feedback which are used quite often. For this question, most teachers admit that they will offer feedback when necessary when students make mistakes with vocabulary in speaking or writing. This is shown in their response to question 13. One thing that deserves to be noticed is that sometimes incidental focus on form may lead to a much better impact for both learning and teaching, especially for the meaning-focused classroom teaching.

3.3.4 The influence of strategies in vocabulary teaching and learning

The various strategies are put forward on the basis of some of the theoretical background. They play a role in language acquisition and also in vocabulary acquisition. From their own teaching experience, most teachers realize and acknowledge this. They have reaped the benefits of various strategies they have adopted in their classes. This is reflected by their responses to the last three questions in the questionnaire.

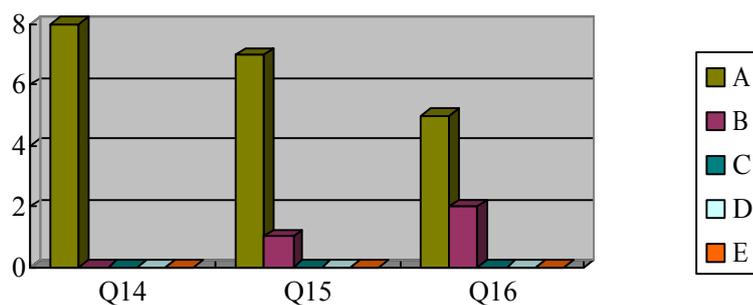


Figure 9: The teachers' responses to questions 14 to 16 (Q for question)

In Figure 9, the overwhelming majority of teachers agree that strategies in vocabulary teaching help students to store, organize and access words better and use words more properly. Strategies help to enlarge students' vocabulary and facilitate their language learning. In addition, with benefits brought about by learning and teaching strategies, students will be motivated and raise their interest in learning.

3.4 The implications for vocabulary learning and teaching from the test and questionnaires

The information from the test and the two questionnaires together with the analysis sheds some new light on vocabulary teaching and learning in Chinese universities. University students have learned English for at least six years. However, vocabulary acquisition still presents a big challenge to them and impedes their mastery of the target language. This might be caused partly by the adoption of ineffective vocabulary learning and teaching strategies. Thus, some implications can be concluded for pedagogical purposes.

Firstly, it is advisable that teachers attach importance to semantic network and to the role that association plays in enlarging vocabulary. In the vocabulary test, the students of higher level perform the best in the vocabulary test. They are more imaginative and creative in association activities. During their vocabulary learning process, most of them use association strategies. It seems that there is a close connection between their

learning strategies and their performance. Association in dealing with words helps students to be more discursive in thinking. “Essentially, a lexical network involves the linking of words in some way” (Gass & Selinker, 2008:458). Thus, in teaching, teachers can try to help establish semantic networks by focusing on different aspects such as collocation, coordination, affixes and so on, according to the contexts. Teachers can also encourage learners to establish semantic networks by their own to recall certain words in this way.

Secondly, great benefits might be reaped if the teaching of lexical chunks becomes a frequent classroom activity. In the multiple-choice test with complex lexical items, it seems that most students have mastered some basic and regular expressions and institutionalized expressions are easier for students to grasp. However many factors such as cultural awareness, the distinction between synonyms and opposites, the similarity of sound and spelling between different words and so on, still interfere with the students’ exact and proper use of vocabulary. In some cases, the lexical items are not treated as a whole. Most students access them and understand them word by word. In English, many expressions are lexical items and they form the key to the mastery of the lexicon. As is noticed by Lewis (1993), students need to develop awareness of not assembling parts of the language they are exposed to into wholes, but of identifying constituent bits within the whole. Thus, it is advisable that teachers attach great importance to the teaching of complex lexical items and to promote students’ awareness of lexical chunks as well.

Thirdly, it can be inferred from the students’ responses to the questionnaire that students think instruction only is not enough to enlarge vocabulary. The appropriate knowledge in language depends on both direct and indirect vocabulary learning. For most learners, extensive reading and oral productivity activity have been proved to be efficient ways to get access to ample input and to enlarge vocabulary. On the one hand, reading is an activity which almost all learners of different proficiency levels can have access to according to their own situation and interests without being locked into an

inflexible class programme, which might increase students' motivation. On the other hand, Nation (2008:151) argues that reading allows learning to occur outside the classroom. It provides another way for students to get access to input. In addition, reading increases opportunities of the meeting with what have learned and also the meeting with low-frequency words more often.

Oral productivity and practice are quite efficient ways to help reinforce and strengthen what has been learned. What is more, output provides new input to learners through negotiation. Thus both ample input and output are indispensable for language acquisition. Teachers are advised to lead students to know the benefits brought about by extensive reading and provide opportunities for learners to practice the knowledge learned. Learners too, are advised to take part in classroom activities actively.

Fourthly, motivation helps learners to succeed in second language learning. Responses to the questionnaire show most students learn vocabulary passively. This might in a way make learning vocabulary a difficult thing. Motivation and an active attitude actually play a role in one's success. Lightbown and Spada (2002) mention Gardner (1985) who says that overall findings show that positive attitudes and motivation are related to success in second language learning. With high motivation, students will participate actively in class, express interest in the subject-matter and study a great deal. Teachers often have more opportunity to recognize and influence the students' characteristics mentioned above. They can try to make a positive contribution to students' motivation to learn language and vocabulary.

Fifthly, errors are unavoidable during the process of learning a second language. For proficiency in language and the correct use of vocabulary, tactful corrective feedback is needed. "Errors are signs of learning failure and as such, not to be willingly tolerated" (Littlewood, 1984:22). However, feedback given at a wrong time and in a wrong way may have negative effect on students and will discourage learners from taking risks which is necessary for progress in language learning. Interactional

feedback is an important source of information for learners. It “gives additional opportunities to focus on production or comprehension” (Gass & Selinker, 2008: 330). And it is agreed by most teachers who participated in the questionnaire that proper use of feedback helps learners to build confidence in using vocabulary exactly to express themselves. Thus, it is beneficial that teachers use feedback wisely and use it according to the overall instructional focus.

Sixthly, difference might be made in classroom teaching if teachers draw students’ attention to the difference between L1 and L2. Gass and Selinker (2008) claim that in all aspects of language learning, the L1 undoubtedly play an important role and the lexicon is no exception. When learners are not sure about the vocabulary knowledge in L2, they will turn to transfer as a strategy to compensate for lack of L2 knowledge. However, Larsen-Freeman and Long (1991) claim that the transfer with idioms, lexis and syntax, will be constrained by the learner’s perception of L1-L2 distance. Thus, especially for students at low levels, it is better that teachers promote students’ knowledge in the difference between L1 and L2. At the same time, teachers had better integrate cultural knowledge into language and vocabulary education. Language habits are a part of culture. If students understand the special meanings of certain complex lexical items, they might achieve both high proficiency and confidence in using the target language. Then, there will not be so much difficulty in choosing correct answers to items such as 15 in the test of vocabulary.

4. Conclusion

This study investigates how different strategies are adopted in both English vocabulary learning and teaching in a Chinese university and how teachers and learners in the university think of the importance of vocabulary and the strategies in vocabulary acquisition.

Through the detailed analysis and discussion which is based on the vocabulary test and

the questionnaires, the research finds that both teachers and learners think vocabulary is the basic elements in language and it is a big challenge for students to learn vocabulary well. For better mastery of vocabulary, instruction only is not enough and strategies in learning and teaching vocabulary will facilitate the process of acquisition. Through the analysis, it can be found that different strategies are adopted and are focused on. Firstly, most students use semantic network or the strategy of association to help them store and access vocabulary. Secondly, both teachers and learners regard ample input in the form of extensive reading and output in the form oral productivity as necessary strategies for vocabulary enhancement. Tactful feedback and cultivation of motivation among students are another two strategies which bring benefits in classroom vocabulary teaching and learning. The promotion of cultural awareness also contributes to precise use of the lexicon.

The research also finds that students of different levels use strategies in different ways. Advanced learners are more creative and have a better and more solid knowledge in vocabulary. Students at low levels are more limited in their usage of vocabulary knowledge. Thus, how to help students of low levels to improve vocabulary acquisition efficiently while at the same time help the advanced students to display their advantages to the full presents a great challenge for further research.

List of references

- Aitchison, Jean. 2003. *Words in the Mind*. Oxford: Blackwell.
- Arnaud, Pierre J. L. & Henri Bejoint. 1992. *Vocabulary and Applied Linguistics*. London: Macmillan Academic and Professional Ltd.
- Barfield, Andy & Henrik Gyllstad. 2009. *Researching Collocations in Another Language: Multiple Interpretations*. UK: Palgrave Macmillan.
- Brophy, Jere. 1998. *Motivating Students to Learn*. Boston: McGraw-Hill.
- Brown, H. Douglas. 1994. *Principles and Language Learning and Teaching*. New Jersey: Prentice Hall Regents.
- Carrell, Patricia L., Joanne Devine & David E. Eskey. 2006. *Interactive Approaches to Second Language Reading*. Beijing: World Publishing Company.
- Carter, Ronald & Michael McCarthy. 1988. *Vocabulary and Language Teaching*. New York: Longman Inc..
- Coady, James. 2005. L2 Vocabulary Acquisition through Extensive Reading. In Coady, James & Thomas Huckin (eds.). *Second Language Vocabulary Acquisition*. Shanghai: Shanghai Foreign Language Education Press.
- Cruse, Alan. 2004. *Meaning in Language: An Introduction to Semantics and Pragmatics*. Oxford: Oxford University Press.
- Ellis, Rod. 1985. *Understanding Second Language Acquisition*. Oxford: Oxford University Press.
- Gass, Susan M. & Larry Selinker. 2008. *Second Language Acquisition*. New York: Routledge.
- Harley, Heidi. 2006. *English Words: A Linguistic Introduction*. Maldon: Blackwell Publishing.
- Hughes, Arthur. 2000. *Testing for Language Teachers*. Beijing: Foreign Language Teaching and Research Press.
- Larsen-Freeman, Diane and Michael H. Long. 1991. *An Introduction to Second Language Acquisition*. New York: Addison Wesley Inc..
- Lewis, Michael. 1993. *The Lexical Approach*. Hove, England: Language Teaching

Publications.

- Lightbown, Patsy M. & Nina Spada. 2004. *How Languages are Learned*. Shanghai: Shanghai Foreign Language Education Press.
- Littlewood, William. 1984. *Foreign and Second Language Learning*. Cambridge: Cambridge University Press.
- Loewen, Shawn. 2005. Incidental Focus on Form and Second Language Learning. *Studies in Second Language Acquisition*. 27: 361-386.
- Nation, I. S. P. 1990. *Teaching and Learning Vocabulary*. Boston: Heinle & Heinle Publishers.
- Nation, I. S. P. 2001. *Learning Vocabulary in Another Language*. Cambridge: Cambridge University Press.
- Nation, Paul & Jonathan, Newton. 2005. Teaching Vocabulary. In Coady, James & Thomas Huckin (eds.). *Second Language Vocabulary Acquisition*. Shanghai: Shanghai Foreign Language Education Press.
- Nattinger, James. 1988. Some current trends in vocabulary teaching. In Carter, Ronald & Michael McCarthy (eds.). *Vocabulary and Language Teaching*. New York: Longman Inc..
- Nattinger, James R. & Jeanette S. DeCarrico. 1992. *Lexical Phrases and Language Teaching*. Oxford: Oxford University Press.
- Parrott, Martin. 1993. *Tasks for Language Teachers*. Cambridge: Cambridge University Press.
- Singleton, David. 2006. *Exploring the Second Language Mental Lexicon*. Beijing: World Publishing Company.
- Ur, Penny. 1996. *A Course in Language Teaching*. Cambridge: Cambridge University Press
- Wilkins, David. 1972. *Linguistics in Language Teaching*. Cambridge, MA: MIT Press.
- Zimmerman, C. B. 2005. Historical trends in Second Language vocabulary Instruction. In Coady, James & Thomas Huckin (eds.). *Second Language Vocabulary Acquisition*. Shanghai: Shanghai Foreign Language Education Press.

Appendices

Appendix A

Dear students,

I'm very thankful for your participation in this **vocabulary test** and the **questionnaire** that is in Appendix C. Both the test and the questionnaire aim to do research into strategies used by non-English major students when learning English vocabulary and strategies used in the vocabulary teaching they receive.

A test of vocabulary

Major:

Sex:

Class:

Age:

Part One

Directions: List the first four words that come to your mind when you see the words given below. (10 minutes)

1. friend

1) _____ 2) _____ 3) _____ 4) _____

2. clothes

1) _____ 2) _____ 3) _____ 4) _____

3. get

1) _____ 2) _____ 3) _____ 4) _____

4. enjoy

1) _____ 2) _____ 3) _____ 4) _____

5. red

1) _____ 2) _____ 3) _____ 4) _____

6. fat

1) _____ 2) _____ 3) _____ 4) _____

Part Two

Directions: There are 15 incomplete sentences in this part. For each sentence there are four choices marked A), B), C) and D). Please tick the best choice which makes the sentence complete. (10 minutes)

1. It was several minutes before I was _____ of what was happening.
A) realized B) aware C) awake D) curious
2. I've made an _____ to see Dr. Lewis at 3 o'clock this afternoon.
A) appointment B) application C) attention D) apartment

3. He found his uncle _____ in the reading of the Sunday newspaper.
 A) interesting B) focused C) absorbed D) involving
4. The old couple decided to _____ a boy and a girl though they had three children of their own.
 A) adapt B) bring C) receive D) adopt
5. Last time I ran across Jack, my roommate in high school, by _____.
 A) accident B) action C) incident D) luck
6. If you keep on working hard, you are ____ to succeed.
 A) insisted B) bond C) doomed D) bound
7. A _____ to this problem is expected to be found before long.
 A) response B) solution C) settlement D) result
8. _____ you work hard, you are going to do well in your exams.
 A) As long as B) Not until C) Even if D) Unless
9. The manager lost his _____ just because his secretary was ten minutes late.
 A) mood B) temper C) mind D) will
10. It is necessary ____ me ____ my studies before a new term.
 A) for, to make a plan for B) of, making a plan for
 C) for, to make a plan of D) of, making a plan of
11. The weather in Britain is ____ too cold in winter ____ too hot in summer.
 A) either; or B) both; and C) neither; nor D) or; and
12. The children burst out laughing _____ he appeared on the stage.
 A) in case B) the minute C) since then D) the minute when
13. A dark suit is _____ to a light one for evening wear.
 A) favorable B) suitable C) preferable D) proper
14. The scientists have ____ to the government to take actions against pollution.
 A) announced B) appeared C) appealed D) approached
15. Why do you beat around the bush and not come to the point? The underlined expression in the sentence means _____.
 A) move around the bush and beat it with something
 B) talk about some interesting things without stopping
 C) play a game of beating something around the bush
 D) avoid talking about something embarrassing directly

Appendix B

Key to multiple choice vocabulary test.

1. B	2. A	3. C	4. D	5. A
6. D	7. B	8. A	9. B	10. A
11. C	12. B	13. C	14. C	15. D

Appendix C (Questionnaire 1 for students)

**Questionnaire on opinions about English vocabulary
learning and teaching**

Major: sex: Class: Age:

Directions: *There are seven questions in this questionnaire. For each question, four choices marked A, B, C and D will be offered. Please tick the option that corresponds to your opinion for each of them. If you have any different idea(s) or have more points to complement, you are welcome to write your ideas as E*

1. What do you think of your vocabulary?
A) larger than the demands B) just meet the demands
C) limited D) rather limited
E) _____

2. Do you think learning words is a difficult thing for you?
A) very difficult B) difficult
C) not so difficult D) not difficult at all
E) _____

3. How do you learn vocabulary?
A) by applying the association method to most words
B) by memorizing each word in a rote fashion(死记硬背)
C) some by the association method and some in a rote fashion
D) have no idea
E) _____

4. What do you focus on when learning vocabulary?
A) meaning B) usage
C) sound D) all of these
E) _____

5. Which of the following do you think will help you enlarge vocabulary and use it more proficiently?
A) communication activities in and outside of classes
B) extensive reading
C) testing
D) instruction in the classroom only
E) _____

6. Do you think it is necessary for teachers to teach vocabulary in classes?
A) very necessary B) necessary
C) not so necessary D) not necessary at all

E) _____

7. Do you think it is necessary for teachers to set aside time in class for you to practice the words and expressions you have learned?

A) very necessary

B) necessary

C) not so necessary

D) not necessary at all

E) _____

Thank you all for your kind cooperation!

Appendix D (Questionnaire 2 for teachers)

Dear friends,

This questionnaire forms part of a research study about vocabulary learning and teaching. I am very thankful for your participation in it.

Questionnaire on opinions about English vocabulary learning and teaching

Teaching Experience:

Sex:

Age:

Directions: *There are sixteen questions in this questionnaire. For each question, four choices marked A, B, C and D will be offered. Please tick the option that corresponds to your opinion for each of them. If you have any different idea(s) or have more points to complement, you are welcome to write your ideas as E.*

1. What do you think of the vocabulary of the majority of the students in your classes?

A) larger than the demands B) just meet the demands

C) limited D) rather limited

E) _____

2. Generally speaking, how do you think the students in your classes learn English vocabulary?

A) actively, and with high motivation

B) passively, learning mainly for testing

C) a few of them actively and most of them passively

D) few passively and most actively

E) _____

3. Do you think lack of vocabulary will impede students' achievement in listening, speaking, reading and writing?

A) greatly B) not so much

C) a little D) not at all

E) _____

4. Do you think vocabulary teaching is important in language instruction?

A) very important B) important

C) not so important D) hardly important

E) _____

5. What do you think about the relationship between instruction of vocabulary in class and vocabulary acquisition?

A) Instruction is enough for students to acquire enough vocabulary for use.

- B) Instruction of vocabulary is unnecessary, and students can learn vocabulary themselves
- C) Instruction is necessary but not enough.
- D) Instruction is the best way for students to acquire vocabulary.
- E) _____
6. Do you think it is necessary for teachers to adopt some strategies in vocabulary teaching?
- A) very necessary B) necessary
- C) not so necessary D) not necessary at all
- E) _____
7. What do you focus on when teaching vocabulary?
- A) meaning B) usage C) sound D) all of them
- E) _____
8. (According to Aitchison, there are usually four types of responses to a word stimulus in word association activities. The four types of responses are as follows: coordination - words clustering on the same level of detail, such as *salt and pepper*, *butterfly and moth*; collocation - words that are likely to be found with the stimulus in connected speech, such as *salt pepper*, *bright red*; superordination - the cover term includes the stimulus word, such as *insect* being elicited by *butterfly*; and synonymy - a word with the same meaning as the original word, such as *starved* and *hungry*. The four types of responses are often referred to as association strategies in vocabulary acquisition.)
- Do you adopt one or some of these strategies in teaching vocabulary?
- A) yes, always B) sometimes C) rarely D) never
9. If you adopt one or some of the strategies mentioned above, which one or ones do you adopt the most often? If you do not, please skip this question.
- A) collocation B) coordination
- C) synonymy D) superordination
10. Content words include nouns, verbs and adjectives – the bulk of vocabulary. The meaning of content words flow and change over time and they will change to accommodate the meaning of the function words. Function words are those that restrict and organize the meanings of content words and provide structure for the sentence; their meanings are relatively formal and inflexible (e.g. not only... but also... when, etc.).
- Compared to function words, do you think it is more difficult for students to grasp the meaning and usage of content words?
- A) yes B) equally difficult
- C) no, less difficult D) have no idea
- E) _____

11. Do you set aside time in class for students to practice the usage of vocabulary?
 A) yes, much B) yes, not so much
 C) seldom D) never
 E) _____
12. Which of the below do you think will efficiently accelerate students' vocabulary acquisition?
 A) communication activities in and outside of classes
 B) extensive reading
 C) testing
 D) instruction in the classroom only
 E) _____
13. Do you offer feedback when students make mistakes with vocabulary in speaking and writing?
 A) always B) incidentally
 C) when necessary D) never
 E) _____
14. Do you think vocabulary teaching and practice helps to enlarge students' vocabulary and facilitate their language learning?
 A) yes, of course B) little help
 C) no help at all D) have no idea
 E) _____
15. Do you think strategies in vocabulary teaching help students to store, organize and access words better and use them more properly?
 A) yes, of course B) little help
 C) no help at all D) have no idea
 E) _____
16. Do you think strategies in vocabulary teaching promote students' interest in learning English?
 A) yes, of course B) little help
 C) no help D) have no idea
 E) _____

Thank you all sincerely for your cooperation and participation in the questionnaire!