## NEAR EAST UNIVERSITY

GRADUATE SCHOOL OF EDUCATION SCIENCES DEPARTMENT OF ENGLISH LANGUAGE TEACHING

# A SURVEY ON THE USE OF VOCABULARY LEARNING STRATEGIES BY ELT AND ELL STUDENTS OF DUHOK UNIVERSITY IN NORTHERN IRAQ 

MASTER THESIS
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# NEAR EAST UNIVERSITY <br> Graduate School of Education Sciences <br> Department of English Language Teaching 

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June, 2014

We certify that we have read the thesis submitted by Wisam Ali Askar titled "A Survey on the Use of Vocabulary Learning Strategies by ELT and ELL Students of Duhok University in Northern Iraq" and that in our combined opinion, it is fully adequate, in scope and in quality, as a thesis for the degree of Master of Arts.

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## DECLARATION

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all materials and the results that are not original to the study.

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# ABSTRACT <br> A SURVEY ON THE USE OF VOCABULARY LEARNING STRATEGIES BY ELT AND ELL STUDENTS OF DUHOK UNIVERSITY IN NORTHERN IRAQ 

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This study aims to describe the use of vocabulary learning strategies (VLSs) among the English language teaching (ELT) and English language and literature (ELL) learners studying at Duhok University in Northern Iraq. A five Likert scale questionnaire, consisting of 36 items was classified under four strategy categories was administrated to 223 ELT participants from the Faculty of Educational Science and to 243 ELL participants from the Faculty of Humanities at the Duhok University. The major purpose of the study was to examine and compare the vocabulary learning strategies employed by the ELT and ELL students as well as the impact of gender and grade levels on the use of learning strategies. The Statistical Package of Social Science (SPSS, version 20) was used to analyse the obtained data.

The results of the descriptive statistics showed that Duhok university students were medium strategy users. The study also found that the cognitive strategies were the most popular strategies among the learners compared to other strategies. Social strategies were found to be the least preferred strategies. In terms of individual strategies, the results revealed that "Using internet" strategy was the most preferred strategy among the learners. This was followed by "Taking notes in class" and "Use a bilingual dictionary" strategies. In contrast, "Testing with your parents, if they know English", "Ask school teachers for Kurdish translation" and "Ask school teachers to check word lists for accuracy" strategies were the
least preferred ones by the students. The results of the T-test also showed that there were minor differences in VLSs preferences between students of different gender and field of study. It was found that in general, the scores of female learners regarding the use of VLSs were slightly higher than male learners. Moreover, ELT learners were found to be more strategy users than ELL learners. The results of ANOVA revealed significant differences regarding the use of VLSs and grade levels.

Keywords: leaning strategies, vocabulary leaning strategies, ELT/ELL learners

## ÖZET

# Kuzey Irak Duhok Üniversitesindeki Ingiliz Dili ve Edebiyati Öğrencilerinin Kelime öğrenme stratejilerinin kullanımı hakkında bir tarama <br> Wisam Ali Askar <br> Yüksek Lisans, İngilizce Öğretmenliği <br> Danıșman, Asst. Prof. Dr. Doina Popescu 

Haziran, 2013 Sayfalari, 134
Bu çalışma Kuzey Irak Duhok Üniversitesinde İngilizcenin yabancı dil olarak öğretimi (IYDÖ) öğrencileri ile Ingiliz Dili ve Edebiyati (IDE) öğrencileri arasında kelime öğrenme stratejilerinin kullanımını tanımlamayı amaçlamaktadır. Dört strateji katagorisi altında Otuz altı madde içeren beşli bir Likert ölçeği anketi. Bilimleri Eğitim Fakültesinden 223 ELT katılımcı ve Duhok Üniversitesi Edebiyat Fakültesinden 243 katılımcıya uygulandı. Çalışmanın başlıca amacı İYDÖ ve IDE öğrencileri tarafından kullanılan kelime öğrenme stratejilerini ve aynı zamanda öğrenme stratejilerinin kullanımı ile ilgili cinsiyet ve sınıf düzeyi etkisini incelemek ve karşılaştırmaktı. Sosyal Bilimler İstatistik Paketi (SPSS, versiyon 20) elde edilen verileri analiz etmek için kullanıld.

Tanımlayıcı istatistik sonuçları Duhok Üniversitesi öğrencilerinin orta strateji kullanıcılar olduğunu gösterdi. Bu çalışma aynı zamanda bilişsel stratejilerin diğer stratejilerle karşılaştırıldığında öğrenciler arasında en popüler strateji olduğunu buldu. Sosyal stratejilerin en az tercih edilen stratejiler olduğu bulundu. Bireysel stratejiler açısından sonuçlar "internet kullanımının " öğrenciler arasında en çok tercih edilen strateji olduğunu ortaya çıkardı. Bu "sınıfta notlar alınarak" ve " iki dilli bir sözlük kullanılarak" takip edildi. Buna karşılık olarak öğrenciler tarafından en az tercih edilen stratejiler ise: " aileleri İngilizce biliyorsa, onlara kontrol ettirme ", "Okulda öğretmenlere Kürtçe çeviri talebinde bulunmak" ve "Okul öğretmenlerinden sözcük listelerinin doğruluğunu kontrol etmelerini istemek"ti. Ayrıca
yapılan T-testin sonuçları farklı cinsiyet ve çalışma alanından olan öğrenciler arasında Kelime Öğrenme Stratejileri tercihlerinde çok az farklılıklar olduğunu gösterdi. Bu test Kelime Öğrenme Stratejilerinin Kullanımı ile ilgi kız öğrencilerin puanları erkek öğrencilere göre biraz daha yüksek olduğunu gösterdi. Bu nedenle, İYDÖ öğrencileri IDE öğrencilerinden daha çok strateji kullanıcıları olarak bulundu. ANOVA'nın sonuçları ise Kelime Öğrenme Stratejilerinin Kullanımı ve sınıf seviyesi ile ilgili önemli farklılıkları ortaya çıkardı.

Anahtar kelimeler: strateji öğrenimi, Kelime öğrenme stratejileri, İYDÖ ve IDE öğrencileri

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|  |  | ABBREVIATIONS |
| :--- | :--- | :--- |
|  |  |  |
| VLSs | $:$ | Vocabulary learning strategies |
| ELT | $:$ | English language teaching |
| ELL | $:$ | English language and literature |
| ESL | $:$ | English as a second language |
| EFL | $:$ | English as a foreign language |
| L1 | $:$ | First language |
| L2 | $:$ | Second language |
| SLL | $:$ | Second language learning |
| LLSs | $:$ | Language learning strategies |
| SPSS | $:$ | Statistical package for the social science |

## CHAPTER I

## INTRODUCTION

## Background of the study

This introductory chapter covers important information about the background of the present study. The following section includes the discussion of undergraduate Duhok University learners' major problems in learning vocabulary. Then, the aim and the significance of the study will be discussed.

The English language is the most extensively learned, read, and spoken language all over the world (Jenkins, 2006). Moreover, English plays an important role in economic progress, internationalization and modern technology (Spolsky, 1998). Vocabulary knowledge plays an important role in learning English as a Second Language (ESL). Read (2000, p.1) stated that "words are the basic building block of language, the units of meaning from which larger structures such as sentences, paragraphs and whole text are formed". The previous statement shows the importance of vocabulary in expressing thoughts and conveying meanings and it can also be an indicator that communication will poorly be understood without a large number of words. Moreover, Heidari, Karimi and Imani (2012) noted that vocabulary is an essential part of language because it labels objects, actions, ideas without which no one can express the intended meaning. It is general knowledge that both first language (L1) and second language (L2) researchers consider developing vocabulary a crucial component of language competence. Yang and Dai (2011, p.61) stated that "no language acquisition, whether first, second, or foreign can take place without the acquisition of lexis". Besides, Karami and Barekat (2012) affirmed that vocabulary knowledge is important when using a foreign language, since no one is able to communicate without words. Even in a learner's mother tongue, there is a continual learning of new words and new meanings for old words (Thornbury, 2002). There is no doubt that vocabulary knowledge has a very important
role in second language learning (SLL) and a good knowledge of vocabulary will help learners improve their language proficiency. Nation (1990) indicated that to read English articles fluently, a learner should understand at least 2000 frequently used English words. Therefore, vocabulary learning is one of the main aspects of English language acquisition.

Learners have rarely been taught that they should gain efficient knowledge of vocabulary in order to produce meaningful sentences. In language classrooms, English language teachers mainly focus on teaching grammar and other linguistics skills. They believe that vocabulary will simply be learned by memorizing or through translation into the native language. Oxford and Crookall (1990, p. 9) pointed out that "vocabulary is not explicitly taught in most language classes, and students are expected to "pick-up" vocabulary on their own without any guidance". They continued arguing that there are very few courses on how to teach and learn vocabulary conversely to speaking, listening, reading, writing and grammar courses in L2 programmes. For English as a foreign language (EFL) students who have learned the pronunciation and mastered the grammatical structures, ignoring vocabulary instruction will probably be the major obstacle in developing language competence. Hedge (2000) confirmed that vocabulary studies have been neglected. Moreover, she explained that even learners do not pay too much attention to vocabulary. Learners need to be aware of the importance of vocabulary, as Campillo (1995, p.36) stated that, "we have observed that, in general, there is a tendency to concentrate on grammar, paying little attention to vocabulary". It seems the teaching and learning of vocabulary has never been paid suitable attention as it has been paid to other aspects of language learning. Oxford and Crookall (1990, p.9) stated that, "courses on reading, writing, speaking, listening, grammar and culture are common in L2 programmes, but very few vocabulary courses exist".

As vocabulary learning is a central part of language learning and teaching, the present study intends to deal with VLSs. Language learners should be taught VLSs in order to be able
to determine the meaning of new words and memorize them. Erten and Williams (2008) suggested that the main aim of the studies into language learning strategies (LLSs) is to determine the most effective techniques of learning a new language. O'Malley and Chamot (1990) pointed out that strategies are essential tools for developing communicative competence. Asgari and Mustapha (2011) noted that learning becomes more efficient and effective by the use of strategies and learners become more proficient in an L2 when they use strategies. Besides, they argued that if learners tend to acquire the vocabulary in an L2, they need a good knowledge of VLSs. Thornbury (2005) declared that the good language learners are those students who are able to develop their own VLSs so that they do not need to be taught how to learn. Moreover, he clarified that VLSs have a very important role in remembering words if learners are introduced to the strategies in an appropriate way. Learners spend much time on memorizing words but unfortunately, they face problems and cannot communicate well when they need them. Nelson (2012) argued that, "a good mastery of vocabulary is essential for ESL/EFL learners, especially for those who learn for specific purposes" (p.27). It is known to most language learners that learning vocabulary is an essential and important element in language acquisition. The good language learners are those who use efficient VLSs and control their vocabulary learning. This means selecting the most suitable strategy from a variety of known strategies and determining how to follow the strategy and when to change to another one. It seems that the language teachers' main purpose is to lead students to reach a level of autonomy and make them independent from teachers in learning vocabulary.

## The problem statement

As far as the researcher knows, the current situation with Kurdish learners is that, to some extent, many teachers have ignored to teach them different ways of learning vocabulary. Therefore, most of language learners just mechanically memorize new vocabulary, without being aware of different VLSs. The language students generally learn the meaning of the new words based on their phonetic representations or their meanings Kurdish. This might indicate that learners are not quite aware of different VLSs. Teachers also think that there is no need to allot too much time and effort to teach vocabulary. There is no doubt that this situation is the result of the students' not being familiar with different VLSs.

Shortly, the present situation of learning vocabulary with Kurdish learners can be outlined as follows: 1) Lack of different strategies in learning vocabulary. For a long time, there has not been adequate change in vocabulary teaching methodology. Most teachers do not pay attention to VLSs. 2) Inefficient ways of learning vocabulary. Generally, learners mechanically memorize vocabulary without being aware of other effective learning strategies.

Given the situation, it is important that learners apply effective strategies in order to gain a wide range of vocabulary. Learners need to be familiar with the various types of strategies and make use of them. Therefore, the use of different VLSs should be investigated.

## The aim of the study

The principal objective of the present study is to examine and compare the use of VLSs by undergraduate ELT and ELL learners at the Duhok University in Northern Iraq to understand better the ways that they use to learn words in English. Based on the research objectives, the study examines the total level of strategy use, and the most and least used VLSs as well as whether there are significant differences among learners in applying VLSs according to gender and grade levels. Moreover, the study aims to investigate whether there is a difference between ELT and ELL learners in VLS use. Many teachers and students consider
vocabulary learning an important factor in learning a foreign language. Willing to improve Kurdish learners' vocabulary learning, the researcher aims to investigate VLSs used by Kurdish ELT/ELL learners at Duhok University.

More specifically this study will seek to answer the following questions:

1. What is the level of VLS use by the ELT and ELL undergraduate learners in Duhok University?
2. What are the most and least frequently used VLSs by the ELT and ELL learners?
3. Are there any significant differences between gender, grade levels, fields of study and the use of VLSs?

## The significance of the study

It is important to find effective strategies of learning vocabulary. This study examines VLSs used by Kurdish ELT and ELL learners studying at the Duhok University in Northern Iraq. Based on the problems mentioned above, this study might help teachers and learners to become aware of the importance of vocabulary and solve those problems to enhance the development of the language learning process. If the findings reveal that the learners are not familiar with a wide range of VLSs; this research might help language teachers become aware of different VLSs. Besides, a study of this type will aid students to choose the strategies that are appropriate to their learning styles. Yongqi (2005) noted that the main aim of VLSs is to shift the responsibility of learning from the teachers to the learners themselves, and to enhance learning results by empowering learners with strategies that are conductive to success.

## Limitations

This study is only limited to English majors studying at the Duhok University and the findings of the current study cannot be generalized to other non-English majors studying in different Faculties in this university.

## CHAPTER II

## LITERATURE REVIEW

## Introduction

The main purpose of this chapter is to review the previous research studies and related literature concerning vocabulary learning, mainly VLSs. It also refers to studies concerning LLSs. The literature review is organized into six parts. The first part describes the vocabulary learning, the importance of vocabulary, what is involved in knowing a word and which words need to be taught. The second part briefly focuses on LLS. The third part is related to VLSs. The following part, part four, the importance of VLSs will be discussed. The fifth part is concerned with the taxonomy of VLSs. Finally, the sixth part is the discussion of past research studies concerning VLSs, and the studies related to gender, proficiency level and VLSs.

## Vocabulary learning

Vocabulary plays an essential part in language learning and teaching as long as it is the sub-skill of a language. There are numerous key aspects in learning vocabulary, such as how important vocabulary is, what is involved in knowing a word, and which words need to be taught. This section debates and assesses vocabulary learning in the different aspects mentioned.

## The importance of vocabulary learning

In most of EFL contexts, students with knowledge of a wide range of words are successful EFL learner. Therefore, the most crucial factor in learning any language is knowing a great number of vocabulary. Vocabulary is considered as an important component in learning a language. Moreover, it is widely acknowledged that vocabulary is an essential part for the four language skills in the field of L2 or foreign language learning. For ESL/EFL
learners, vocabulary plays a crucial role in learning a language that supports the reading, writing, speaking and listening skills. As Alemi and Tayebi (2011, p.81) stated that, "vocabulary is a basic component of language proficiency which provides the basis for learners' performance in other skills, such as speaking, reading, listening and writing". Vocabulary has a clear connection with reading comprehension, such as Matsuoka and Hirsh (2010) stated, "there is a strong link between vocabulary knowledge and reading comprehension "(p. 56). This strong link is mutual that poor knowledge of words would not make someone a good reader; in contrast, good knowledge of reading comprehension helps someone to acquire more words. Words are the devices learners use to imagine, think or express ideas and thoughts, as Hunt and Beglar (2005, p.2) argued that, "the heart of language comprehension and use is the lexicon" (as cited in Sanchez \& Manchon, 2007, p. vii). Inadequate vocabulary items refrain learners from expressing their ideas and thoughts. On the other hand, sufficient or rich vocabulary provides language learners the correct words to apply at the right time.

Yang and Dai (2011, p. 61) explained that "vocabulary is by far the most sizeable and unmanageable component in the learning of any language, whether foreign or one's mother tongue". For language learners, vocabulary knowledge is of great significance when using a foreign language, while no one can communicate without lexical repertoire. However, in language classrooms, teachers have not always reflected the amount of attention that vocabulary plays in language learning. Vocabulary has long been neglected in the language learning classes (Hedge, 2000; Yu-Ling, 2005). Besides, Oxford and Crookall (1990) noted that vocabulary is not explicitly taught in most language classes. It is clear that both vocabulary and grammar are of great significance in good language classes, but to compare between them, vocabulary is more central than grammar and more attention should be paid to vocabulary instruction. Language words are just like blocks of a high building, in spite of
their quite small pieces, they are indispensable to the great structure. As Thornbury (2002) mentions our English will not improve very much if we waste most of our time on studying grammar, on the other hand much improvement is obtained if we learn more words and vocabulary; little can be said with grammar but almost anything with words.

Ellis (1994) indicated that lexical errors tend to obstruct comprehension more than grammatical errors. Besides, Wilkins (1972, p.111) affirms that "Without grammar, very little can be conveyed; without vocabulary, nothing can be conveyed" (as cited in Choudhury, 2010, p.307). Moreover, Harmer (1991) noted that choosing words carefully in certain situations is more important than choosing grammatical structures because language learners cannot use structures correctly if they do not have enough vocabulary knowledge. In comparison with aspects of language, such as grammar and pronunciation, vocabulary is the area of language that learners seem most conscious of (Ellis, 1996). Mastering vocabulary items is an important component of second/foreign language learning. Besides, it seems that vocabulary is more important than grammar, and it is vital for comprehension in language skills in any situation.

Concerning vocabulary in communication, it is clear that for language learners vocabulary knowledge is important for successful communication. They accordingly need to have a wide range of vocabulary items to comprehend written texts, magazines, articles, and so on. Moreover, language learners need to have sufficient words to understand listening texts, and conversation. The importance of vocabulary in the communication process is highly researched by many educators. McCarthy (1990) stated that "no matter how well the student learns grammar, no matter how successfully the sounds of L2 are mastered, without words to express a wider range of meanings, communication in L2 just cannot happen in any meaningful way" (p. viii). Likewise, Schmitt (2000) indicated that vocabulary is central to communicative competence and to the acquisition of a L2. Bastanfar and Hashemi (2010)
affirmed that words are building blocks of a successful communication. Similarly, AlKhasawneh (2012) stated that the knowledge of vocabulary is a vital part when using a second or foreign language because one is unable to communicate with others without a sufficient amount of words. It is apparent that if the learners do not have a wide range of vocabulary and do not know the meaning of the key words used in a communication situation, they cannot participate in a conversation. This means that even if the language learners were successful in grammar and successfully mastered the sounds of L2, communicating successfully cannot be conveyed in a meaningful way without words.

Briefly, it is clear how important the words are, and how they can probably affect L2 learners' acquiring of the four skills in the language. Language learners need knowledge of different levels of lexical items in order to attain sufficient understanding in listening, reading or create ideas effectively in writing and speaking.

## What is involved in knowing a word?

In a language words do not occur as isolated items, they are interwoven in a complicated system. Language learners need knowledge of different levels of lexical items in order to attain sufficient understanding in listening, reading or create ideas effectively in writing and speaking. Taylor (1993) stated that knowledge of a word denotes the acquisition of information of different types such as frequency occurrence of the word, style, register, dialect, collocation, morphology, semantics, polysemy, its translation, spelling, pronunciation (as cited in Campillo, 1995). Moreover, the learners' aim to be achieved in learning vocabulary, is principally their ability to recall the vocabulary and to identify it in its spoken and written form (Shejbalova, 2006).

Knowing a word is rather a complicated process than its appearing at first sight. Moreover, it should be noted that, in a language, it is not a condition to acquire the same quantity of knowledge for every word. Furthermore, we have to take into consideration that
even native speakers of a language are able to understand a wider range of words than they really use. Accordingly, it is important to make a distinction between productive vocabulary (the words learner needs to be able to use and understand) and receptive vocabulary (the words a learner needs to recognize only). Teachers need to teach productive vocabulary to their students more than receptive vocabulary.

In ELT literature, there is a clear distinction between receptive vocabulary and productive vocabulary. According to Nation (2001), the ability to understand the form of a word while listening or reading means receptive vocabulary whereas, the ability to use the appropriate spoken and written means productive vocabulary.

Nation (2001) explains the distinction between receptive vocabulary and productive vocabulary through giving the word "underdeveloped". The receptive knowledge of a word proposed by Nation (2001, pp. 26-28) is presented below. Knowing a word involves:

- being able to recognize the word when it is heard
- being familiar with its written form so that it is recognized when it is met in reading
- recognizing that it is made up of the parts under-, -develop- and -ed and being able to relate these parts to its meaning
- knowing that underdeveloped signals a particular meaning
- knowing what the word means in the particular context in which it has just occurred
- knowing the concept behind the word which will allow understanding in a variety of contexts
- knowing that there are related words like overdeveloped, backward and challenged
- being able to recognize that underdeveloped has been used correctly in the sentence in which it occurs
- being able to recognize that words such as territories and areas are typical collocations
- knowing that underdeveloped is not an uncommon word and is not a pejorative word

In contrast, the productive knowledge focusing on the same word "underdeveloped" would imply:

- being able to say it with correct pronunciation including stress
- being able to write it with correct spelling
- being able to construct it using the right word parts in their appropriate forms
- being able to produce the word to express the meaning "underdeveloped"
- being able to produce the word in different contexts to express the range of meanings of "underdeveloped"
- being able to produce synonyms and opposites for underdeveloped
- being able to use the word correctly in an original sentence
- being able to produce words that commonly occur with it
- being able to decide to use or not use the word to suit the degree of formality of the situation

Language learners are not required to recognize all the aspects of knowing a word. Knowing aspects of a word, it can be said, depends on language learners' level of education, whether learners are beginner, intermediate or advanced. For instance, there is no need for young language learners to deal with morphology, register or collocation since these aspects are very difficult for them but advanced language learners need to deal with them if they intend to have a better knowledge of vocabulary.

Regarding the aspects of knowing a word, researchers (e.g., Ur, 2002; Harmer, 1991; Nation, 2001) have suggested some elements. Ur (2002) suggests that knowing a word concerns knowing word form (pronunciation and spelling), grammar, collocation, aspects of meaning (denotation, connotation, appropriateness, and meaning relationships), and word
formation. In general, knowing a word means knowing its form and its meaning. Similarly, Harmer (1991) proposed knowing a word means the ability to know its meaning (relate the word to an appropriate object or context), to know its usage (knowledge of its collocations, metaphors and idioms, style and register, connotations and associations), to know its word formation, (ability to spell and pronounce the word correctly, to know prefixes suffixes and to know parts of speech), and to know the grammar (to use it in the appropriate grammatical form).

Nation (2001) made a list of different elements related to knowing a word. The elements of knowing a word suggested by Nation (2001) are divided into three groups. These consist of knowing the form of a word, the meaning of a word, and how a word is used. Knowing the form of a word contains word parts, sound and spelling. Knowing the meaning of a word includes connecting its form and meaning, knowing a notion for a word and what it refers to, and knowing what other words of associated meaning it can be related with. To know how a word is used, it means the grammar of the word, comprising parts of speech, sentence patterns, collocation of the word, and so on. The list of elements of knowing a word proposed by Nation (2001) is presented in table 1:

Table 1
The list of elements of knowing a word proposed by Nation (2001)

| Form | Spoken | Receptive | What does the word sound like? |
| :---: | :---: | :---: | :---: |
|  |  | Productive | How is the word pronounced? |
|  | Written | Productive | What does the word look like? |
|  |  | Productive | How is the word written and spelled? |
|  | Word parts | Receptive | What parts are recognizable in this word? |
|  |  | Productive | What word parts are needed to express this meaning? |
| Meaning | Form and meaning | Receptive | What meaning does this word form signal? |
|  |  | Productive | What word form can be used to express this meaning? |
|  | Concept \& Referents | Receptive | What is included in the concept? |
|  |  | Productive | What items can the concept refer to? |
|  | Associations | Receptive | What other words does this make us think of? |
|  |  | Productive | What other words can we use instead of this one? |
| Use | Grammatical functions | Receptive | In what patterns does this word occur? |
|  |  | Productive | In what patterns must we use this word? |
|  | Collocations | Receptive | What words or types of words occur with this one? |
|  |  | Productive | What words or types of words must we use with this one? |
|  | Constraints on use (register, frequency...) | Receptive | Where, when and how often would we expect to meet this word? |
|  |  | Productive | Where, when and how often can we use this word? |

To summarize, knowing a word suggested by the researchers mentioned above includes many important elements. All the aspects involve an amount of word form, word meaning, and word use. Knowing word form involves how the word sounds, spelling, and grammatical changes. Knowing word meaning involves dictionary meaning, and even means knowing how the word associates to other word commonly related with it (collocations) and
connotation, etc. Knowing word use concerns knowing its patterns when it occurs with other words. Some of the proposed elements are essential, simple, and suitable for young learners while some others are complex, for instance connotation and register require a high level of language proficiency. To conclude, there is no doubt that learning vocabulary means to learn the new word's form, meaning, and use.

## Which words need to be taught?

To deal with a particular context, it is important for language learners to be taught vocabulary that needs to be learned and teachers are required to pay more attention for planning their lessons. For many language teachers this will be determined by the choice of course book, the syllabus designer or other factors (Campillo, 1995). Even so, the language teachers have to take into consideration the various criteria used when planning their materials and syllabuses, they need to train students how to make decisions about which content word needs to be learned in a language course, and to identify the purposes of these particular decisions. Otherwise, McCarthy (1990) stated that it becomes difficult to assess syllabuses and materials, to understand why a particular word is to be taught as well as to explain to students why they must learn a particular vocabulary.

In every language there are too many words that EFL/ESL learners need to know in order to understand authentic texts. Campillo (1995) stated that it seems obvious that in any language, it is sensible to teach the most frequent words before the unusual ones are taught, as they are probably the most useful words for students of that language. There are different lists of high frequency words, such as the one provided by West (1953), who identifies 2,000 word families of which many are function words (as cited in Nation, 2001). Macro (2003) confirmed that as far as 2,000 most frequently used words include all the function words, this would lead us to decide that they must be taught in L2 classrooms and taught in an explicit way and early. Once learners acquire these words, it is time to begin increasing their
vocabulary command by introducing less frequently used words. Without the most frequently used words, learners cannot function in the foreign language. Besides, Schmitt (2000) affirmed that words around 2,000 would be a realistic goal. It seems that since in all kinds of text, high frequency words occur, so this leads us to determine high frequency words should be taught to language learners. Nation (2001) indicated that other categories of words are academic words, technical words and low frequency words. Macro (2003) noted that academic words become essential when learners go beyond the intermediate language learning stage and are starting to learn about academic content (e.g. psychology, economics, areas of study) through the medium of the L2 while technical words are very closely related to the topic and subject area of the context. There are thousands of low frequency words in the language (Nation, 2001). As far as low frequently used lexical items form a large number of words, it is definitely impossible to master them in a/the L2 class. Learner's independence let them to work on this gap and to some extent identify what word to concentrate on outside the class based on their interests or needs. As a result, instead of wasting time on less frequently used words inside the class, language teachers should provide and train on good VLSs for learners. Strategies regarding these words should be taught to learners.

In summary, teaching high-frequency vocabulary would guide learners to deal with different kinds of text. Teaching academic words is a basic goal for language learners who hope to do academic projects in English. Teaching technical words is important for particular disciplines and specific or technical reports. Strategies that are suitable for low frequency words have to be taught to learners.

## Language learning strategies

Researchers of ESL and EFL have given a great attention to learning strategies since the 1970s (Chang, 2011). Numerous studies have clarified the significant roles that LLSs play in the learning of a second or foreign language. Nation (2001) stated that VLSs represent a
part of LLSs. Therefore, the main purpose of this section is to show how LLSs are defined, in order to locate an obvious notion of what VLSs are concerned with.

Scholars who look at learning strategies have defined the term LLS from different streams from their personal points of view and might use different terms such as approaches, techniques, conscious actions, plans, thoughts, learning behavior and so forth. In Ellis's viewpoint (1994, p. 529), the concept of strategy "is a somewhat fuzzy one and not easy to tie down". Besides, Ellis suggests a general definition of strategy: "a strategy consisted of mental or behavioural activity related to some specific stage in the overall process of language acquisition or language use". Moreover, Ellis (1994, p.712) has more deeply defined the term learning strategy that is "A learning strategy is a device or procedure used by learners to develop their interlanguages. It is one type of learner strategy. Learning strategies account for how learners acquire and automatise L2 knowledge".

O'Malley and Chamot (2002) defined LLSs as "the special thoughts that an individual uses to improve them, comprehend, learn, or retain new information". Besides, Chamot (2004) defined learning strategies as "the thoughts and actions that individuals use to accomplish a learning goal" (p.14) as means for learners to achieve their learning goals. Moreover, Nunan (1999) defined learning strategies as "the mental and communicative procedures learners use in order to learn and use language" (p.171). Thus, LLSs could be any set of procedures used by language learners to involve this procedure. By comparison, Oxford (1990, p.8) proposed another useful definition of LLSs. She defined LLSs as "specific actions taken by the learners to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (as cited in Martinez \& Carril, 2009). Oxford in her definition focuses on learner's determination to achieve learning objectives in an independent way. Moreover, these kinds of strategies are able to facilitate the internalization, retrieval, storage, or use of the new language as well as make the process
more interesting. As far as the language learners consciously select learning strategies that suit their learning style and the L2 task at hand, these LLSs become an important and useful tool for conscious, active, and purposeful learning self-regulation. Strategies are devices for the self-directed involvement that is essential for developing the communicative ability.

Nation (2001, p. 217) stated that it is difficult to make a clear definition of "what strategy is" rather he proposes that teachers should look at the characteristic of strategy according to its four distinguishing aspects: " 1 . involve choice, that is, there are several strategies to choose from, 2 . be complex, that is, there are several steps to learn, 3 . require knowledge and benefit from training, 4. increase the efficiency of vocabulary learning and vocabulary use". There are a number of learning strategies that involve these characteristic. Language learners are not only required to identify these learning strategies, but in fact, it is essential to master them.

It is obvious from the definitions and objectives of the LLSs, that they are any type of devices, procedures, activities, ways that language learners make use of them to easily retrieval, memorize and use information for their learning process.

## Vocabulary learning strategies

LLSs have been given a great attention by teachers, educators and researchers, particularly in the field of second language acquisition. Since VLS is a part of LLS, an increased attention has been given to VLS too.

At this point, the researcher would like to shed light on what VLS means in the current study. VLS means any devices, tools or techniques used by the language learners to retain their vocabulary easily. Nation (1990) asserts that most of language learners' problems in both receptive and productive usage of vocabulary emerge from their insufficient learning of lexical knowledge. On the other hand, Ellis (1994) stated that it has been revealed that language learners learn words in many different ways; therefore, VLSs must contain strategies
for learning a word, in addition to using a word. Similarly, Hedge (2000) proposes that in addition to the teachers' explanation of the new words to learners, one of their main crucial role is to improve independence among learners by teaching them effective strategies for learning vocabulary. Accordingly, VLSs are teachable, that language learners can be taught various kinds of VLSs and how to practice them effectively. Therefore, language learners need to be familiar with a variety of VLSs and acknowledged with a selection of VLS and are taught how to employ them in order to build up their vocabulary or to resolve the problems they face in learning vocabulary effectively.

In the language classroom, VLSs taught probably build learners' self-confidence to learn vocabulary autonomously. In order to deal with a new word when it occurs and be successful and independent language learners, Harmer (1991) stated that language learners should be familiarized with extensive kinds of strategies, which is very beneficial since they become able to select the type of strategies that are appropriate to their individual learning styles. LLSs create a better self-direction for language learners. Oxford (1990) pointed that independent language learners are self-directed learners, who have the responsibility for their own learning strategies and progressively obtain confidence and proficiency (as cited in Karamai \& Barekat, 2012). Schmitt (1997) declared that learners are widely inclined to employ basic VLSs. This in turn makes VLS instruction an important part of foreign or SLL. Language teachers need a good knowledge of VLS that could be useful to plan their teaching more successfully and guide learners in adopting effective strategies. Therefore, training in the VLSs is necessary for language learners.

To summarize, VLSs can be defined as any procedures, techniques, methods, tools used by language learners to simplify the acquiring and learning words more easily and autonomously. In order to obtain and learn a large number of lexical items or to increase vocabulary size and use it properly, language learners need to deal with an extended range of
strategies and every single learner has their special method of the strategy that is appropriate to his/her learning style. Nation (2001) believes that the main benefit of LLSs, as well as VLSs, is that they allow language learners to take more command of their learning and more aware, that a large number of vocabulary might be acquired with the help of VLSs, particularly for their studies. This includes selecting the most suitable strategy from a variety of known choices and deciding how to follow the strategy and when to shift to another strategy.

## The importance of vocabulary learning strategies

It is widely acknowledged that mastery of vocabulary is an essential part of learning a second or foreign language. Moreover, it has been accepted that acquiring vocabulary items is a gradual procedure and needs an active effort by the learners. For EFL/ESL students, learning new words has always been difficult. It might be impossible for language learners to master all new words only in L2 classroom. Learners may know the role of vocabulary in learning a language, but in fact, they may not know that VLSs can assist them to learn vocabulary effectively. Language teachers also have to become aware of a wide range of VLSs and must train their learners to use them. O'Malley and Chamot (1990) pointed out that training L2 learners to use learning strategies focuses primarily on learning vocabulary. Moreover, they also suggested that VLSs are used most frequently and might be the most famous type of LLSs. Furthermore, in the field of ELT and other related fields, many educators emphasize the important role of teaching VLSs to help students to learn successfully and to make use of training the strategy for their independent learning in the future (Tassana-ngam, 2004). Training might be achieved effectively by weaving it into normal classroom activities (Oxford \& Crookall, 1990). Graves (1987) noted that, since language students learn most of their new vocabulary autonomously, it is important to support them to establish personal tactics or plans to enlarge their vocabulary items over time (as cited
in Hogben \& Lawson, 1996). Consequently, language teachers should teach students how to acquire a new word autonomously. Learners' autonomy has long been known as an essential factor in acquiring vocabulary items (Hamzah, Kafipour \& Abdullah, 2009). Besides, Oxford and Nyikos (1989) stated that strategies enhance "learner autonomy, independence, and selfdirection" (p. 291). Schmitt (2000) asserts that VLSs are assumed as crucial strategies and have received a frequent attention in learning a L2. To learn vocabulary, it has been considered that all learning strategies including VLSs help students to learn vocabulary and to take more control of their individual learning. VLSs help learners to take more responsibility for their own learning. Nation (1990, p.174) stated, "Strategies which learners can use independently of a teacher are the most important of all ways of learning vocabulary. For this reason it is worthwhile ensuring that learners are able to apply the strategies and that they get plenty of help and encouragement in doing so. By mastering a few strategies learners can cope with thousands of words". Moreover, Nation (2001) asserted that a wide range of new vocabulary could be learned by the students of any language with the help of VLSs. VLSs help to activate explicit vocabulary learning that contains several aspects, such as selective attending, making conscious efforts to notice new word, and storing into long-term memory (Ellis, 1994). Students who use strategies of selective attending may know which words are useful and essential for them to learn so that they can comprehend the text. Moreover, VLSs do not only assist students to improve their words, but they can also help with problems of remembering and retrieving vocabulary (Mombeini, Gorjian \& Pazhakh, 2013). If language learners have a good knowledge of VLSs and the ability to use them in suitable situations, they will probably be able to deal with the new or unknown words easily. VLSs simplify learners' process of learning new vocabulary items. Moreover, it has been recognized that the effectiveness of the learning strategies may depend on different factors, such as field of study, proficiency level, course type, gender, and so on.

In conclusion, it seems clear that VLSs play an important role in learning vocabulary. A wide range of vocabulary items can be acquired by the use of VLSs if the learners are familiar with them. More attention to VLSs by teachers and learners will outcome in better overall language development. Influential strategies for vocabulary progression must be taught, so that learners might simply be able to make their way to proficiency objectives.

## Classification of vocabulary learning strategies

Scholars have different ways of classifying VLSs. These classifications provide a crucial influence to the vocabulary strategies' knowledge. In what follows, a discussion of the main classifications of VLSs identified by different scholars (e.g., Hedge, 2000; Lawson \& Hogben, 1996; Nation, 2001; Schmitt, 1997) is presented.

Hedge (2000) clarified that to learn a new word, learners are required to use a large number of strategies so as to comprehend, understand, categorize, and retain them in mental lexicon. Two major strategies are proposed by Hedge (2000) for learning vocabulary items. Cognitive Strategies which includes making associations, learning words in groups, discovering range of meaning, using key words. A keyword is a word selected from the mother tongue that sounds the same as the new word in the L2 and where it is likely to establish a kind of relationship between the two words. Metacognitive Strategies refer to consciously gathering words from authentic contexts, making word cards, categorizing words into lists, reactivating vocabulary in internal dialogue, making a network word of vocabulary associated with a particular item.

Hedge (2000) classified VLSs based on two major categories, known as Cognitive and Metacognitive strategies. Cognitive strategies generally refer to those strategies that are used for applying vocabulary and to understand how vocabulary works. Metacognitive strategies largely involve getting ready or preparation for learning, choosing, planning, and applying
strategies, monitoring strategy process, orchestrating different types of strategies, and assessing the effectiveness of the learning strategy use.

Lawson and Hogben's (1996) taxonomy of VLSs was based on the data obtained from 15 university female students studying Italian as a foreign language in Australia. Through thinking aloud procedure, they were able to test which VLSs students actually use. The VLS taxonomy was classified under four categories, which were: repetition, word feature analysis, simple elaboration and complex elaboration. Repetition strategies consist of reading of related words, words, simple rehearsal (the students repeat a new word), writing of word and meaning (the learners write notes of a new word and its meaning), cumulative rehearsal and testing. Word feature analysis includes spelling, word classification (learners comment on a word's grammar, e.g. parts of speech) and suffix. Simple elaboration contains sentence translation (translating a sentence with a new word), simple use of context, appearance similarity (based on the word's spelling, the learners link the known word to an English or another language's word), sound link (based on the word's pronunciation, the learners link the known word to an English or another language's word) and complex elaboration includes complex use of context (to guess the meaning of the new word from context), paraphrase and mnemonic (creating a picture of a new word's meaning).

VLSs classified by Nation (2001) were divided under three kinds of strategies as follows:

Planning: these strategies emphasize where and when to focus the attention on the item that consists of choosing words, selecting aspects of word knowledge, choosing strategies and planning repetition.

Sources: these strategies focus on finding information on analyzing the word, using word parts, using dictionary, consulting a reference source, using context, using parallels with first and second languages.

Processes: these strategies focus on establishing vocabulary knowledge and methods for remembering vocabulary that involves noticing, retrieving and generating.

Taxonomy of VLSs proposed by Nation (2001) is based on three major categories involving planning, source and process. The planning category combines four main strategies. The sources category includes seven sub-strategies, and the processes category consists of three strategies. The characteristics of the strategies suggested by Nation (2001) are based on a large number of different complex strategies and these strategies might include both cognitive and metacognitive strategies.

Planning repetition is built on an informal plan for revising words formerly taught. The source strategies (finding information about words), includes four subclasses of strategies (analyzing word parts, using context, consulting a reference source, and using parallels with other languages). Obviously, the first two strategies help learners to guess the meaning of unfamiliar words or might help in memorising vocabulary once taught or met, consulting a reference source known by teachers, classmates, native speakers and presented in various dictionaries. The last strategy makes use of parallels between L1 and L2. The process class strategies, which are establishing vocabulary knowledge, consist of three subclasses of strategies (noticing, retrieving, and generating). The 'noticing strategy' refers to recording strategies concerning writing words in a vocabulary notebook, on word cards and lists. This is probably categorized as one of the cognitive strategies under the classification of consolidation strategies groups, in Schmitt's (1997) VLS taxonomy, as learners who use these strategies presumably make an effort to remember the words once taught or encountered. The second strategy, which is retrieving strategy, refers to recall of previously met items. The last strategy, generating strategies, includes linking new recognition of words with known knowledge.

Schmitt (1997) investigated many learning strategies altogether in his own classification of VLSs. He distinguished between the strategies that learners use to determine the meaning of unknown words when they first encounter them from the ones learners use to consolidate meanings when they encounter the words again. Schmitt classified the strategies in his taxonomy as discovery strategies (social and determination strategies) and consolidation strategies (social, memory, cognitive, and metacognitive strategies for learning vocabulary). Social strategies are included in two groups of strategies because they can be used for both purposes. Lessard-Clouston (2008) stated that this categorization has been developed based on language-learning strategies' classification organised by Oxford's (1990).

In the discovery strategies category, determination strategies contain: analyse part of speech, analyse affixes and roots, check for L1 cognate, analyse any available pictures or gestures, guess meaning from textual context and use a dictionary (bilingual or monolingual). Social strategies contain: ask teacher for a synonym, paraphrase, or L1 translation of new word, ask classmates for meaning. In the consolidation strategies category, cognitive strategies contain: verbal repetition, written repetition, word lists, put English labels on physical objects, keep a vocabulary notebook. Memory strategies contain: connect word to a previous personal experience, associate the word with its coordinates, connect the word with its synonyms and antonyms, use semantic maps, image word form, image word's meaning, use keyword method, group words together to study them, study the spelling of a word, say new word aloud when studying and use physical action when learning a word. Metacognitive strategies contain: use English language media (songs, movies, newscasts, etc.), test oneself with word tests, skip or pass new word and continue to study word over time. Social strategies contain: study and practice meaning in a group and interact with native speaker.

In discovery strategies, determination strategies are used for the discovery of a new word's meaning without attaining somebody's knowledge. Schmitt noted that learners try to
determine the meaning of a new word by guessing it with the help of context, dictionary or through using social strategies to ask someone (e.g. teachers, their classmates) for help with unfamiliar words. Group learning work through which learners study and practice the meaning of new words is an example of social strategies for consolidating a word. Memory strategies involve those approaches to relate the word with some existing learned knowledge. Schmitt defined cognitive strategies as "manipulation or transformation of the target language by the learner". Cognitive strategies refer to the repetition and employing some mechanical means for learning vocabulary. Lastly, metacognitive strategies are defined as a conscious overview of the learning process and they assist students to control, plan, monitor and evaluate the best ways to study (Schmitt, 1997).

Concerning this taxonomy, Catalan (2003) debates that the classification proposed by Schmitt (1997) has numerous advantages such as: it can be standardized as a test, to gather the answers from learners in a simple way, it is based on both the theory of learning strategies and memory theories, technologically it is easy, it can be applied with students from different age groups, educational backgrounds and target languages, it is rich from different learning strategies, and it permits contrast with other studies, among them Schmitt's own study.

Several classifications of VLSs have been proposed, but Schmitt's VLS system suits the purpose of the current study more, as in general it provides more concrete explanations of VLSs that were more effective in the determination of every single strategy taxonomy. Nation's taxonomy does not include these; moreover, the taxonomy seems not quite clearly listed. Schmitt's VLS classification obviously explains each single VLS used as consolidation strategies. Therefore, the research instrument used in the current study will be the one developed by Tek (2006) who adapted it from Kudo (1999) who relied mainly on Schmitt's (1997) taxonomy. The reason behind choosing Tek's (2006) questionnaire is discussed in details in chapter 3.

## Research studies on vocabulary learning strategies

We clearly see that vocabulary is a very important part in the improvement of all language skills. Scholars such as Hedge (2000) asserted that for many years vocabulary has received little attention in L2 classroom for several reasons. Language learners do not place considerable importance on vocabulary. Besides, teachers have been taught/led towards paying attention about new discoveries in English grammar, but they have less been taught/led towards paying attention to help students learn new words (Hedge, 2000). On the other hand, in recent years, researchers (e.g., Nation, 2001; Schmitt, 1997) proposed that learning vocabulary has become a crucial argument and an area of current attention in teaching and learning a language. However, as far as the researcher knows until present, few studies have been conducted specially to examine VLSs reported by learners at different levels of education in Northern Iraq. Therefore, it is important to discuss and reveal what the past studies examined on VLSs used by learners. What follows are some past research studies concerning VLSs.

Schmitt (1997) categorized the strategies in his taxonomy as determination strategies and social, memory, cognitive, and metacognitive strategies. Schmitt examined 600 Japanese EFL students to explore the frequency of VLS use, learner's perceptions of the helpfulness of strategies, and to show the most helpful strategies. The findings revealed that six strategies were common among the most frequently used VLSs and most helpful ones. These strategies were bilingual dictionary, written repetition, verbal repetition, saying a new word aloud, studying a word's spelling, and taking notes in class. Schmitt also pointed out that some of VLS use seemed to change over time according to the middle school, high school, university and adult EFL students.

Gu and Johnson (1996) examined the VLSs of 850 Chinese university students. VLS questionnaire, proficiency measure and vocabulary size tests were applied to reach the
purpose of the study. The questionnaires consisted of a section about beliefs on VLSs and 91 VLSs, which were classified under metacognitive regulation and cognitive strategies. The other section consists of six sub-categories, which were divided into further smaller unites. The results of descriptive statistics revealed that the participants did not depend on rote learning of words. They found that metacognitive strategies arised as positive predicators of general proficiency. Moreover, they revealed that dictionary use, taking notes and contextual guessing positively correlated with general proficiency and vocabulary size.

Lawson and Hogben (1996) investigated 15 female university students studying Italian as a foreign language in Australia. The data were obtained through think aloud procedure, which enabled to test which VLSs students actually use. They found that repetition strategies and neglect of word feature analysis were popular among the students. Moreover, they revealed that knowledge of suffixes was disfavored among the students. The results of the study also revealed that the students with a large number of strategies recalled more words than the students who use a limited number of strategies.

Kafipour and Naveh (2011) investigated 164 EFL undergraduate students in Iran. The results of their study revealed that metacognitive strategies were the most frequently used strategies among learners. They stated that this indicates that most of the learners were taking control of their own learning. Then, they suggested that this was because of the existence of an extensive number of commercially produced educational materials. Internet and other electronic resources are easily accessed. Likewise, they clarified that reviewing and informal testing were activities that can easily be performed without the presence of a teacher who would use metacognitive strategies most frequently and social strategies least frequently. Moreover, 504 Japanese high school students participated in a study conducted by Kudo (1999). The schools that were chosen for the study were considered high-level schools in their respective prefectures. To find out the VLSs of the samples, a questionnaire consisting of 56
items was administered. The results of the study indicated that the most frequently used strategies were cognitive strategies such as verbal repetition, while the keyword and semantic mapping were found to be the least used strategies among the participants. Kudo (1999) concluded that the cognitive strategies were cognitively so demanding that most senior high school students could not use them yet, they had not achieved sufficient cognitive maturity to use them.

## Gender and vocabulary learning strategies

Among the social factors, it seems that researchers paid the widest attention to gender differences in applying learning strategies, as Khamkhien (2010) stated that a number of research studies have provided evidence that among various factor such as motivation, age proficiency level, etc., sex difference has an influence on language learning and acquisition. Hardly any study has investigated gender as representing a key variable influencing the choice of LLS use. The findings are still inconclusive. Catalan (2003) noted that some differences have been identified between male and female learners in the use of LLSs. Moreover, it has been evidenced by many research studies that learning strategies might be correlated with different individual factors such as motivation, types of memory, learning style, and even culture. More investigations are needed in order to precisely define the gender differences in VLS use.

Catalan (2003) investigated 581 (279 males and 302 females) Spanish-speaking learners learning Basque and English as a L2. A questionnaire as a main instrument was used to investigate gender differences in using VLSs. She found that male and female learners are more alike than different in using VLSs. To compare between male and female learners with LLSs, almost all the investigations have reported that female learners often use more strategies than males. However, generally in learning L2, Ellis (1994) stated that many research studies showed that female students have more positive attitudes to learning an L2
than males. Furthermore, research showed that females frequently use social strategies that enhance communicative competence more frequently than male learners. The main findings of researches on gender differences also revealed that males use translation strategies more than female learners. (Catalan, 2003)

Additionally, Catalan (2003) indicated that there were significant difference between male and female learners in her study. She stated that with regard to the number of VLSs, female students were the ones who used more different vocabulary strategies than male students. Moreover, females employ VLSs more to enhance their language learning in contrast with male learners (Catalan, 2003). In addition, female learners use more formal rule strategies, study strategies and elicitation strategies while male students use more visual VLSs. The following table shows the ten most used VLSs by male and female learners' in Catalan's study (2003)

Table 2
The ten most frequently used strategies by male and female learners in Catalan's study (2003)

|  | Males | Females |
| :--- | :--- | :--- |
| 1. Bilingual dictionary | 1. Bilingual dictionary |  |
| 2. Taking notes in class | 2. Taking notes in class |  |
| 3. Guess from Context | 3. Guess from Context |  |
| 4. Ask teacher for L1 translation | 4. Ask classmates for meaning |  |
| 5. Ask classmates for meaning | 5. Ask teacher for L1 translation |  |
| 6. Analyse part of speech | 6. Say word aloud |  |
| 7. Connect the word to cognates | 7. Connect the word to cognates |  |
| 8. Use English language media | 8. Analyse part of speech |  |
| 9. Say word aloud | 9. Use English language media |  |
| 10. Form image of word's meaning | 10. Use vocabulary section textbook |  |

Another research study was recently conducted by Pourshahian, Azarfan and Kalajahi (2012) to examine the frequency of VLSs by male and female learners in Northern Cyprus. In the study, a questionnaire was distributed to 125 undergraduate learners ( 91 female and 34 male) at the Department of Education Faculty of Eastern Mediterranean University. The results of the study showed that half of the psycholinguistic strategies were used frequently
and another half were used infrequently. According to the psycholinguistic strategies, they found that "Taking notes in class" was the most frequently used strategy whereas "putting English labels on physical objects" was the least infrequently used strategies. According to metacognitive strategies, about two thirds of the strategies were employed infrequently. "Using internet" was the most frequently used metacognitive strategy whereas "spaced word practice" was the least infrequently used metacognitive strategy. The findings revealed that the participants frequently used twenty out of 44 VLSs. They found that the mean for the psycholinguistic and metacognitive strategies use as well as the overall frequency mean was higher for the female participants, which indicates that female learners use VLSs more often than males. According to the results of Pourshahian et al. (2012) study, the main reason that obstructs students to use psycholinguistic strategies might be the education system. They noted that the education system might have trained learners to be moderate users of psycholinguistic strategies. Moreover, they suggested that the other cause might be that the curriculum design cannot promote psycholinguistic strategies. Several other research studies have also supported the concept that there is no significant difference in using VLSs and gender differences. Khatib, Hassanzadeh and Rezaei (2011) investigated the preferred VLSs among 146 undergraduate upper-intermediate EFL learners in Iran. The vocabulary test and written questionnaire were used to reach the aim of the study. They found that there was no significant difference between male and female learners and the use of VLSs. Moreover, Shmais (2003) examined 99 Arab speaking English learners. Shmais found that there were no significant differences in using learning strategies and gender. Besides, Zhang (2009) used a questionnaire and a vocabulary test to investigate the use of VLSs among 481 undergraduate learners studying at different universities in western China. The study included 223 males and 258 females. The results of his study showed that there was no significant difference between genders and VLS use. He summarized that this finding was inconsistent with Oxford, Nyikos
and Ehram's (1988) conclusion that the female learners are better strategy users than males, especially of social strategies. He further explained that social strategies were not included in his study.

To summarize, male and female students are challenged to employ different VLSs for learning vocabulary. A gender difference in the use of VLS is an interesting topic, but it still has not been studied extensively. Regardless of the fact that males and females are more alike in VLS use than expected, some differences can be perceived and the need for more studies is evident.

## Class level and vocabulary learning strategies

Learning a foreign language successfully means employing sufficient learning strategies. Therefore, good knowledge of strategies increases proficiency. Moreover, different VLSs seem to be more suitable at different levels of education and proficiency level. Beginner language learners seem to depend mostly on the use of bilingual dictionary and word pairs whereas learners at advanced levels seem to depend on both L1 and L2 means (Loucky, 2006). Proficiency level arises as an obvious factor affecting the use of VLSs. However, the research studies supported that consistently there is a positive connection between strategy use and language proficiency (Radwan, 2011). Researchers have found that proficient EFL/ESL students use a wider range of strategies to achieve their learning goals. This indicates that less proficient learners use a small number of strategies (Magno, 2010). Liu's (2004) research study revealed that if learners' proficiency level becomes high, the strategy use occurs more often. On the other hand, with the less proficient learners, the lesser strategy use occurs. Moreover, Anderson (2005) pointed out that proficiency could clarify from .30 to .78 of the difference in using strategy. There is a strong connection between the use of strategy and proficiency.

A small number of research studies examined the correlation between the use of VLSs and class level. Mongkol's (2008) results indicated that the Thai EFL undergraduate learners in second year were inclined to use VLSs to analyse affixes and roots to know the meaning of words more frequently comparing to the first year learners. Additionally, he found that the first year learners apply VLSs more frequently as they learn new words by identifying parts of speech or paraphrasing the word (as cited in Boonkongsaen, 2012). Likewise, Tsai and Chang (2009) found that the learners of higher level used more vocabulary strategies than intermediate level learners, and intermediate level learners used more vocabulary strategies than lower level students. In other words, as much as the learners' year of study increases the more use of strategies sets. Moreover, Doczi (2011) examined 84 Hungarian ESL learners. Using 18 high school students in their last year as participants and 66 university students, the study aimed to investigate the strategies that the students use in the final year of high school and 3 different years of university. A VLS questionnaire was used for data collection. The findings revealed that as Hungarian ESL learners study more, or in other words as the level of proficiency improves, the number of VLSs to practice on regular basis or active strategies reduced, but strategies such as skipping a new word were used more frequently when learners became more improved. Karami and Barekat (2012) aimed to investigate VLSs among three proficiency levels: elementary, intermediate, and advanced. The results of the study revealed that almost all of the students used dictionary as the main source to learn the meaning of a word. Besides, they revealed that the three memory strategies (use new words in sentences, use physical action when learning a new world, and study the sound of a word) were somehow different among proficiency levels. They believed that the more advanced students got the more memory strategies they used. They also found that the metacognitive strategy (study new words many times) was almost the same among proficiency levels, but the use English language media was not a favored one for elementary learners.

To conclude, it seems that to identify the reason behind choosing certain strategies by language learners is not quite easy. Therefore, it is important to examine the factors influencing learner's use of strategies in order to certify more success when language teachers teach learning strategy training to learners. Thus, one of the present research study's aim is to investigate whether proficiency level (proficiency in this study is reflected according to learners' class level) has an effect on VLS use.

## CHAPTER III

## METHODOLOGY

## Introduction

This chapter sheds light on the methodology used to carry out the research. The first part covers the aim of the study and the research design. Then, the participants of the study and the VLS questionnaire will be described. This is followed by the reliability and the validity of the questionnaire and the data collection procedures. Finally, the methods that were used to analyse the data will be presented.

The present study investigates the VLS use by the ELT and ELL students at Duhok University in Northern Iraq. This study aims to investigate the levels of VLS use by the learners at first and then to explore the most and least used learning strategies by the students. The study also intends to test whether there was a correlation between gender and grade levels of students and their use of VLSs. Finally, the study aims to examine if there is a significant difference between ELT and ELL learners in strategy use. Few studies that focus on the aspects of VLSs have been conducted in Northern Iraq. Thus, this study will present an insight in to the field of VLSs used by students at Duhok University. In order to reach the study objectives, the following research questions have been addressed:

1. What is the level of VLS use by the ELT and ELL undergraduate learners in the Duhok University?
2. What are the most and least frequently used VLSs by the ELT and ELL learners?
3. Are there any significant differences between gender, grade levels, fields of study and the use of VLSs?

## Research design

The purpose of the study is to examine and compare the use of VLSs by the ELT and ELL students, to find out whether there are any significant differences in strategy use between genders and whether there is a link between strategy use and grade levels of the students. Based on the purpose of this study, the research is designed as a descriptive survey study with quantitative approach. Creswell (2012, p.376) stated that we "use survey research to determine individual opinions". Surveys are designed to process large quantities of data statistically when needed to be researched. Therefore, this study mainly depends on quantitative data collection methods. The obtained data were analyzed using Statistical Package of Social Sciences (SPSS version 20).

## Participants

The study included 466 undergraduate students at Duhok University, Northern Iraq. The data were collected from the Faculty of Educational Science and the Faculty of Humanities. The questionnaire was distributed to the whole ELT and ELL population in these two faculties. Table 3 shows the distribution of students according to gender and field of study

Table 3
Distribution of students according to their gender and field of study

| Gender | Frequency | Percentage (\%) |
| :--- | :--- | :--- |
| Male | 199 | 42.7 |
| Female | 276 | 57.3 |
| Total | 466 | 100 |
| Field of study |  |  |
| ELT | 223 | 47.9 |
| ELL | 243 | 52.1 |
| Total | 466 | 100 |

As table 3 shows, the study included 267 female students (57.3\%) and 199 (42.7\%) male students. It was originally planned to select an equal or at least a close number of male
and female learners. This seemed to be impossible because of the limited number of female learners at Duhok University. The table 3 shows that 223 ( $47.9 \%$ ) of the participants were ELT students from the Faculty of Educational Science and 243 (52.1\%) were ELL students from the Faculty of Humanities.

All the students in the study were on a BA degree programme in the English Department. The students were four-year degree learners. Table 4 shows the distribution of the students according to their grade levels in the English language departments.

Table 4
The distribution of students according to their grade levels

| Grade levels | Frequency | Percentage (\%) |
| :--- | :--- | :--- |
| $1^{\text {st }}$ grade | 129 | 27.7 |
| $2^{\text {nd }}$ grade | 139 | 29.8 |
| $3^{\text {rd }}$ grade | 106 | 22.7 |
| $4^{\text {th }}$ grade | 92 | 19.7 |
| $\quad$ Total | $\mathbf{4 6 6}$ | $\mathbf{1 0 0}$ |

As can be seen from the table 4, the study included 129 (27.7\%) first year students, 139 (29.8\%) second year students, 106 (22.7\%) third year students and 92 (19.7\%) fourth year students. As already mentioned in Chapter 1, the main aim of this study is to examine and compare the use of VLSs by ELT and ELL learners at Duhok University to determine and better understand the strategies students prefer to use when it comes to learn a new word. Therefore, the data were collected from ELT and ELL learners.

## Instrument

In this study, a written VLS questionnaire was used as a main instrument in order to identify patterns and preferences of the participants' use of VLSs. Questionnaires can be defined as any set of statements or questions on a topic planned to be filled in by the participants. Nunan (1992, p.231) indicated that "A questionnaire is an instrument for the collection of data, usually in written form, consisting of open and/or closed questions and
other probes requiring a response from subjects". The respondents of the questionnaire can be required not to just indicate if they use a certain strategy as well as to rate the frequency of that strategy. Moreover, the questionnaires are simple to complete under conditions of confidentially. Furthermore, "written questionnaires enable the researcher to collect data in field settings and the data obtained are more amendable to quantification than those collected through freeform field notes, participant observing journals or the transcripts of oral language" (Nunan, 1992, p.149). Bialystok (as cited in Siriwan, 2007) stated that the advantage of the questionnaire is that it can easily be administered to a large number of subjects and data compilation are quite simple, and more notably, accurate quantitative measures can be obtained.

The questionnaire used in this study (see Appendix C), is the one developed by Tek (2006) who adapted it from Kudo (1999) who relied mainly on the study conducted by Schmitt (1997). Kudo relied mainly on Schmitt's taxonomy because he believed that they are close to the samples in his study. Kudo (1999) stated, "Schmitt's taxonomy was chosen because it dealt specifically with Japanese people of different ages" (p.9). Tek (2006) developed the questionnaire and conducted her study in one of the public schools in Turkey. Tek stated that many of the items were chosen from Kudo's (1999) study. She indicated that some of the items were excluded from the questionnaire since they were not relevant to the background of the Turkish students. For instance, she removed the item "Ask an Assistant English Teacher for a paraphrase or synonyms" based on that they do not have Assisted English Teachers in schools. Consequently, Tek reduced the number of questionnaire items from 56 to 36. It can be said that, to some extent, the Kurdish and Turkish students have the same background because, for example, there are no Assistant English Teachers in schools and even in universities in Northern Iraq. Therefore, the main reason behind choosing this questionnaire is that the items are relevant to Kurdish students.

The questionnaire consists of two parts. In the first part, questions are designed to gain demographic information about participants. Questions in this section include the respondents' gender and grade level. The second part includes the questions related to the VLSs. The questionnaire contains 36 items. The items are divided into four categories, social, memory, cognitive and metacognitive. Each category consists of nine items. To find the frequency of use for each strategy, a five point Likert scale was used with the options, "never", "sometimes", "often", "usually", and "always".

## Reliability and validity

A pilot study was performed with the students of the Faculty of Science in Duhok University, in April 2013. After the questionnaire had been collected from 35 participants, the SPSS 20 calculated them. Cronbach Alpha coefficient was calculated as 0.941 . Therefore, the present written questionnaire was considered to be reliable and was used in the main study.

Face validity of VLS questionnaire was carried out with two university English experts so that they could check the VLS questionnaire. They have proposed some suggestions. These suggestions resulted in a few changes in VLS questionnaire, therefore, the questionnaire was found to be a valid instrument.

## Data collection procedure

The written VLS questionnaire as the main tool for the data collection was used in this research study. The data collection took place in January 2014. The questionnaire was administered to 466 ELT and ELL undergraduate learners studying English in the Duhok University. A VLSs questionnaire in English was applied as a data collection instrument. The original version of VLS questionnaire was used because all the participants majored in English and they were expected to have enough language proficiency to understand the statements.

Before collecting data, the researcher asked the head of both departments of English language for permission to distribute the written questionnaires. After the permissions had been granted (see Appendix A and B), the researcher was helped by the university teachers to distribute the written questionnaires to each group of students during the class time. Inside the classroom, the researcher explained the purpose of the study and then the students were asked to indicate the frequency of using the VLSs. Moreover, before filling in the questionnaire, they were informed that their answers would not affect their marks in their educational system. They were given at least 15 minutes to indicate their answers.

In order to test the use of VLSs among undergraduate learners studying English at Duhok University, the questionnaire was distributed to the students of both genders and different grade levels. The questionnaires provided the researcher with sufficient information for this study.

## Data analysis

Concerning the data collection, the completed VLS questionnaires of all students were analyzed with the help of the SPSS programme in order to test the use of VLSs. The analysis of the questionnaire was done in order to answer the research questions. Descriptive statistics was used to find out the percentages, frequencies, means and standard deviations of the variables. ANOVA was used to identify the relationships among the means of more than two variables. In this study, ANOVA was used to identify whether there were differences among grade levels regarding their use VLSs. Independent T-test is a method that used to determine the relationship between two variables. In the present investigation, the T-test was used to identify whether there is a relationship between the students' gender and the use of VLSs. Moreover, T-test was used to determine whether there is a significant difference between the ELT and ELL students in VLS use.

## CHAPTER IV

## FINDINGS AND DISCUSSIONS

## Introduction

The purpose of this chapter is to explain and discuss the findings of the research study. The results are discussed based on the data obtained and they are described quantitatively. The data is described in the form of tables and the key features are discussed to in order to find answers to the research questions. First, the frequency of use and the level of overall strategies reported by 466 undergraduate Duhok university students are described. Then, the frequency of use of VLS categories, which are cognitive, memory, metacognitive and social strategies are explained. This is followed by the use of individual strategy of VLS categories. After that, the most and least frequently used strategies are presented. Finally, a correlation between preferences in the choice of VLSs and such factors as the participants' gender, grade level and field of study are discussed.

## Overall vocabulary strategy use and level

According to Oxford's (1990) scores system, the frequency of students' strategy use is categorized as high, medium and low. This system is organized by the respondent's frequency of use of the five-point Likert scale in the questionnaire. According to Oxford's (1990) system the scores between 1.0-2.4, on the 5 likert scale, are regarded as a "low strategy use", which are those that are not generally used. Mean scores ranging between 2.5-3.4 are labeled as a "medium strategy use". The scores between 3.5-5.0 are regarded as those strategies that are generally used, which means "high strategy use". Table 5 illustrates Oxford's (1990) scoring system for the level of VLS use.

Table 5
Oxford's (1990) scoring system for the level of VLS use

| Strategy use level | score | Strategy use |
| :--- | :--- | :--- |
| Low | $1-2.4$ | Never |
|  |  | Occasionally |
| Medium | $2.5-3.4$ | Often |
| High | $3.5-5$ | Usually |
|  |  | Always |

To determine the total mean score across the VLS questionnaire collected from the 466 undergraduate learners at the Duhok University, the mean score was calculated and it is illustrated in table 6.

Table 6
Descriptive statistics for overall VLS use

| Number of students | Mean score | SD |
| :---: | :---: | :---: |
| 466 | 2.98 | 1.10 |

Table 6 shows that 2.98 is the overall mean score of VLSs used by the students. According to Oxford's (1990) scoring system, the students of this study were found to be medium strategy users.

According to the data collected through the questionnaire, to learn English vocabulary, the students were found to be medium strategy users. This mean score is consistent with some previous research studies (e.g., Liao, 2004; Pourshahian et al., 2012; Hamzah et al., 2009). On the other hand, Lip's (2009) research study with EFL postsecondary learners, Kudo's (1999) research study with Japanese high school learners, and Ruutmets's (2005) research with Estonian school students found that their subjects were low strategy users of VLSs.

The results of descriptive statistics of this study showed that students were medium strategy users. Therefore, it can be concluded that in general, Duhok University learners had moderate success in employing VLSs due to their limited knowledge of the existing strategies. Since the results reveal that VLSs are not given importance by the language teachers in their lessons, these findings demonstrate that it is crucial for language teachers to
teach vocabulary strategies more thoroughly. In short, it can be said that in the English language departments of Duhok University, VLSs are not effectively taught. The plausible reason could be that the language teachers are not equipped with different VLSs. This means that first, language teachers need to be familiar with different types of VLSs and then train their learners to be aware of various kinds of learning strategies to improve them to learn the meaning of unknown lexis better.

## The frequency of usage of VLS categories

In this study, the VLSs have been grouped into four main categories as previously mentioned in Chapter 3. They are: 1) cognitive, 2) memory, 3) metacognitive, and 4) social strategies. After analyzing the questionnaire data, the researcher tried to report the results based on the research questions of this study. To locate the most and least frequently used VLS categories, descriptive statistics, including means and standard deviations of the four categories were calculated. Table 7 shows the frequency of strategy use of the four categories.

Table 7

The mean score and standard deviation of the four categories of VLSs

| Strategy main category | Number | Mean | S.D. | Strategy level | Rank |
| :--- | :--- | :--- | :--- | :---: | :---: |
| Cognitive | 466 | 3.29 | 1.08 | Medium | 1 |
| Memory | 466 | 3.06 | 1.06 | Medium | 2 |
| Metacognitive | 466 | 2.89 | 1.14 | Medium | 3 |
| Social | 466 | 2.69 | 1.12 | Medium | 4 |

The results in table 7 show that the Duhok University undergraduate learners were medium strategy users. All four categories of VLSs were moderately used. Therefore, Duhok University students reported only average-level use of VLSs of any category ( $\mathrm{M}=2.98$ ).

As table 7 shows, among the four VLSs categories, cognitive strategies ( $\mathrm{M}=3.29$; $\mathrm{SD}=$ 1.08) were reported as the most frequently used strategies by the respondents, followed by
memory strategies $(M=3.06 ; S D=1.06)$ and metacognitive strategies $(M=2.89 ; S D=1.13)$. Social strategies $(\mathrm{M}=2.69 ; \mathrm{SD}=1.12)$ were found to be the least frequently used strategies compared to other strategies.

Cognitive strategies were found to be the most frequently used strategies. These strategies were used at the medium level of strategy use with the mean score of 3.29 , but compared to the strategies of the other three categories, they were more frequently used. This result goes in line with many previous research findings (e.g., Pourshahian et al., 2012; Bengar \& Kasmani, 2013; Karami \& Barekat, 2012; Kudo, 1999; Peng, 2009; Tek, 2006). The frequent use of cognitive strategies might result from students' high English proficiency level. According to Gu and Johnson (1996), the use of cognitive strategies is a positive predictor of general proficiency. Therefore, the main reason behind the frequent use of cognitive strategies might be that Duhok University students were proficient learners of English.

Memory strategies were found to be the second most used type of strategies among the participants. The results in table 7 show that the frequency mean score of 3.06 was reported for the memory strategies, which means these strategies were often used by the students. This means that the students, to some extent, were more familiar with memory strategies than other learning strategies. Finding memory strategies as the second most frequently used strategies might result from the influence of Duhok University learning environment (e.g. the fact that its teachers mostly use the traditional approach and do not pay much attention to communicative learning). This means that both teachers and learners are not interested in the communicative learning approach and depend on memorization.

Metacognitive strategies with the mean score of 2.89 were used by the students of this study, which is regarded at the medium level of strategy use. This means that these strategies were used at a moderate level. However, there were significant differences in the frequency of
use of individual strategies among metacognitive strategies. The highest used strategy and the rare used strategy were among the metacognitive strategies. These strategies will be discussed in detail in the following sections.

Social strategies were the least frequently used strategies among the students. Many previous researchers found that social strategies were least popular among language learners (e.g., Heidari, Izadi \& Ahmadian, 2012; Amirian \& Heshmatifar, 2013; Karami \& Barekat, 2012; Komol \& Sripetpun, 2011; Doczi, 2011; Khoshsaligheh, 2009; Bangar \& Kasmani, 2013; Kodu, 1999; Liao, 2004; Hamzah et al., 2009). Researchers who examined the use of VLSs (e.g., Bengar \& Kasmani, 2013; Liao, 2004) suggested that the infrequent use of social strategies might be explained by the fact that learning vocabulary is an individual process. In contrast, the results of the study conducted by Alhaysony (2012) with Saudi EFL learners showed that the social strategies were the most frequently used among the VLSs. He suggested that his finding shows that the students depend generally on teachers or seeking help from others in learning new vocabulary. He stated that the main reason for the high frequency of use of social strategies might be the environment of the English language programme of the preparatory schools. He further explained that within the environment of English language programme, native speakers were around the learners and the instruction in the English Language Centre paid great attention to interactive activities used to develop linguistic fluency.

It is significant that social strategies were the least frequently used in the present study. One might believe that language is an instrument for communication, and thus learning a language must have a direct relationship with social activities. The reason behind the infrequent use of social strategies in this study could be the fact that learning words has traditionally been considered as an individual work instead of pair or group work. The most plausible explanation for the infrequent use of social strategies might be the ELT and ELL
learning environment. This means the rare use of social strategies is a result of the nature of the educational system in Northern Iraq, particularly in Duhok University, which is teachercentered. This means that teachers are the central element in the learning process. In language classrooms, language teachers stand in front of the students and present all the knowledge that learners need. In other words, language teachers present the information and the learners just follow the instructions by listening and writing notes. Thus, this kind of classes does not involve group work or discussions.

## The use of individual strategies of VLS categories

In the previous section, an overall picture of the frequency of use of the four types of strategies reported by the students was illustrated and explained. This section presents the frequency of use of each individual strategy of the four categories, with their means and standard deviation obtained from descriptive statistic.

## Students' use of cognitive strategies

This section shows the frequency of use of the cognitive strategies by the students in the present study. The overall mean of these strategies reported by the students was 3.29 . The cognitive strategies consist of nine strategies which involve "Taking notes in class", "Use a bilingual dictionary", "Use a monolingual dictionary", "Keep a vocabulary notebook", "Use new word in sentences", "Guess from textual context in reading", "Do written repetition", "Paraphrase the word's meaning by yourself" and "Put English labels on physical objects". The frequency of use of each of these strategies in descending order is presented in Table 8.

Table 8
Cognitive strategies with their frequencies, percentages, means and standard deviations

| Item | Frequency | N | percentage | Mean Score | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q. 19 Take notes in class. | Never | 17 | 3.6\% | 3.77 | 1.03 |
|  | Occasionally | 30 | 6.4\% |  |  |
|  | Often | 119 | 25.5\% |  |  |
|  | Usually | 173 | 37.2\% |  |  |
|  | Always | 127 | 27.3\% |  |  |
| Q. 26 Use a bilingual dictionary | Never | 12 | 2.6\% | 3.69 | 1.05 |
|  | Occasionally | 49 | 10.5\% |  |  |
|  | Often | 131 | 28.1\% |  |  |
|  | Usually | 152 | 32.6\% |  |  |
|  | Always | 122 | 26.2\% |  |  |
| Q. 10 Use a monolingual dictionary. | Never | 20 | 4.3\% | 3.51 | 1.11 |
|  | Occasionally | 74 | 15.9\% |  |  |
|  | Often | 115 | 24.7\% |  |  |
|  | Usually | 158 | 33.9\% |  |  |
|  | Always | 99 | 21.2\% |  |  |
| Q. 22 Keep a vocabulary notebook. | Never | 47 | 10.2\% | 3.36 | 1.29 |
|  | Occasionally | 77 | 16.5\% |  |  |
|  | Often | 118 | 25.3\% |  |  |
|  | Usually | 105 | 22.5\% |  |  |
|  | Always | 119 | 25.5\% |  |  |
| Q. 16 Use new word in sentences. | Never | 20 | 4.3\% | 3.25 | 1.06 |
|  | Occasionally | 98 | 21\% |  |  |
|  | Often | 152 | 32.6\% |  |  |
|  | Usually | 133 | 28.5\% |  |  |
|  | Always | 63 | 13.5\% |  |  |
| Q. 3 Guess from textual context in reading. | Never | 4 | .9\% | 3.22 | . 85 |
|  | Occasionally | 85 | 18.2\% |  |  |
|  | Often | 212 | 45.5\% |  |  |
|  | Usually | 132 | 28.3\% |  |  |
|  | Always | 33 | 7.1\% |  |  |
| Q. 14 Do written repetition. | Never | 31 | 6.7\% | 3.16 | 1.08 |
|  | Occasionally | 92 | 19.7\% |  |  |
|  | Often | 166 | 35.6\% |  |  |
|  | Usually | 122 | 26.2\% |  |  |
|  | Always | 55 | 11.8\% |  |  |
| Q1. Paraphrase the word's meaning by yourself. | Never | 47 | 10.1 \% | 3.01 | 1.11 |
|  | Occasionally | 110 | 23.6\% |  |  |
|  | Often | 132 | 28.3\% |  |  |
|  | Usually | 144 | 30.9\% |  |  |
|  | Always | 33 | 7.1\% |  |  |
| Q. 6 Put English labels on physical objects. | Never | 90 | 19.3\% | 2.62 | 1.14 |
|  | Occasionally | 134 | 28.8\% |  |  |
|  | Often | 125 | 26.8\% |  |  |
|  | Usually | 96 | 20.6\% |  |  |
|  | Always | 21 | 4.5\% |  |  |

The table 8 shows that three strategies, "Taking notes in class" $(M=3.77)$, "Use a bilingual dictionary" ( $\mathrm{M}=3.69$ ) and "Use a monolingual dictionary" $(\mathrm{M}=3.51)$, from the cognitive strategies were used at a high level of strategy use. "Taking notes in the class" was the most preferred among the cognitive strategies with the mean score of 3.77 . The table 8 shows that only $4 \%$ of the participants said that they never use "Taking notes in class" strategy; therefore, it is clear that most of the students tend to depend on note taking strategy. Writing notes might provide different entries alongside the native translation such as pronunciation, parts of speech and sentence examples. Thus, this strategy supports learners to improve strategies for learning new words. In addition, because there is not enough time for language teachers to teach everything about vocabulary, learners need to take notes in the class and become autonomous in learning a word. Taking notes in class helps students to be independent. Therefore, it is obvious that taking notes is valuable to L2 learners. Moreover, the popularity of this strategy results from the fact that most of the time teachers simply present new material in front of the students and the students are only required to listen and take notes. In this kind of classroom, interaction activities are very rare. Therefore, the infrequent use of social strategies in this study is consistent with this finding. This finding goes in line with some previous research findings (e.g., Kodu, 1999; Komol \& Sripetpun, 2011; Tanyer \& Ozturk, 2014; Catalan, 2003; Peng, 2009). Kudo (1999, p.17) noted that the reason of the frequent use of the note taking strategy in class "is probably because it is typical that students at schools oriented towards university entrance examinations listen to the teacher-fronted lectures and take notes about what was said".
"Using bilingual dictionary" strategy is the second most used strategy from the cognitive strategies used by the participants in the current study with the average mean of 3.69, which is considered to be high strategy use. Only $2 \%$ of the students stated that they never used this strategy. It seems that almost all the students use a bilingual dictionary. The
frequent use of bilingual dictionaries might be because it is the simplest and easiest way to learn the meaning of a new word. Moreover, it seems that regardless of the students' L2 proficiency level, as long as they use dictionaries, learners would probably turn to bilingual dictionary. This finding was similar with the findings of some previous researchers (e.g., Wu, 2005; Komol \& Sripetpun, 2011; Alhaysony, 2012). However, the students of this study tended to use both dictionary strategies - bilingual and monolingual dictionary - to a high extent, because according to the results of descriptive statistics analysis, the mean scores for both strategies were high. That is, the third most frequently chosen strategy was "Using a monolingual" dictionary with the mean score of 3.51 .

Monolingual dictionaries contain complete details on the grammar and pronunciation of words. Moreover, this kind of dictionary offers examples of words used in different contexts. The frequent use of monolingual dictionary discovered in this study was in line with some previous research studies (e.g., Amirian \& Hashmatifar, 2013; Asgari \& Mustapha, 2011; Heidari et al., 2012; Catalan, 2003; Hamzah et al., 2009). Amirian and Hashmatifar (2013) concluded that some proficient students used monolingual dictionary strategies more often than any other kinds of VLSs. These findings were the same as the findings in the study conducted by Ahmad (1989), who found that dictionary and note taking strategies were the most common strategies among the participants. Gu and Johnson (1996) researched 850 Chinese students and their findings also revealed that the dictionary use and note taking strategies were highly used strategies by the students. In this study only $4 \%$ of the students said that they never used a monolingual dictionary. This means that the learners were familiar with the use of a monolingual dictionary. The most plausible explanation of the popularity of monolingual dictionaries among the students of this study might be that the students were extensively trained by the English language teachers to perform this kind of strategy. Thus, the students of this study seem to be very familiar with this strategy. Another reason of the
high frequency of use of a monolingual dictionary could be the students' high level of English proficiency. This means that the more learners know English the more they tend to use monolingual dictionaries.

The strategies "Keep a vocabulary notebook", "Use new word in sentences", "Guess from textual context in reading", "Do written repetition" and "Paraphrase the word's meaning by yourself" were reported at the medium level of strategy use. Their mean score ranged between 3.01 to 3.36 . This shows that these strategies were, to some extent, familiar among the students of this study. The average mean of the strategy, "Put English labels on physical objects" was under 3 . The mean score for this strategy was 2.62 , which is also reported at the medium level of strategy use, but compared to other metacognitive strategies it is regarded to be the least used strategy. Different previous research studies have also found the rare use of the strategy, "Put English label on physical objects", (e.g., Kudo, 1999; Pourshahian et al., 2012; Amirian \& Hashmatifar, 2013).

## Students' use of memory strategies

This section shows the frequency of memory strategies use in learning vocabulary by the students. The overall frequency mean of these strategies reported by the students was 3.06. Memory strategies contain nine individual items of VLSs. These strategies are "Image word's meaning", "Memorize parts of speech", "Say new word aloud when studying", "Connect a word to a personal experience" "Connect word to already known words", "Connect the word to its synonyms and antonyms", "Use physical action when learning a new word", "Group words together within a storyline" and "Associate the word with its coordinates". The mean and standard deviation of frequency use of each of these strategies are presented in descending order in table 9 .

Table 9
Memory strategies with their frequencies, percentages, means and standard deviations

| Item | Frequency | N | percentage | Mean Score | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q. 23 Image word's meaning. | Never | 22 | 4.7\% | 3.53 | 1.11 |
|  | Occasionally | 65 | 13.9\% |  |  |
|  | Often | 120 | 25.8\% |  |  |
|  | Usually | 158 | 33.9\% |  |  |
|  | Always | 101 | 21.7\% |  |  |
| Q. 20 Memorize parts of speech. | Never | 22 | 4.7\% | 3.25 | 1.04 |
|  | Occasionally | 88 | 18.9\% |  |  |
|  | Often | 159 | 34.1\% |  |  |
|  | Usually | 141 | 30.3\% |  |  |
|  | Always | 56 | 12\% |  |  |
| Q. 33 Say new word aloud when studying | Never | 43 | 9.2\% | 3.23 | 1.19 |
|  | Occasionally | 77 | 16.5\% |  |  |
|  | Often | 155 | 33.3\% |  |  |
|  | Usually | 108 | 23.2\% |  |  |
|  | Always | 83 | 17.8\% |  |  |
| Q. 24 Connect a word to a personal experience. | Never | 23 | 4.9\% | 3.16 | 1.03 |
|  | Occasionally | 100 | 21.5\% |  |  |
|  | Often | 168 | 36.1\% |  |  |
|  | Usually | 126 | 27\% |  |  |
|  | Always | 49 | 10.5\% |  |  |
| Q. 18 Connect word to already known words. | Never | 14 | 3\% | 3.11 | . 94 |
|  | Occasionally | 109 | 23.4\% |  |  |
|  | Often | 182 | 39.1\% |  |  |
|  | Usually | 130 | 27.9\% |  |  |
|  | Always | 31 | 6.7\% |  |  |
| Q11. Connect the word to its synonyms and antonyms. | Never | 30 | 6.4\% | 3.08 | 1.07 |
|  | Occasionally | 114 | 24.5\% |  |  |
|  | Often | 154 | 33\% |  |  |
|  | Usually | 121 | 26\% |  |  |
|  | Always | 47 | 10.1\% |  |  |
| Q. 36 Use physical action when learning a new word. | Never | 60 | 12.9\% | 2.91 | 1.22 |
|  | Occasionally | 134 | 28.8\% |  |  |
|  | Often | 110 | 23.6\% |  |  |
|  | Usually | 108 | 23.2\% |  |  |
|  | Always | 54 | 11.6 |  |  |
| Q. 21 Group words together within a storyline. | Never | 49 | 10.5\% | 2.71 | 1.01 |
|  | Occasionally | 159 | 34.1\% |  |  |
|  | Often | 153 | 32.8\% |  |  |
|  | Usually | 85 | 18.2\% |  |  |
|  | Always | 20 | 4.3\% |  |  |
| Q. 30 Associate the word with its coordinates. | Never | 50 | 10.7\% | 2.52 | . 89 |
|  | Occasionally | 192 | 41.2\% |  |  |
|  | Often | 164 | 35.2\% |  |  |
|  | Usually | 51 | 10.9\% |  |  |
|  | Always | 9 | 1.9\% |  |  |

The table 9 shows that only the "Image word's meaning" strategy under the memory strategies was used at the high level of strategy use with the mean score of 3.53 . All the other strategies were used at the medium level with the mean ranging between ( $\mathrm{M}=2.52$ and $\mathrm{M}=3.25$ ). Since only $4 \%$ of the students said they never use "Image word's meaning" and $33 \%$ said they usually use it when learning a new word, it seems that most of the students were familiar with the "Image word's meaning"strategy. This finding goes in line with Khoshsaligheh (2009), who found "Image the word's meaning" strategy as the most frequently used strategy by the respondents. In further support of this finding, Soureshjani (2011); and Pourshahin et al. (2012) found "Image word's meaning" strategy as one of the most used strategies among the participants. This kind of strategy implies that the students create a mental linkage of the new word to aid them remember it. Imagining the word's meaning, occurs when a learner reads a new word and a picture that somehow has a linkage to its meaning is created in the mind of the learner to learn it easily. This strategy helps retaining the information in mind. This kind of strategy might be, to some extent, difficult for young learners to perform. Therefore, the frequency of use of this strategy among the students of this study might be justified by their level of education that they are at university level and they seem to be experienced in learning a new word.

The second most frequently used strategy among the memory strategies was "Memorize parts of speech" with the mean score of 3.25 . This finding is in line with a study by Ababneh (2013) in which this strategy also was the second most used among the subjects. Studies examining the types of VLSs (e.g., Catalan, 2003; Amirian \& Heshmatifar, 2013) have found parts of speech strategy in learning vocabulary as one of the most popular strategies among the participants. According to the results of descriptive statistics in this study, only $4 \%$ of the students stated that they never use "Memorize parts of speech". Therefore, memorizing parts of speech seems to be another popular strategy among the
students in this study. The high frequency of use of this strategy might be because the grammar teachers in their lessons focus mainly on parts of speech or by giving different kinds of exercises on parts of speech. Komol and Sripetpun (2011) found that memorizing parts of speech strategy in learning a new word has a correlation with vocabulary size. They found out that the strategy about parts of speech contributes to the increase of student's vocabulary size. This strategy might be difficult for young learners since they have to deal with nouns, verbs and so on. The students of this study seem to be experienced in using this strategy to learn vocabulary.

The strategy "Associate the word with its coordinates" was the least used strategy under the memory strategies among the students. The students reported this strategy at the medium level of strategy use with the mean score of 2.52 . Only $1 \%$ of the students stated that they always use this strategy. Therefore, the students of this study might not be quite familiar with this kind of strategy. Language teachers have to be aware that the students need to use different kinds of strategies and train their learners how to use them.

## Students' use of metacognitive strategies

This section shows the frequency of use of Metacognitve strategies that were used by the students. The total average mean score of the strategies was 2.89 . Metacognitive strategies consist of nine individual strategies. These strategies are "Using internet", "Learn words from paper tests (learn from failure)", "Use English-language songs", "Learn words written or commercial items", "Test yourself with word tests", "Use spaced word practice", "Read an English language newspaper", "Listen to English- radio programs" and "Testing with your parents, if they know English". The frequency of use including the means and standard deviations of each of these strategies in descending order is presented in Table 10.

Table 10
Metacognitive strategies with their frequencies, percentages, means and standard deviations

| Item | Frequency | N | percentage | Mean Score | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q. 35 Use English language internet. | Never | 27 | 5.8\% | 3.80 | 1.17 |
|  | Occasionally | 41 | 8.8\% |  |  |
|  | Often | 93 | 20\% |  |  |
|  | Usually | 140 | 30\% |  |  |
|  | Always | 165 | 35.4\% |  |  |
| Q. 7 Use English-language songs. | Never | 15 | 3.2\% | 3.40 | 1.08 |
|  | Occasionally | 86 | 18.5\% |  |  |
|  | Often | 147 | 31.5\% |  |  |
|  | Usually | 133 | 28.5\% |  |  |
|  | Always | 85 | 18.2\% |  |  |
| Q2. Learn words from paper tests (learn from failure) | Never | 40 | 8.6\% | 3.33 | 1.27 |
|  | Occasionally | 94 | 20.2\% |  |  |
|  | Often | 114 | 24.5\% |  |  |
|  | Usually | 106 | 22.7\% |  |  |
|  | Always | 112 | 24\% |  |  |
| Q. 27 Learn words written or commercial items. | Never | 29 | 6.2\% | 3.00 | 1.01 |
|  | Occasionally | 119 | 25.5\% |  |  |
|  | Often | 172 | 36.9\% |  |  |
|  | Usually | 112 | 24\% |  |  |
|  | Always | 34 | 7.3\% |  |  |
| Q. 5 Test yourself with word tests. | Never | 45 | 9.7\% | 2.87 | 1.07 |
|  | Occasionally | 132 | 28.3\% |  |  |
|  | Often | 161 | 34.5\% |  |  |
|  | Usually | 94 | 20.2\% |  |  |
|  | Always | 34 | 7.3\% |  |  |
| Q.12 Use spaced word practice. | Never | 70 | 15\% | 2.74 | 1.12 |
|  | Occasionally | 128 | 27.5\% |  |  |
|  | Often | 149 | 32\% |  |  |
|  | Usually | 89 | 19.1\% |  |  |
|  | Always | 30 | 6.4\% |  |  |
| Q. 32 Read an English language newspaper. | Never | 113 | 24.2\% | 2.49 | 1.15 |
|  | Occasionally | 125 | 26.8\% |  |  |
|  | Often | 133 | 28.5\% |  |  |
|  | Usually | 73 | 15.7\% |  |  |
|  | Always | 22 | 4.7\% |  |  |
| Q. 25 Listen to Englishradio program. | Never | 134 | 28.8\% | 2.45 | 1.24 |
|  | Occasionally | 121 | 26\% |  |  |
|  | Often | 107 | 23\% |  |  |
|  | Usually | 73 | 15.7\% |  |  |
|  | Always | 31 | 6.7\% |  |  |
| Q. 13 Test with your parents, if they know English. | Never | 233 | 50\% | 1.90 | 1.11 |
|  | Occasionally | 108 | 23.2\% |  |  |
|  | Often | 79 | 17\% |  |  |
|  | Usually | 29 | 6.2\% |  |  |
|  | Always | 17 | 3.6\% |  |  |

The table 10 shows that "Using internet" as the most frequently used strategy from metacognitive strategies with the mean score of 3.80 . This strategy was used at the high level of strategy use. To learn English vocabulary, the students of this study seem to depend on using internet to a high extent. Therefore, it is interesting to find that only $5 \%$ of the students stated that they never "Use internet" for learning a new word. The results showed that this kind of strategy was highly preferred by the students.

The major reason of the high frequency of use of internet strategy among the students could due to the developed technology in recent years. It is the fact that only during the last few years, commercial internet services widespread quickly in Northern Iraq. Therefore, the occurrence of internet seemed to be something new for learners, and this might highly have motivated them to be keen on using internet and find the meaning of new words. Another reason for the high frequency of use of internet might be that the students of this study find it as a quick source to find the meaning of unknown words. The students in this study seemed to be more eager to guess the meaning of the unfamiliar words when using internet, for example through communicating with other people, playing games and different other programmes. In literature review, different researchers found the popularity of "Using internet" strategy to find the meaning of a new word. Khoshsaligheh (2009) found using internet as one of the most preferred strategy to learn a new word. In further supports of this finding, Asgari and Mustapha (2011) found the use of English-language media (songs, internet, computer games, etc.) as a popular strategy among the students. They clarified that a possible explanation to the frequency of use of English language media among the high-preferred used strategies might be because of the accessibility of the materials. Authentic materials are important for language learners to learn the meaning of a new word in context. As indicated in the literature review, Stoffer (1995) demonstrated the strategies involving authentic language use (as cited in Asgari \& Mustapha, 2011). Furthermore, Agari and Mustafa (2011) stated that the high
frequency of use of this strategy could be from the development of technology. It seems that the developed technology is becoming a main part for learning vocabulary items in the L2 learning process.

The second most preferred strategy among metacognitive strategies by the students was the "Use English-language songs" with the mean score of 3.40 . This finding was consistent with the results of some previous research findings (e.g., Komol \& Sripetpun, 2011; Catalan, 2003; Subon, 2013). It is interesting to see listening to extracurricular source has become one of the most popular strategies for learning a new word by the students of this study. This might due to the listening lessons in the Duhok University. Listening exercises in this university might have affected the students to listen to songs since during those exercises different kinds of text are required to be listened to. Therefore, listening teachers might have advised their students to listen to different kinds of text outside the class in order to improve their listening skill. There are researchers encouraging the idea of learning English through songs such as Nation (2001) who noted that the teachers could assist students by encouraging or motivating them to learn through listening materials, such as advertisements, songs and news to develop their vocabulary learning. In addition, Schmitt (1997) asserted that in his study, when the students learned English by listening to songs, they felt relaxed.

The least frequently used strategy among the metacognitive strategies was "Testing with your parents, if they know English" among the 36 learning strategies. The results of descriptive statistics revealed that $50 \%$ of the students said that they never test the meaning of the new word with their parents. It seems that in the Kurdish culture, the sons, daughters and parents never communicate to test on the meaning of the new words with each other. The major reason could be that the parents do not know English.

To sum up, the data of the present study proved the evidence of the development of technology and modernity of the new learning environment by the students. Learning English
words from the internet was the highest used strategy among the overall strategies and also learning words from the songs was one of the popular used strategies by the students. It is interesting to find out that SLL, instead of being just classroom activities and teacher-oriented lecturing, is becoming a part of students' everyday life. To learn English vocabulary, finding the use of internet and English language songs among the most preferred strategies indicate that the main reason might be that the students spend most of their time on conversation forums on the web, playing computer games, searching authentic texts and ready-made exercises, watching you tube songs, and so on.

## Students' use of social strategies

This section shows the frequency of use of Social strategies that were used by the students in this study. The overall mean score of these strategies was 2.69 . Social strategies consist of nine interaction VLSs to help the learners learning a new word. These strategies are "Learn by group work in class", "Learn by pair work in class", "Ask your classmates for paraphrase or synonym", "Ask your classmate for Kurdish translation", "Study and practice meaning in a group outside of class", "Ask your teacher for paraphrase or synonym", "Ask your teacher for sentence including the new word", " Ask your teacher to check your word lists for accuracy" and "Ask your school teacher for Kurdish translation". Table 11 illustrates the frequency of use of means and standard deviations of each of these strategies in descending order.

Table 11
Social strategies with their frequencies, percentages, means and standard deviations

| Item | Frequency | N | percentage | Mean Score | SD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Q. 9 Learn by group work in class. | Never | 32 | 6.9\% | 3.18 | 1.11 |
|  | Occasionally | 106 | 22.7\% |  |  |
|  | Often | 125 | 26.8\% |  |  |
|  | Usually | 149 | 32\% |  |  |
|  | Always | 54 | 11.6\% |  |  |
| Q. 15 Learn by pair work in class. | Never | 35 | 7.5\% | 3.09 | 1.05 |
|  | Occasionally | 96 | 20.6\% |  |  |
|  | Often | 168 | 36.1\% |  |  |
|  | Usually | 126 | 27\% |  |  |
|  | Always | 41 | 8.8\% |  |  |
| Q. 31 Ask your classmates for paraphrase or synonym. | Never | 53 | 11.4\% | 2.97 | 1.13 |
|  | Occasionally | 104 | 22.3\% |  |  |
|  | Often | 152 | 32.6\% |  |  |
|  | Usually | 116 | 24.9\% |  |  |
|  | Always | 41 | 8.8\% |  |  |
| Q. 34 Ask your classmate for Kurdish translation. | Never | 82 | 17.6\% | 2.87 | 1.27 |
|  | Occasionally | 112 | 24\% |  |  |
|  | Often | 107 | 23\% |  |  |
|  | Usually | 114 | 24.5\% |  |  |
|  | Always | 51 | 10.9\% |  |  |
| Q. 17 Study and practice meaning in a group outside of class. | Never | 88 | 18.9\% | 2.64 | 1.14 |
|  | Occasionally | 125 | 26.8\% |  |  |
|  | Often | 142 | 30.5\% |  |  |
|  | Usually | 85 | 18.2\% |  |  |
|  | Always | 26 | 5.6\% |  |  |
| Q. 28 Ask your teacher for paraphrase or synonym. | Never | 71 | 15.2\% | 2.61 | 1.07 |
|  | Occasionally | 153 | 32.8\% |  |  |
|  | Often | 154 | 33\% |  |  |
|  | Usually | 62 | 13.3\% |  |  |
|  | Always | 26 | 5.6\% |  |  |
| Q. 29 Ask your teacher for sentence including the new word. | Never | 108 | 23.2\% | 2.53 | 1.18 |
|  | Occasionally | 134 | 28.8\% |  |  |
|  | Often | 116 | 24.9\% |  |  |
|  | Usually | 81 | 17.4\% |  |  |
|  | Always | 27 | 5.8\% |  |  |
| Q. 8 Ask your teacher to check your word lists for accuracy. | Never | 116 | 24.9\% | 2.31 | 1.03 |
|  | Occasionally | 159 | 34.1\% |  |  |
|  | Often | 129 | 27.7\% |  |  |
|  | Usually | 52 | 11.2\% |  |  |
|  | Always | 10 | 2.1\% |  |  |
| Q4. Ask your school teacher for Kurdish translation. | Never | 190 | 40.8\% | 2.03 | 1.10 |
|  | Occasionally | 141 | 30.3\% |  |  |
|  | Often | 78 | 16.7\% |  |  |
|  | Usually | 43 | 9.2\% |  |  |
|  | Always | 14 | 3\% |  |  |

The table 11 shows the mean score of the frequency of use of each strategy item of social strategies. The social strategies were the least preferred by the students of this study. The mean score of social strategies ranged between 2.03 and 3.18 . The results in table 11 show that the mean score of many strategies were fewer than three, except for the two highest strategies, which are, "Learn by group work in class" and "Learn by pair work in class". The most popular social strategies among the students were the strategies "Learn by group work in class" $(M=3.18)$ and "Learn by pair work in class" $(M=3.09)$. These two strategies seem to be the only social strategies that were reported often by the students. This finding suggests that the students somehow preferred to interact on finding the meaning of a new word between themselves inside the classroom rather than getting help from teachers. This finding was similar with Khoshsaligheh (2009), who found the mean score for all the social strategies quite low, except the group work inside the classroom, which was reported as the highest frequency of use among the social strategies. MsComish (1990) found that if through conversations, learners try to exchange their thoughts and ideas with each other by giving examples containing a word; it might develop their vocabulary knowledge. Thus, the language teachers are more required to motivate and encourage the students to interact and arrange group or pair work activities in learning new vocabulary to exchange their thoughts and ideas between them.

The least frequently used strategy among social strategies was "Ask your school teacher for Kurdish translation" ( $\mathrm{M}=2.03$ ). $40 \%$ of the students stated that they never "Ask your school teacher for Kurdish translation" and $30 \%$ said that they occasionally ask them. This indicated that the students highly did not prefer to ask the teachers about the information to find the meaning of unknown word. Moreover, one female student wrote on the blank part of the questionnaire "I want to ask the teacher for the L1 translation but I never did". This interpretation shows that the university teachers might do not give the freedom to learners to
ask them questions concerning learning the meaning of a new word freely. On the other hand, the reason might be the students feel ashamed to ask their teachers for the L1 translation, since they are English majors and supposed to know the meaning of many words.

The strategy "Ask your teacher to check your word lists for accuracy" ( $\mathrm{M}=2.31$ ) was the second infrequently used strategy by the students. It seems that language learners did not feel free to ask their teachers questions concerning the meaning of the new word. Teachers need to motivate and encourage learners to ask questions concerning the learning process and create suitable group work activities to enhance the learning process. However, these findings were in line with many previous researchers' studies (e.g., Amirian \& Hashmatifar, 2013; Tanyer \& Ozturk, 2014; Liao, 2004; Bengar \& Kasmani, 2013; Khoshsaligheh, 2009; Tsai \& Chang, 2009; Kudo, 1999; Karami \& Barekat, 2012). The least frequency of use of social strategies might be justified by the English vocabulary learning being an individual task and social interaction not being necessary for learning words (Liao, 2004; Bengar \& Kasmani, 2013). Kudo (1999) found that Japanese students reported the strategies of asking classmates or teachers to find out the meaning of the unknown words very rarely. He suggested that the reason is the learners tend not to work together to learn vocabulary. On the other hand, surprisingly Catalan (2003), dealing with Spanish learners, found that asking classmates for the meaning of the word and asking teachers for a L1 translation among the ten most popular used strategies, which differ from the findings of this study.

The major reason for the rare use of social strategies might be justified by the educational system in Duhok University, which is mainly based on individual study. It seems that both learners and teachers are interested in traditional methods of learning, that the teacher provides all the knowledge and materials and the students are required only to listen, take notes and follow the instruction. This means that the system is mainly based on individualism rather than the interaction activities. Moreover, language teachers have to be
careful concerning curriculum designers by paying more attention to social strategies while teaching materials. This means that since the social strategies were the least preferred strategies by the students, language teachers have to take into consideration to design their teaching lessons by providing more interaction activities such as arranging suitable group work or pair work activities to facilitate social strategies through learning process.

## Frequency of overall individual strategy use

In the previous section, the frequency of individual strategy use within each of the four strategy categories was clarified. This section provides further information on students' reported overall individual strategy use in a more detailed manner.

## The most and least frequently used VLSs

Table 12 shows the VLS use by the 466 undergraduate students of Duhok University that participated in this study. Based on the means and standard deviations, the VLSs are listed in a descending order obtained by using descriptive statistics.

The results reveal that the mean score of all the VLS use ranged from 1.90 to 3.80 . The overall mean of the VLSs was at a medium level of strategy use ( $\mathrm{M}=2.98$ ). Based on Oxford's (1990) scoring system, the table 12 shows that the first five strategies were reported at a high level of strategy use. The mean score of the five highly used strategies ranged between 3.51 and 3.80 . The most popular strategy among 36 VLSs was "Using internet" ( $\mathrm{M}=3.80$; $\mathrm{SD}=1.17$ ). The second preferred strategy was "Taking notes in class" $(\mathrm{M}=3.77$; $\mathrm{SD}=1.03$ ) with a mean slightly lower than the first highest strategy. The third most common strategy was "Use a bilingual dictionary" ( $\mathrm{M}=3.69$ : $\mathrm{SD}=1.05$ ). The fourth frequently used strategy by the learners was "Image the word's meaning" $(\mathrm{M}=3.53$; $\mathrm{SD}=1.11)$ from the memory strategies. The fifth common strategy was "Use a monolingual dictionary" ( $\mathrm{M}=3.51$; $\mathrm{SD}=1.11$ ) from the cognitive strategies.

Table 12
Means of VLSs used by the Students in Descending Order

| Strategy items | N | Mean | S.D. |
| :--- | :--- | :--- | :--- |
| Q35. Use English language interknit | 466 | 3.80 | 1.17 |
| Q19. Take notes in class. | 466 | 3.77 | 1.03 |
| Q26. Use a bilingual dictionary. | 466 | 3.69 | 1.05 |
| Q23. Image word's meaning. | 466 | 3.53 | 1.11 |
| Q10. Use a monolingual dictionary. | 466 | 3.51 | 1.11 |
| Q7. Use English-language songs | 466 | 3.40 | 1.08 |
| Q22. Keep a vocabulary notebook. | 466 | 3.36 | 1.29 |
| Q2. Learn words from paper tests (learn from failure | 466 | 3.33 | 1.27 |
| Q20. Memorize parts of speech. | 466 | 3.25 | 1.04 |
| Q16. Use new word in sentences. | 466 | 3.25 | 1.06 |
| Q33. Say new word aloud when studying | 466 | 3.23 | 1.19 |
| Q3. Guess from textual context in reading | 466 | 3.22 | .85 |
| Q9. Learn by group work in class | 466 | 3.18 | 1.11 |
| Q24. Connect a word to a personal experience. | 466 | 3.16 | 1.03 |
| Q14. Do written repetition | 466 | 3.16 | 1.08 |
| Q18. Connect word to already known words | 466 | 3.11 | .94 |
| Q15. Learn by pair work in class. | 466 | 3.09 | 1.05 |
| Q11. Connect the word to its synonyms and antonyms | 466 | 3.08 | 1.07 |
| Q1. Paraphrase the word's meaning by yourself | 466 | 3.01 | 1.11 |
| Q27. Learn words written or commercial items | 466 | 3.00 | 1.01 |
| Q31. Ask your classmates for paraphrase or synonym | 466 | 2.97 | 1.13 |
| Q36. Use physical action when learning a new word | 466 | 2.91 | 1.22 |
| Q5. Test yourself with word tests | 466 | 2.87 | 1.07 |
| Q34. Ask your classmate for Kurdish translation | 466 | 2.87 | 1.27 |
| Q12. Use spaced word practice. | 466 | 2.74 | 1.12 |
| Q21. Group words together within a storyline. | 466 | 2.71 | 1.01 |
| Q17. Study and practice meaning in a group outside of class | 466 | 2.64 | 1.14 |
| Q6. Put English labels on physical objects | 466 | 2.62 | 1.14 |
| Q28. Ask your teacher for paraphrase or synonym. | 466 | 2.61 | 1.07 |
| Q29. Ask your teacher for sentence including the new word. | 466 | 2.53 | 1.18 |
| Q30. Associate the word with its coordinates. | 466 | 2.52 | .89 |
| Q32. Read an English language newspaper. | 466 | 2.49 | 1.15 |
| Q25. Listen to English- radio program. | 466 | 2.45 | 1.24 |
| Q8. Ask your teacher to check your word lists for accuracy. | 466 | 2.31 | 1.03 |
| Q4. Ask your school teacher for Kurdish translation. | 466 | 2.03 | 1.10 |
| Q13. Test with your parents, if they know English. | 466 | 1.90 | 1.11 |
| Total | 466 | $\mathbf{2 . 9 8}$ | $\mathbf{1 . 1 0}$ |

Five strategies were reported to be used lower than the average mean of 2.5 . Those strategies with the scores lower than this mean, are regarded to be at a low level of strategy use. The mean of these infrequently used strategies are ranged between $1.90 ; \mathrm{SD}=1.11$ and 2.49 ;
$\mathrm{SD}=1.15$. The least frequently used strategy among all the strategies by the students was "Testing with your parents, if they know English" ( $\mathrm{M}=1.90$; $\mathrm{SD}=1.1$ ). This is followed by "Ask your school teacher for Kurdish translation", ( $\mathrm{M}=2.03$; $\mathrm{SD}=1.10$ ), "Ask your teacher to check your word lists for accuracy", ( $\mathrm{M}=2.3 ; \mathrm{SD}=1.03$ ), "Listen to English- radio program", ( $\mathrm{M}=2.45$; $\mathrm{SD}=1.15$ ) and "Read an English language newspaper", ( $\mathrm{M}=2.49$; $\mathrm{SD}=1.15$ ).

## The five most used strategies

Table 13
The five most preferred strategies by the students

| Strategy items | Mean | SD | Rank |
| :--- | :--- | :---: | :---: |
| Use English language internet | 3.80 | 1.17 | 1 |
| Take notes in class. | 3.77 | 1.03 | 2 |
| Use a bilingual dictionary | 3.69 | 1.05 | 3 |
| Image word's meaning. | 3.53 | 1.11 | 4 |
| Use a monolingual dictionary | 3.51 | 1.11 | 5 |

The table 13 shows the five most frequent used VLSs by the students of this study. The results revealed that the highest mean score was from meacognitive strategies, "Using internet" ( $\mathrm{M}=3.80 ; \mathrm{SD}=1.17$ ). The results showed that the students in this study see the internet as a main source to find out information to learn a new word. This finding was similar with the study conducted by Khoshsaligheh (2009), who found that using English language internet as the second most popular strategy with Iranian EFL learners. Similarly, Pourshahian et al. (2012) found that the strategy, "Using internet" to discover the meaning of the new word as a popular strategy among the undergraduate ELT students at the Eastern Mediterranean University in Cyprus. Interestingly, using internet strategy to learn the meaning of the new word was the most preferred strategy among the overall strategies by the learners and probably it has several justifications for its high frequency of use.

The development of technology in Northern Iraq could be the major reason for the high frequency of use of this strategy. In fact, it was only about three or four years ago when the commercial internet service providers began to emerge in Northern Iraq. Commercial internet services widespread quickly. Therefore, people in general and students in particular found the internet to be a source of new extracurricular language learning activities for them. It can be said, this new advanced technology, to some extent, motivated the students to discover new VLSs. Furthermore, because of its novelty and extraordinary character, students probably started to spend much time working on the internet, and thus they tended to frequently come across various unknown words and thus enrich their vocabulary. Finding this strategy as the highest used strategy might have a connection with the students' very frequent use of various forums or online exercises on the Web. On the other hand, the high frequency of using internet to learn vocabulary might be related to its accessibility. Asgari and Mustapha (2011) supported this finding as they suggested that the frequent use of Englishlanguage media (songs, internet, computer games, etc.) among the students might be due to the accessibility of the materials.

The second most frequently used strategy in this study was of cognitive strategies, which is "Taking notes in class" ( $\mathrm{M}=3.77$; $\mathrm{SD}=1.03$ ). The students of this study seem to use note-taking strategy in class frequently to discover the meaning of the new words. It seems that language teachers have advised the students to memorize and take notes in class as a preparation for examination. Taking notes in the class beside L1 translation, provide several advantages for the language learners, such as the possibility to write down the phonetic transcription of a word, parts of speech and sentence examples. Therefore, this strategy positively supports learners to develop strategies for learning new words. This result was similar with the findings of some previous researchers (e.g., Karami \& Barekat, 2012; Ahmad, 1989; Pourshahian, et al., 2012). Ahmad (1989) revealed that note-taking strategies
were a popular strategy among the poor and good students and there was not a big difference between them. He summarized that note taking strategies proved to be a successful instrument not just to help students to learn vocabulary but of different VLSs and leads the learner to a level of independency. This finding also goes in line with Kudo (1999), who noted that it is typical that at schools students would go toward university entrance examinations, thus they would listen and take notes while the teachers teach in front of them. The possible explanation for the popularity of this strategy among the learners could be because of the educational system, which is mainly based on individualism. This means that inside the classrooms, language teachers mostly provide the materials and knowledge in front of the students and the students are required to just listen and take notes. Interaction activities in this kind of classes would occur very rarely, and the least frequency of use of social strategies in this study is the evidence.

The third popular strategy was the use of a "bilingual dictionary" ( $\mathrm{M}=3.69$; $\mathrm{SD}=1.05$ ), from the cognitive strategies. The results of this study showed that the students preferred using bilingual dictionaries more than using monolingual dictionaries. This means that the learners tended more to think the meaning of the unknown word in their L1 translation. This is in line with the results of many previous studies (e.g., Schmitt, 1997; Asgari \& Mustapha, 2011; Subon, 2013; Zhi-liang, 2010; Kudo, 1999; Ababneh, 2013; Wu, 2005; Tek, 2006; Alhaysony, 2012). However, finding the popularity use of bilingual dictionary among the students of this study does not mean that it is a useful source for learning a word, as in the VLS literature review, Brown (2000, p. 377) stated, "It is unfortunate that such practices rarely help students internalize the word for later recall". Moreover, the use of a "bilingual dictionary" was criticized for several reasons, for example to encourage using the translation, provides little knowledge on how the words are used (Nation, 2001). Komol and Sripetpun (2011) found that the bilingual dictionary did not contribute to the development of vocabulary
size among the students but they found that in order to discover the meaning of the word, monolingual dictionary contributed highly to the development of vocabulary size of the students. In contrast, in the study conducted by Hamzah et al. (2009) with Iranian undergraduate EFL learners found that using bilingual dictionaries was more effective for enlarging vocabulary than using monolingual dictionaries. Thus, the efficiency of this strategy still remains unclear to the readers.

The researcher believes that students at Duhok University are required to use the strategy of deducing the meaning of new words from the context and use monolingual dictionary rather than the bilingual dictionary strategy. The learners should be advised by language teachers to use guessing and monolingual dictionary strategies to learn the meaning of the new word more than using the bilingual dictionary strategy. To conclude, the plausible explanation of finding bilingual dictionary being among the most popular strategies might be because of its easiest and simplest way to learn a new word. Moreover, employing this strategy does not consume much time to find out the meaning of new words.

The fourth most used strategy was "Image word's meaning" ( $\mathrm{M}=3.53$; $\mathrm{SD}=1.11$ ) from the memory strategies. This finding goes in line with Cicko, Pojani and Stavre (2013), who found "Image word's meaning" strategy as one of the most used strategies among the EFL Albanian University Students. Image word's meaning means creating a mental image of the unknown word in mind to help remembering it. In other words, this strategy means studying the new word with a symbolic representation of its meaning. This strategy seems to be difficult somehow, but according to the results of descriptive statistics, the existence of this strategy was popular among the students. This memory strategy seems to help the Kurdish learners to remember the meaning of the new word that is why they are more inclined to use it. Moreover, the students' proficiency of learning the meaning of the new words might have affected them to use this strategy frequently. Since the participants of the current study were

English major at the University, probably their experience inclined them to use this strategy. This confirms Karami and Barekat's (2012) findings; they believed that the more advanced students tend to use more memory strategies. They further explained that this could be because of the students' proficiency in learning unknown words.

The fifth most preferred strategy was "Using a monolingual dictionary" $(\mathrm{M}=3.51$; $\mathrm{SD}=1.11$ ). The high frequency of use of monolingual dictionary to determine the meaning of the unknown words by the students has several advantages for the learners, such as the learners would face more words and every word is explained or illustrated in the dictionary. This finding confirms the finding of some other previous researchers (e.g., Catalan, 2003; Hamzah et al., 2009; Amirian \& Hashmatifar, 2013).

Using a monolingual dictionary requires the learners to have a wide range of vocabulary in order to understand the meaning of the new word; otherwise, the learners would be faced in identifying the meaning of a word after another in order to get the meaning. This means that the learners need a good knowledge of vocabulary to use a monolingual dictionary. Therefore, the popularity of this strategy among the students of the current study might be the consequence of their experience in learning new vocabulary. This finding is partially consistent with Amirian and Hashmatifar's (2013) investigation, who found that some experienced students used monolingual dictionary strategies more than any other kinds. Moreover, this kind of strategy, to some extent, is popular among the ELT and ELL environment of the Duhok University. This shows that the students were familiar with this kind of strategy. Accordingly, the students of this study preferred to use a bilingual dictionary more than a monolingual dictionary. This indicates that the students tried to find out the meaning of the new word in monolingual dictionary, but the high preference use of bilingual dictionary might be because the students do not know how to use the monolingual dictionary appropriately. The teachers probably talk about the benefices of monolingual dictionary inside
the classroom, but they do not give enough knowledge to the learners on how to use it. Therefore, the lack of knowledge on how to use a monolingual dictionary might have inclined the students to find the meaning of the new word in bilingual dictionary. This suggests that the language teachers are more required to teach the students how to use the monolingual dictionary not just encouraging them to use it.

## The five least used strategies

Table 14
The five least used strategies by the students

| Strategy items | Mean | SD | Rank |
| :--- | :---: | :--- | :---: |
| Test with your parents, if they know English | 1.90 | 1.11 | 1 |
| Ask your school teacher for Kurdish translation | 2.03 | 1.10 | 2 |
| Ask your teacher to check your word lists for accuracy | 2.32 | 1.03 | 3 |
| Listen to English- radio program | 2.45 | 1.24 | 4 |
| Read an English language newspaper | 2.49 | 1.16 | 5 |

The least frequently used strategy among 36 VLSs by the students of this study was from metacognitive strategies, which was "Testing with your parent, if they know English" ( $\mathrm{M}=1.90$; $\mathrm{SD}=1.11$ ). This strategy seems to be very rarely used among the students. This finding indicates that the parents might not know the English language therefore; the students almost never tested the meaning of the new word with them. Moreover, this could also be justified by the Kurdish-speaking environment in which the students were less likely to test the new English words with their parents. Since the "Testing with your parents, if they know English" strategy was found to be the least ones, it seems to be important for future research studies to investigate more widely whether parents' English language knowledge can be a crucial factor on the sons and daughters' learning.

The second and the third infrequently used strategies are from social strategies which are, "Ask your teacher for Kurdish translation" $(\mathrm{M}=2.03 ; \mathrm{SD}=1.10)$ and "Ask your teacher to
check your word lists for accuracy" $(\mathrm{M}=2.32$; $\mathrm{SD}=1.03)$. It seems that inside the language classes, interaction activities very rarely happen. This result is consistent with the results of Amirian and Heshmatifar (2013) study with Iranian EFL university students who used "asking teacher's L1 translation" least frequently.

The most sensible explanations for the least use of social strategies, particularly asking teachers for the L1 translation or other information to determine the meaning of a new word, is that learning vocabulary items seems to be regarded as an individual process rather than seeking help from others. These findings are also similar with Bengar and Kasmani (2013), who suggested that the reason of the infrequent use of social strategies could be that learning English vocabulary is inclined to be seen as an individual task, therefore, when learners think to discover the meaning of the new word, they prefer not to ask help from others. They further explained that learning vocabulary does not need interaction with others. Another reason for the rare use of asking teachers' help in learning a new word might be found in the peculiarities of the educational system in Northern Iraq, particularly in Duhok University. In language classrooms, teachers seem to be the centre of language learning. This means that language teachers tend to provide information and materials in front of the learners and the students are required to follow the instructions by just listening and taking notes. In this kind of classrooms, interaction activities very rarely would be seen.

The fourth least used strategy was "Listening to English-radio program" ( $\mathrm{M}=2.45$; $\mathrm{SD}=1.24$ ) among metacognitive strategies. This shows that the students did not prefer to use this kind of extracurricular activity. According to this result, it seems that the Duhok University students very rarely listened to English radio programmes. The development of new technology in Northern Iraq, for example the internet might be the major reason affecting the students to less likely listen to radio programmes. Instead of this, they might tend to spend their time on internet programmes and songs rather than radio programmes.

The fifth least frequently used strategy was the item 32, "Read an English language newspaper" ( $\mathrm{M}=2.49 ; \mathrm{SD}=1.16$ ). This finding is in line with Pourshahian et al. (2012), who found "Read an English language newspaper" strategy to find out the meaning of the new word as the least frequently used strategy among the undergraduate ELT students. Moreover, Tek (2006) found that reading an English language newspaper to learn vocabulary was among the disfavored strategies. The reason why this strategy had been found among the least used strategies might be from the fact that Kurdish students do not give great attention to reading authentic texts, particularly newspapers or magazines.

## VLS use and gender

The study involved 199 male and 267 female learners. For the purpose of relationship between the gender and the frequency of use of VLSs, using independent-samples t-test was calculated. In terms of overall strategies, there were no significant differences between male and female learners. The statistically significant differences were found only between the use of four individual strategies out of thirty-six strategies. However, studies examining the gender as a key factor on strategy use (e.g., Liao, 2004; Yan, 2009) found that there was a clear significant difference between gender and strategy use. They revealed that the use of VLSs had a significant correlation with gender, and they found that the female students generally had a higher use of learning strategies than male students. Similarly, the results of some other previous researches (e.g., Catalan, 2003; Boonkongsaen \& Intaraprasert, 2014) showed that the percentage of overall females' strategy use were higher than the male students. In contrast, this finding was correlated with the results of the study conducted by Pourshahian et al. (2012), who found that there was a slight difference between gender and the use of VLSs. Moreover, the results of some other previous research studies (e.g., Khatib et al., 2011; Khoshsaligheh, 2009; Zhang, 2009) revealed that there was no significant
difference between gender and strategy use, they concluded that the female and male learners turn out to be equal in strategy use.

## Significant differences of VLS use based on gender

In the Kurdish context, gender difference as a factor that might have an effect on learner's VLS use, has received little attention. In this study, gender was one of the key factors on the use of VLSs. The results revealed that the female learners slightly applied more learning strategies than male learners, especially in using social strategies. The results in table 15 show the significant differences only in four individual strategies found between gender and strategy use.

Table 15
Significant differences of VLS use based on gender

| Strategy Items | Gender | N | Mean | SD | T | d.f | Sig |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Take notes in class | male | 199 | 3.58 | 1.10 | -3.49 | 464 | . 001 |
|  | female | 267 | 3.92 | . 95 |  |  |  |
| Test with your parents, if they know English. | male | 199 | 1.72 | 1.00 | -2.95 | 464 | . 003 |
|  | female | 267 | 2.03 | 1.17 |  |  |  |
| Learn by pair work in class | male | 199 | 2.90 | 1.09 | -3.30 | 464 | . 001 |
|  | female | 267 | 3.22 | 1.01 |  |  |  |
| Learn by group work in class | male | 199 | 3.00 | 1.17 | -3.05 | 464 | . 002 |
|  | female | 267 | 3.32 | 1.05 |  |  |  |

In this study, the significant differences were found only in using four strategies. Female learners were more frequent strategy users in those four strategies than male learners. One of these significant differences was found in "Taking notes in class" strategy between male and female learners $t(464)=-3.49, p<.001$. The results in table 15 indicate that the female learners $(M=3.92)$ seem to take more notes in the class than the males $(M=3.58)$. This finding suggests that inside the classroom, female learners are more active and follow the teacher's instructions more than male learners. The second difference between gender and strategy use was found in "Testing with your parents, if they know English" strategy $t(464)=$
$-2.95, p<.003$. The results show that female learners $(\mathrm{M}=2.03)$ tend to test the meaning of the new word with their parents more than male learners ( $\mathrm{M}=1.92$ ). In other words, this finding reveals that daughter and parents communicate on testing the meaning of the new words more than son and parents.

In literature review, research studies have investigated that females talk to parents more than males, such as Noller and Callan (1991) stated, "females talk more to parents and disclose more in conversation regarding issues such as interests, family sex roles and relationships" (as cited in McNaughton,n.d, p.27). Consequently, females are more verbally interactive with parents and receive affection from parents in general than males. Therefore, this might be a main reason that female learners used to test the meaning of the new words with their parents more than male learners. Furthermore, in the Kurdish background culture, females spend most of their times staying at home compared to males. Kurdish males have a more freedom not to stay at home than females, who have a limited freedom. Therefore, the fact that females spend more time staying at home might be another reason why they are more inclined to test the meaning of the new words with parents than males. The significant difference was also found in both social strategies, which were "Learn by pair work in class" $t(464)=-3.30, p<.001$ and "Learn by group work in class" $t(464)=-3.05, p<.001$. The female learners $(M=3.22)$ showed that they preferred more to work in pairs than males $(M=$ 2.90). Interestingly, the same with the frequency of use of strategy "Learn by group work in class", that females $(\mathrm{M}=3.32)$ were using it more frequently than the males $(\mathrm{M}=3.00)$.

These findings suggest that females tend to build social interaction and learn the meaning of the new word through pair or group work more than males, such as Timmers and Fischer (1998) stated that "females' communication patterns focus on relationships and females' focus on power" (as cited in McNaughton,n.d, p.27). These findings are in line with Boonkongsaen and Intaraprasert (2014), who found that female learners tend to ask friends to
find out the meaning or other aspects of vocabulary more than females. Likewise, there have been investigations between gender difference and teachers' interaction in language classrooms, such as Batters (1986), who concluded that there were significant differences between male and female learners. He found that female students spent most of their times inside the classroom on "attentive activities" than male students. Attentive activities mean listening to the classmates, the teacher, observing and reading (as cited in Lin, 2011).

The most plausible explanation for the frequent use of social strategies by females could be that females in general are more inclined to interact and build social relationships than men. Several research studies explained that females seek for help more than males, females are more eager to keep on the need for social support and approval (Ehrman \& Oxford, 1989). These findings also go in line with Alhaysony (2012), who found that female students preferred to use social strategies more frequently than their counterparts. Besides, Oxford and Nyikos (1989) found that females used more conversational input (e.g. asking for pronunciation and correction) strategies than male learners. In further support of this finding, Pourshahian et al. (2012) suggested that females usually employ social strategies, which promote communicative competence whereas males do not use social strategies actively. Hall (2011) stated that if the idea of believing that female learners are better L2 learners than male learners is right, then probably it is resulted from their effective social interactions (as cited in Boonkongsaen \& Intaraprasert, 2014). These findings support the idea that the females tend to use more social strategies than males.

## VLS use and grade level

The study included 466 students from four grade levels at the Duhok University. The first grade includes 129 participants, the second grade 139, third grade 106 and fourth grade 92 participants.

To investigate whether there are any significant differences in VLSs preferences among the students at the four grade levels, One-way ANOVA test was applied. As the results in the table 16 shows, the reported strategies by the students among all the grade levels were used in the medium level. The results in the table indicate that the fourth year students reported the highest mean scores of VLSs among the four grade levels of students $(\mathrm{M}=3.03)$. This indicated that the fourth year students were the most frequent VLSs users. The third year students were the second most frequent strategy users $(M=3.01)$. This is followed by the first year students who tend to be the third most strategy users with the mean of 2.99 and second year students were found to be the fourth strategy users with a slight mean lower than the first year students ( $\mathrm{M}=2.92$ ).

Table 16
$V L S$ use among the grade levels

| The Grade | Number | Mean | SD | Rank |
| :--- | :--- | :--- | :--- | :---: |
| Fourth grade | 92 | 3.03 | 1.05 | 1 |
| Third grade | 106 | 3.01 | 1.10 | 2 |
| First grade | 129 | 2.99 | 1.13 | 3 |
| Second grade | 139 | 2.92 | 1.08 | 4 |

The results in table 16 show that there is a slight difference among the frequency of use of the grade levels and strategy use. Despite this, a close look at the results shows that the fourth and the third year students use more strategies than the second and the first year students. Therefore, it can be said, that the results reveal that there is a significant difference in the frequency of use of VLSs between the fourth, third year students and the second, first
year students. This finding suggests that the more experienced students (fourth and third year students) in studying English reported more frequent use of VLSs than the less experienced students (second and first year students) in learning English. Similar result was found by some previous researchers (e.g., Ahmed, 1989; Gu \& Johnson, 1996; Schmitt, 1997). Shmais (2003) explained that it is a common belief that the use of learning strategies has a positive relation with language proficiency. Ahmed (1989) stated that the more experienced learners use more strategies. It seems that the experienced language learners in English combine and orchestrate their use of particular vocabulary in a successful way. The high frequency of use of VLSs by fourth and third level learners might have several reasons, for example, they might have a good knowledge of vocabulary. Researchers (e.g., Intaraprasert \& Boonkongsaen, 2014; Hamzah et al., 2009) revealed that the students with high and low vocabulary knowledge tend to use VLSs differently. Moreover, the fourth and third year students could have high proficiency of vocabulary, thus this high proficiency might have motivated them to use VLSs frequently.

## Significant differences of VLS use based on grade level

The results of post hoc analysis (Dunnett and LSD) showed several significant differences among the grade levels and VLS use (see table 17).

Table 17
Significant differences of VLS use based on grade levels

| Strategy category |  | Sum of Squares | Df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cognitive 1 | Between Groups | 11.306 | 3 | 3.769 | 3.095 | . 027 |
|  | Within Groups | 562.617 | 462 | 1.218 |  |  |
|  | Total | 573.923 | 465 |  |  |  |
| Metacognitive 2 | Between Groups | 13.437 | 3 | 4.479 | 3.900 | . 009 |
|  | Within Groups | 530.522 | 462 | 1.148 |  |  |
|  | Total | 543.959 | 465 |  |  |  |
| Social 9 | Between Groups | 17.626 | 3 | 5.875 | 4.803 | . 003 |
|  | Within Groups | 565.132 | 462 | 1.223 |  |  |
|  | Total | 582.758 | 465 |  |  |  |
| Memory 11 | Between Groups | 26.827 | 3 | 8.942 | 8.060 | . 000 |
|  | Within Groups | 512.566 | 462 | 1.109 |  |  |
|  | Total | 539.393 | 465 |  |  |  |
| Metacognitive 13 | Between Groups | 40.565 | 3 | 13.522 | 11.653 | . 000 |
|  | Within Groups | 536.090 | 462 | 1.160 |  |  |
|  | Total | 576.655 | 465 |  |  |  |
| Social 15 | Between Groups | 15.450 | 3 | 5.150 | 4.695 | . 003 |
|  | Within Groups | 506.765 | 462 | 1.097 |  |  |
|  | Total | 522.215 | 465 |  |  |  |
| Cognitive 16 | Between Groups | 11.157 | 3 | 3.719 | 3.302 | . 020 |
|  | Within Groups | 520.424 | 462 | 1.126 |  |  |
|  | Total | 531.582 | 465 |  |  |  |
| Memory 20 | Between Groups | 18.128 | 3 | 6.043 | 5.680 | . 001 |
|  | Within Groups | 491.454 | 462 | 1.064 |  |  |
|  | Total | 509.582 | 465 |  |  |  |
| Metacognitive 25 | Between Groups | 16.491 | 3 | 5.497 | 3.633 | . 013 |
|  | Within Groups | 699.063 | 462 | 1.513 |  |  |
|  | Total | 715.554 | 465 |  |  |  |
| Metacognitive 35 | Between Groups | 31.483 | 3 | 10.494 | 7.874 | . 000 |
|  | Within Groups | 615.747 | 462 | 1.333 |  |  |
|  | Total | 647.230 | 465 |  |  |  |

The first significant difference was found in the use of strategy "Paraphrase the word's meaning by yourself" $(f[3,462]=3.09, p=.027)$. The results show that the fourth year students $(M=3.27)$ tend to paraphrase the word's meaning more frequently than the first year
students ( $\mathrm{M}=2.81$ ). This might be because the fourth year learners have a good knowledge of vocabulary to paraphrase the word's meaning. In contrast, the first year students might be less experienced in English to paraphrase the meaning of the new word. Another significant difference was found in using "Learn words from paper tests (learn from failure)" between the first year students and all the other grades $(f[3,462]=3.90, p=.009)$. The first year students $(M=3.58)$ learned words from paper test more frequently than the second $(M=3.23)$, third $(\mathrm{M}=3.31)$ and fourth $(\mathrm{M}=3.21)$ year students. A significant difference has also been found in the use of the social strategy "Learn by group work in class" $(f[3,462]=4.80, p=.003)$. The results indicate that the fourth year students $(M=3.56)$ preferred to learn by group work to find out the meaning of the new word more frequently than the first ( $\mathrm{M}=3.16$ ), second ( $\mathrm{M}=3.02$ ) and third $(M=3.09)$ year students. The reason for the high use of the fourth year students in group work learning strategy than the students of other three grades, might be because the fourth year students have a strong relationship among each other and know each other better than the students of other previous years of study. Therefore, this might have affected them to interact and work together in learning language more than other grade levels of students. Another significant difference in frequency of use of memory strategy "Connect the word to its synonyms and antonyms" was also found among the grade levels $(f[3,462]=8.060, p=$ .000). The results show that the second $(M=3.17)$, third $(M=3.26)$ and fourth year students $(M=3.28)$ connected the word to its synonyms and antonyms more frequently than the first year students $(M=2.70)$. It is interesting to find that the first year students disfavor to connect the word to its synonyms and antonyms compared to other grade levels. This might indicate that since the first year students are new learners, they might have poor vocabulary knowledge to use this kind of strategy. In contrast, the popularity of this strategy by the second, third and fourth year students reveals that the vocabulary knowledge increases with the years of study. A significant difference was also found among the students of different grade levels in the use
of metacognitive strategy, "Testing with your parents, if they know English" $(f[3,462]=$ $11.653, p=.000)$. Interestingly, the first year students $(M=2.35)$ preferred to test the meaning of the new word with their parents more frequently than the second $(\mathrm{M}=1.80)$, third $(\mathrm{M}=1.78)$ and fourth year students $(\mathrm{M}=1.55)$. The reason of the high frequency of use of this strategy by the first year students might be that the learners are new university students and this might have affected them to be more conscious of the learning process, in contrast to the other grade level students that they might rely on their learning experience in English. A correlation was also found between grade level and the frequency of "Learn by pair work in class" strategy ( $f$ $[3,462]=4.695, p=.003)$. The results show that the first year students $(M=3.34)$ were more eager to learn the meaning of the new word by pairs than the second $(\mathrm{M}=2.86)$ and the fourth year students $(\mathrm{M}=3.05)$. The high frequency of use of learning a word in pairs by the first year learners might be because they were not familiar with a wide range of vocabulary and this might have pushed them to work in pairs. The other reason might be that as beginners, first year students were more motivated and keen to know the meaning of the word in pairs to follow the instructions effectively. The infrequent use of pair work in the class in learning words by fourth year students might be because they feel more confident to use this strategy. The strategy "Use new word in a sentence" was a more common strategy $(f[3,462]=3.302$, $p=.020)$ among the third $(\mathrm{M}=3.46)$ and fourth year students $(\mathrm{M}=3.34)$ than among the second year students $(M=3.05)$. The frequent use of new words in sentences by the fourth and third year students might be because of their English proficiency to put unknown words in sentences. Moreover, it is interesting to find the occurrence of using a word in sentences increase as students get towards higher-grade levels. Thus, it can be concluded that as the students become more experienced, a greater attention is paid to context. Another significant difference in the use of strategy "Memorize parts of speech" $(f[3,462]=5.680, p=.001)$ was found among the grade level students. The strategy "Memorize parts of speech" was a more
popular strategy among the fourth $(\mathrm{M}=3.58)$ and third year students $(\mathrm{M}=3.32)$ than the first year students $(M=3.01)$. The fourth year students $(M=3.58)$ used the "Memorize parts of speech" strategy more frequently than the second year students ( $\mathrm{M}=3.22$ ), and the fourth year students $(M=3.58)$ used it more than the third year students $(M=3.32)$. It is interesting to find that as the students pass to other stage of the learning process, the frequency of use of "Memorize parts of speech" becomes higher. This result indicates that the most experienced learners in studying English use more frequent strategies than the less experienced in studying English. The strategy "Listen to English radio program" from metacognitive strategies has also been found to be different in frequency of use among the grade levels $(f[3,462]=3.633$, $p=.013)$. The fourth $(M=2.75)$ and third year students $(M=2.54)$ tended to listen to English radio programmes to learn the meaning of a new word more frequently than the first year students $(M=2.21)$. Moreover, the fourth year students $(M=2.75)$ used to listen to English radio programmes more commonly than the second year students $(M=2.41)$. This means that as the higher the learners' English proficiency is, the more they use extracurricular sources in learning new words. The fourth and third year learners might have a better knowledge of vocabulary items than the first year students to listen to English radio programmes.

The last significant difference was found in "Using internet" among the grade level ( $f$ $[3,462]=7.874, p=.000)$. The results show that the fourth $(\mathrm{M}=4.20)$ and second year students ( $M=3.92$ ) used internet more frequently than the first year students $(M=3.48)$. The second year students $(M=3.92)$ used internet more frequently than the third year students (3.69). The fourth year students $(\mathrm{M}=4.20)$ used internet more frequently than the third year students (3.69). The frequency of use of this strategy depends, to some extent, on the students' grade level. In general, this strategy is mostly preferred by the fourth year students than the first, second and third year students. This might happen because the fourth year
students have more experience in using internet to find out the meaning of the new word than other grade levels.

Generally, most of the fourth and third year students are better strategy users than the second and first year students. According to the previous data on differences among different grade levels in strategy use, whenever a difference was found, the higher-grade level of students tended to use this strategy more frequently.

## VLS use and field of study

The study also aims to investigate if there are any significant differences between ELT and ELL students in VLS use.

The students of this study were composed of two different fields of study. The ELT students include 223 participants while the ELL students include 243 participants. The ELT students were from the Faculty of Educational Science and the ELL students were from the Faculty of Humanities. In Faculty of educational Science, the English department is concerned with introducing the students to various steps of the development of the English language, and the curriculum is generally concentrates on such psychology, linguistics, grammar and methods of teaching. Moreover, the English department aims at preparing students to be skillful teachers in governmental establishments. In Faculty of Humanities, the English department concentrates on language and literary studies by offering a comprehensive recognition of English literature and English as a universal language. English department in this faculty aims to prepare individuals with different career objectives. It mainly prepares translators and interpreters to work in various government and non-governmental institutions and organizations.

## Significant differences of VLS use based on field of study

For the purpose of comparison between the two major fields of study, independent samples t-test revealed that there were only six significant differences in the strategy use among the 36 strategies used by the ELT and ELL students. Therefore, the findings revealed that the ELT and ELL learners studying at the Duhok University were more alike than different in VLS use. The results showed that the ELT learners were higher strategy users in "Connect the word to its synonyms and antonyms", "Use new word in sentences","Ask your teacher for sentence including the new word", and "Memorize parts of speech" than ELL learners. Only the ELL learners showed that they use "Using internet" more frequently than ELT learners. Table 18 illustrates the significant differences in two major fields of study and strategy use.

Table 18
Significant differences of VLS use based on field of study

| Strategy Items | Major Field | N | Mean | SD | T | d.f | Sig. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Connect the word to its <br> synonyms and antonyms |  | ELT | 223 | 3.27 | 1.03 |  | 3.609 |
|  | ELL | 243 | 2.91 | 1.08 |  |  | .000 |
|  | ELT | 223 | 3.44 | 1.07 | .128 | 464 | .000 |
|  | ELL | 243 | 3.08 | 1.03 |  |  |  |
| Ask your teacher to check | ELT | 223 | 2.47 | 1.08 | 3.139 | 464 | .002 |
| your word lists for accuracy. | ELL | 243 | 2.17 | .96 |  |  |  |
| Ask your teacher for sentence | ELT | 223 | 2.58 | .78 | 5.207 | 464 | .000 |
| including the new word | ELL | 243 | 2.27 | 1.13 |  |  |  |
| Memorize parts of speech | ELT | 223 | 3.51 | .99 | 5.197 | 464 | .000 |
|  | ELL | 243 | 3.02 | 1.04 |  |  |  |
| Use English language <br> internet | ELT | 223 | 3.64 | 1.22 | -2.80 | 464 | .005 |

The results in the table 18 shows that the first significant difference was found in using "Connect the word to its synonyms and antonyms" $t(464)=-3.609, p<.000$. The ELT learners $(M=3.27)$ were more eager to connect the words to its synonyms than the ELL learners $(M=2.91)$. The significant difference was also found in the strategy "Use new word in sentences" between the two fields of study $t(464)=.128, p<.000$. The use of the new word
in sentences to learn new vocabulary was more preferred by ELT learners $(\mathrm{M}=3.44)$ than the ELL learners ( $\mathrm{M}=3.08$ ). Moreover, according to the results, "Ask your teacher to check your word lists for accuracy" strategy $t(464)=.3 .139, p<.002$ was a more common strategy among the ELT learners than the ELL learners. Another significant difference was found between the ELT and ELL learners in the frequency of use of the strategy "Ask your teacher for sentence including the new word" $t(464)=5.207, p<.000$. The ELT students $(\mathrm{M}=2.58)$ were more frequently asking the teachers sentences including the new word than the ELL students ( $\mathrm{M}=2.27$ ). This is followed by another significant difference in using "Memorize parts of speech" strategy by the two major fields of study $t(464)=5.197, p<.000$. The ELT learners $(M=3.51)$ preferred to use parts of speech in memorizing a new word more frequently than the ELL learners $(\mathrm{M}=3.02)$.

The ELT learners were frequent users of the "Connect the words with its synonyms and antonyms" strategy than ELL learners. This could be because the ELT teachers during their lessons focused more on connecting the word to its synonyms and antonyms. Moreover, the ELT students preferred to use new words in sentences, ask teachers for sentence including the new word and ask teachers to check their word lists for accuracy more frequently than ELL students. A close look at the high frequency of use of these strategies by the ELT learners, shows that these strategies have more relationship with the ELT learners than the ELL learners. This could be because ELT learners deal with the structure of sentences and grammar rules more frequently than ELL learners. Therefore, this might have led the ELT students to use the new word in sentences. ELT students preferred to use "Memorize parts of speech" strategy to learn the meaning of a new a word more frequently than ELL students. The ELT learners might have more experience in parts of speech than ELL learners, who rarely deal with parts of speech.

A significant difference was also found in "Using internet" strategy $t(464)=-2.80, p<$ . 005 among the students of grade levels. Surprisingly, the ELL students ( $\mathrm{M}=3.95$ ) used internet strategy more frequently than ELT students $(M=3.64)$. The results show that the ELL learners were more eager to use internet to find the meaning of a new word than ELT learners. The reason could be that when the ELL students deal with literature, especially medieval literature, they probably face many difficult words that might not be found in modern dictionaries. Therefore, these difficult words might have affected the students to use internet to find the meaning of the new words. To summarize, it was concluded that there were minor differences between the ELT and ELL learners in strategy use. In general, the ELT students were statistically more strategy users than the ELL students.

## CHAPTER V

## CONCLUSIONS AND RECOMMENDATIONS

## Introduction

In this chapter, first a brief summary of the study will be presented. Then, the main findings of the study will be presented. Finally, implications and recommendations for further research will be provided.

## Summary of the study

The purpose of the study was to investigate and compare the use of VLSs by the ELT and ELL learners studying at Duhok University. The main objectives of the study were to find out the total level of strategy use and the most and least frequently used VLSs by the students. The study also aims to explore if there were any significant differences between gender, grade levels, field of the study and VLS use. A questionnaire in English was used for the data collection. It consisted of thirty-six items classified under four strategy categories. This questionnaire was the one used by Tek (2006), who adapted it from Kudo (1999), who relied mainly on the study conducted by Schmitt (1997). The study included 466 students and the SPSS for Windows analyzed the data.

The results of descriptive statistics showed that Duhok University students were medium strategy users. Even the level of strategy use for all the four strategy categories reported by the students was found to be medium. The cognitive strategies were the most frequently used strategies among the participants. In contrast, social strategies were the most disfavored strategies. According to Oxford's (1990) scoring system, five strategies were found to be at the highly used and five strategies were used rarely. The five most commonly used strategies were among the cognitive, metacognitve and memory strategies whereas the five least used strategies were among the metacognitive and social strategies. The most
preferred strategies were, "Using internet,"Taking notes in class", "Use a bilingual dictionary", "Image word's meaning" and "Use a monolingual dictionary". In contrast, the five least preferred strategies were, "Testing with your parents, if they know English", "Ask your school teachers for Kurdish translation", "Ask your teachers to check your word lists for accuracy", "Listen to English-radio programs" and "Read an English language newspaper".

Interestingly, using internet was found to be the most common strategy among the Duhok University students. The high frequency of use of this strategy is probably the result of the development of technology and the quick widespread of commercial internet services in Northern Iraq during the last few years. Three of the most used strategies were among cognitive strategies, one from metacognitive and one from memory strategies. It was concluded that the students of this study mostly used cognitive strategies. On the other hand, three of the least frequently used strategies were from metacognitive strategies and two from social strategies. The gender as a key factor on strategy use in this study, there were significant differences only in four individual strategies. When there were significant gender differences in VLSs use, these differences were always in favor of female learners. The descriptive statistics revealed that females seem to use certain strategies more frequently than males. These strategies were, "Taking notes in class", "Testing with your parents, if they know English", "Learn by group work in class" and "Learn by pair work in class". Based on these significant differences between gender and strategy use, it can be concluded that females tend to use social strategies more frequently than males. Hall (2011) suggested that female learners are better L2 learners and the use of effective social strategies by them represent the main cause. Different significant differences were found between the grade levels and strategy use. A general look at the differences reveals that the fourth and third grade year students were more frequent strategy users than the first and second year students. Referring to each grade levels, most of the significant differences were found between the
fourth and first year students. The fourth year students seem to use paraphrasing, learning by group work, connecting the word to its synonyms or antonyms, memorizing parts of speech, listening to English-radio programmes and using internet to find the meaning of the new word more frequently than the first year students. Moreover, the third year students were more frequent user of connecting the word to its synonyms and antonyms, using new word in a sentence, memorizing parts of speech and listening to English radio programmes to learn the meaning of a new word than the first year students. The most plausible explanation for the frequent use of these strategies by the fourth and third year students is that they have more experience in learning vocabulary than first and second year learners. Ahmed (1989) stated that the more experienced learners use more strategies. In contrast, the first year students were found to be more frequent strategy users in two specific strategies which were "Learn words from paper test" and "Testing with your parents, if they know English" than the second, third and fourth year students. The infrequency of use of these strategies by the fourth, third and second year students might be because they feel more confident to use them. Concerning the field of study and strategy use, the results indicated that there were statistically significant differences between the ELT learners and ELL learners. The ELT learners were more frequent strategy users than ELL learners. The ELT students preferred to connect the word to its synonyms and antonyms, use new word in sentences, ask the teacher to check their word lists for accuracy, ask the teacher about the sentence including the new word, and memorize parts of speech more frequently than the ELL learners. Only using internet to find the meaning of known word was found to be the most popular strategy among ELL learners than ELT learners. The ELT learners used more social strategies, especially asking their teachers to discover the meaning of the new word and those strategies which have a direct relationship with the department (e.g. memorize parts of speech) more frequently than the ELL learners. In general, the ELT students were statistically more strategy users than the ELL students.

To conclude, the most preferred strategies were cognitive ones. This is followed by the memory and metacognitive strategies. Social strategies were the most disfavored ones by the students.

## Implications

Based on the findings of this study, it was concluded that the students were familiar with limited VLSs. The medium level of VLS use indicated that the students were not quite aware of different VLSs. Therefore, several implications can be made based on the results of this study:

It can be said, that in Duhok University language classes, vocabulary was not taught explicitly, since only several VLSs among 36 strategies were popular among the students. The results showed that the students were not aware of a wide range of strategies. This indicates that even language teachers might not know enough about VLSs. Therefore, this study can assist the teachers and the students to have more knowledge on VLSs. The Duhok University learners must be more conscious and aware that they have the central role in the language learning process. Training learners by using various strategies would probably lead to better independent L2 learners in the language learning process. To do this, teachers need to be familiar with different kinds of VLSs at first. Then, they are required to train their learners with different learning strategies. The main aim of training learners with strategies is to enhance learner autonomy. Besides teachers should encourage students to use a greater range of VLSs in order to enable learners to find the most suitable strategy of learning a word. As Nation (2001) noted that explicit instruction of strategies proved to improve students' strategic knowledge.

Social strategies were found to be the least frequently used in this study. The least frequency of use of social strategies indicates the poor social interaction in language classes. Language teachers are required to design more cooperative learning discussions and
communicative competence activities in their L2 classroom. To do this, the university first must provide a curriculum, which is more directed towards collaborative and interaction activities to enhance learning in L2 classes. Then, language teachers are also required to arrange suitable group activities in order to encourage learners to share ideas when learning new vocabulary. Therefore, language teachers need to be aware of the importance of incorporating strategies inside language classrooms. The results of the study showed that the ELT/ELL students preferred to use a bilingual dictionary more often than a monolingual dictionary. The high preference use of bilingual dictionary might be that the students do not know how to use monolingual dictionaries appropriately. Teachers probably talk about the benefices of monolingual dictionary in classes, but they do not give enough information on how to use it. This suggests that the language teachers are more required to teach the students how to use a monolingual dictionary not just encouraging them to use it. The students also need to use the strategy of deducing the meaning of new words from the context. Furthermore, language teachers should be aware of differences in VLSs preferences between male and female learners and provide different opportunities for learning words.

## Suggestions for further research

Further research should be done to get better understanding of student's VLSs use. For example, since the respondents of this study were medium strategy users of VLSs, it would be interesting to see how the teachers teach words and whether they apply any of the strategies in their own classrooms. Moreover, the parents' English language as a factor affecting their childrens' learning process seems important to be investigated more widely in future studies. Using qualitative data collection to triangulate the data could reveal whether the respondents' answers in the written questionnaire are similar with what they actually do. To attain this aim, qualitative data collection method and classroom observation should be employed. In addition, although this study showed that there was only a slight difference between male and
female learners in VLS preferences, this does not mean that male and females are similar in other fields or levels of education. No difference between males and females among English majors does not mean that there is no difference among the students majoring in other subjects. No difference in VLS use between male and female learners among university students does not confirm that there is no difference between males and females in the basic or preparatory schools. All these aspects need to be investigated in future studies in order to get a better understanding of gender differences in SLL.

## REFERENCES

Ababneh, S. (2013). Strategies used by Jordanian university students' in dealing with new vocabulary in English. Journal of Education and Practice, 4(4)1-6.

Alemi, M., \& Tayebi, A. (2011). The Influence of incidental and intentional vocabulary acquisition and vocabulary strategy use on learning L2 vocabularies. Journal of Language Teaching and Research, 2 (1), 81-98.

Alhaysony, M. (2012). Vocabulary discovery strategy used by Saudi EFL students in an intensive English language learning context. International Journal of Linguistics, 4(2), 518-535.

Al-Khasawneh, F. M. (2012). Vocabulary learning strategies: A case of Jordan University of Science and Technology. English for Specific Purposes World, 12(34), 1-15.

Amirian, S. M. R., \& Heshmatifar, Z. (2013). A survey on vocabulary learning strategies: A case of Iranian EFL university students. Journal of Language Teaching and Research, 4(3), 636-641.

Anderson, N. J. (2005). L2 strategy research. Retrieved October 8, 2013, from http://dafl.ntpu.edu.tw/files/news/56_0bf0e1bf.pdf

Asgari, A., \& Mustapha, G. B. (2011). The type of vocabulary learning strategies used by ESL students in University Putra Malaysia. English Language Teaching, 4(2), 84-90.

Bastanfar, A., \& Hashemi, T. (2010). Vocabulary learning strategies and ELT materials: A study of the extent to which VLS research informs local course books in Iran. International Education Studies, 3(3), 158-166.

Bengar, A. S., \& Kasmani, M. B. (2013). The effect of vocabulary learning strategies of EFL undergraduate students on their listening comprehension ability. Asian Journal of Social Sciences \& Humanities, 2(1), 253-259.

Boonkongsaen, N. (2012). Factors affecting vocabulary learning strategies: A synthesized study. Naresuan University Journal, 20(2), 4-53.

Boonkongsaen, N., \& Intaraprasert, CH. (2014). English vocabulary learning strategies employed by Thai tertiary-levels students with different genders and levels of vocabulary proficiency. International Journal of Scientific and Research Publications, 4(3), 1-9.

Brown, H. D. (2000). Teaching by principles: An interactive approach to language pedagogy (2 $2^{\text {nd }}$ ed.). New York: Longman.

Campillo, R. M. L. (1995). Teaching and learning vocabulary: An introduction for English students. 35-49. Retrieved October 20, 2013, from http://www.uclm.es/ab/educacion/ensayos/pdf/revista10/10_6.pdf

Catalan, R. M. J. (2013). Sex differences in L2 vocabulary learning strategies. International Journal of Applied Linguistics, 13(1), 54-77.

Chamot, A. U. (2004). Issues in language learning strategy research and teaching. Electronic Journal of Foreign Language Teaching, 1(1), 14-26.

Chang, Ch. (2011). Language learning strategy profile of university foreign language majors in Taiwan. Electronic Journal of Foreign Language Teaching, 8(2), 201- 215.

Choudhury, A. S. (2010). Teaching vocabulary in the ESL/EFL classroom: Central pedagogical issues. MJAL Journal, 2(4), 306-316.

Cicko, P., Pojani, V., \& Stavre, B. (2013). Vocabulary learning strategies - A survey of EFL Albanian university students. Indian Journal of Applied Research, 3(10), 1.7.

Creswell, J. W. (2012). Educational research: planning, conducting, and evaluating quantitative and qualitative research ( $4^{\text {th }}$ ed.). Boston, MA: Pearson Education.

Dóczi, B. (2011). Comparing the vocabulary learning strategies of high school and university students: A pilot study. WoPaLP, 5-138-158.

Ellis, R. (1994). The study of second language acquisition. Oxford: Oxford University Press.

Ehrman, M., \& Oxford, R. (1989). Effects of sex differences, career choice and psychological type on adult language learning strategies. The Modern Language Journal, 73(1), 113.

Ellis, R. (1996). Understanding second language acquisition. Oxford: Oxford University Press.

Erten, I. H., \& Williams, M. (2008). A comparative look into how to measure the effectiveness of vocabulary learning strategies: Through using percentages or correlation coefficients. Journal of Language and Linguistic Studies, 4(2), 56-72.

Gu, P. Y. \& Johnson, R. K. (1996). Vocabulary learning strategies and language learning outcomes. Language Learning, 46, 643-679

Hamzah, M. S. G., Kafipour, R., \& Abdullah, S. K. (2009). Vocabulary learning strategies of Iranian undergraduate EFL students and its relation to their vocabulary size. European Journal of Social Sciences, 11(1), 39-50.

Harmer, J. (1991). The practice of English language teaching. London: Longman.
Hedge, T. (2000). Teaching and learning in the language classroom. Oxford: Oxford University Press.

Heidari, F., Izadi, M., \& Ahmadian, M. V. (2012). The relationship between Iranian EFL learners' self-efficacy beliefs and use of vocabulary learning strategies. Canadian Center of Science and Education, 5(2), 174-182.

Heidari, F. L., Karimi, F., \& Imani, A. (2012). Vocabulary learning strategy instruction: Its impact on English for specific purpose vocabulary achievement and reading comprehension. Middle-East Journal of Scientific Research, 12(11), 1488-1496.

Hogben, D., \& Lawson, M. J. (1996). The vocabulary learning strategies of foreign language students. Language Learning, 46(1), 101-135

Jenkins, J. (2006). Current perspectives on teaching World English and English as a lingua franca. TESOL Quarterly, 40(1), 157-181.

Kafipour, R. \& Naveh, M. H. (2011). Vocabulary learning strategies and their contribution of EFL undergraduate students in Kerman Province. European Journal of Social Science, 23(4), 626-647.

Karami, S., \& Barekat, B. (2012). Vocabulary learning strategies: The effect of level of proficiency on the strategy use. Trends in Advanced Science and Engineering, 6(1), 79-87.

Khamkhien, A. (2000). Factors affecting language learning strategy reported usage by Thai and Vietnamese EFL learners. Electronic Journal of Foreign Language Teaching, 7(1), 66-85.

Khatib, M., Hassanzadeh, M., \& Rezaei, S. (2011). Vocabulary learning strategies of Iranian upper-intermediate EFL learners. Canadian Center of Science and Education, 4(2), 144-152.

Khoshsaligheh, M. (2009). Vocabulary learning strategies employed by Iranian EFL learners and their relations to listening performance. Retrieved March 10, 2014, from http://profdoc.um.ac.ir/articles/a/1033647.pdf

Komol, T., \& Sripetpun, W. (2011). Vocabulary learning strategies employed by undergraduate students and its relationship to their vocabulary knowledge. Paper presented at the 3rd International Conference on Humanities and Social Sciences, Prince Songkla University. Retrieved March 8, 2014 from ftp://fs.libarts.psu.ac.th/research/conference/Proceedings3/article/2pdf/008.pdf

Kudo, Y. (1999). L2 vocabulary learning strategies. Retrieved October 18, 2013, from http://nflrc.hawaii.edu/NetWorks/NW14.pdf

Lessard-Clouston, M. (2008). Strategies and success in technical vocabulary learning: Students' approaches in one academic context. Indian Journal of Applied Linguistics, 34(1-2), 31-63.

Liao, Y. (2004). A survey study of Taiwan EFL freshmen's vocabulary learning strategies. Retrieved March 3, 2014, from http://ord.npue.edu.tw/ezcatfiles/b008/img/img/1300/E21-9.pdf

Lin, L. (2011). Gender differences in L2 comprehension and vocabulary learning in the videobased CALL program. Journal of Language Teaching and Research, 2(2), 295-30. doi:10.4304/jltr.2.2.295-301

Lip, P. Ch. (2009). Investigating the most frequently used and most useful vocabulary language learning strategies among Chinese EFL postsecondary students in Hong Kong. Electronic Journal of foreign Language Teaching, 6(1), 77-87.

Liu, D., (2004). EFL proficiency, gender and language learning strategy use among a group of Chinese technological institute English majors. Annual Review of Education, Communication and Language Sciences 1, 1-10.

Loucky, J. P. (2006). Maximizing vocabulary development by systematically using a depth of lexical processing taxonomy, CALL resources, and effective strategies. CALICO Journal, 23(2), 363-399.

Macro, E. (2003). Teaching and learning a second language: A guide to recent research and its approaches. London: Continuum.

Magno, C. (2010). Korean students' language learning strategies and years of studying English as predictors of proficiency in English. TESOL Journal 2, 39-61.

Martinez, I. M. P., \& Carril, R. F. (2009). English vocabulary teaching and learning in the Galician EFL context. The role and importance of vocabulary learning strategies (doctoral dissertation, The University of Santiago de Compostela, Santiago de Compostela, Spain). Retrieved February 22, 2014 from http://dspace.usc.es/bitstream/10347/2806/1/9788498873771_content.pdf

Matsuoka, W., \& Hirsh, D. (2010).Vocabulary learning through reading: Does an ELT course book provide good opportunities? Journal of Reading in a Foreign Language, 22(1), 56-70.

McCarthy, M. J. (1990). Vocabulary. Oxford: Oxford University Press.
McComish, J. (1990). The word spider: A technique for academic vocabulary learning in curriculum area. Guideline, 12, 26-36.

McNaughton, J. (n.d). Gender differences in parent child communication patterns. Retrieved April 12, 2014, from http://murphylibrary.uwlax.edu/digital/jur/2000/menaughton.pdf

Mombeini, S., Gorjian, B., \& Pazhakh, A. (2013). The role of encoding and rehearsal strategies in developing EFL learners' vocabulary recall and retention. International Journal of Language Learning and Applied Linguistics World, 4(4), 283-302.

Nation, I.S.P. (1990). Teaching and Learning Vocabulary. Boston: Heinle \& Heinle.
Nation, P. (2001). Learning vocabulary in another language. Cambridge: Cambridge University Press.

Nelson, D. (2012). ESP teaching and language system. Research Expo International Multidisciplinary Research Journal, 2(3), 24-29

Nunan, D. (1992). Research methods in language learning. Cambridge: Cambridge University Press.

Nunan, D. (1999). Second language teaching and learning. New York: Heinle \& Heinle.
O'Malley, J. M., \& Chamot, A. U. (1990). Learning strategies in second language acquisition. Cambridge: Cambridge University Press.

Oxford, R., \& Crookall, D. (1990). Vocabulary learning: A critical analysis of techniques. TESL Canada Journal, 7(2), 9-30.

Oxford, R., \& Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. The Modern Language Journal, 79(3), 291-300.

Oxford, R. L., Nyikos, M. \& Ehram, M. E. (1988). Vive la difference: Reflections on sex differences in the use of language learning strategies. Foreign Language Annals, 21(4), 321 - 329.

Peng, S. (2009). English vocabulary learning strategies of senior high school students. (MA thesis, Suranaree University of Technology). Retrieved March 15, 2014, from http://sutir.sut.ac.th:8080/sutir/bitstream/123456789/3455/2/fulltext.pdf

Pourshahian, B., Azarfam, A. Y., \& Kalajahi, S. A.R. (2012). Does applying vocabulary learning strategies vary based on gender? The case of Turkish EFL learners. The International Institute for Science, Technology and Education (IISTE), 2(4), 1-11.

Radwan, A. A. (2011). Effects of L2 proficiency and gender on choice of language learning strategies by university students majoring in English. The Asian EFL Journal, 13(1), 115-163.

Read, J. (2000). Assessing vocabulary. United Kingdom: Cambridge University Press.
Ruutmets, K. (2005). Vocabulary learning strategies in studying English as a foreign language. Unpublished MA thesis. University of Tartu, Tartu, Estonia.

Sanchez, A., \& Manchon, R. M. (2007). Research on second language vocabulary acquisition and learning: An introduction. IJES, 7 (2), vii-xvi.

Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt \& M. McCarthy (Eds.), vocabulary: description, acquisition, and pedagogy. (pp.199-227). Cambridge: Cambridge University Press.

Schmitt, N. (2000). Vocabulary in language teaching. Cambridge: Cambridge University Press.

Shejbalova, D. (2006). Methods and approaches in vocabulary teaching and their influence on students' acquisition. Retrieved December 5, 2013, from http://is.muni.cz/th/104917/pedf_b_a2/bakalarska_prace.pdf

Shmais, W. A. (2003). Language learning strategy use in Palestine. TESL, 7(2). Retrieved October 28, 2013, from http://tesl-ej.org/ej26/a3.html

Siriwan, M. (2007). English vocabulary learning strategies employed by Rajabhat University students. Unpublished Ph.D. thesis. Suranaree University of Technology Nakhoratchasima, Thailand.

Soureshjani, K. H. (2011). Gender-oriented use of vocabulary strategies: A comparative study. Theory and Practice in Language Studies, 1(7), 898-902.

Spolsky, B. (1998). Sociolinguistics. Oxford University Press.
Subon, F. (2013). Vocabulary learning strategies employed by form 6 students. International Journal of Scientific and Research Publications, 3(6), 1-32.

Tanyer, S., \& Ozturk, Y. (2014). Pre-service English teachers' vocabulary learning strategy use and vocabulary size: A cross-sectional evaluation. Journal of Language Teaching and Research, 5(1), 37-45.

Tassana-ngam, I. (2004). The effect of vocabulary learning strategies training on Thai University students' word retention in the second language classroom. (PHD thesis, University of Essex). Retrieved March 12, 2014, from http://pirun.ku.ac.th/~fhumirt/phd.pdf

Tek, A. F. (2006). A survey on vocabulary learning strategies used by students at Osmangazi super high school. Unpublished MA thesis. Near East University, Nicosia, North Cyprus.

Thornbury, S. (2002). How to teach vocabulary. Harlow: Longman.
Thornbury, S. (2005). How to teach vocabulary. Harlow: Pearson.
Tsai, Ch., \& Chang, I. (2009). EFL vocabulary learning strategies: A comparison study of various age group learners in a community university in Taiwan. Journal of Nan Kai, 6(2), 9-14.

Ur, P. (2002). A course in language teaching: A practice and theory. UK: Cambridge University Press.

Yan, H. (2009). Empirical study on relations between gender differences and English vocabulary and the overall proficiency level. Asia Social Science, 5(10), 109-114.

Yang, W., \& Dai, W. (2011). Rote memorization of vocabulary and vocabulary development. Canadian Center of Science and Education, 4(4), 61-64.

Yongqi, P. G. (2005). Vocabulary learning strategies in the Chinese EFL context. Singapore: Marshal Cavendish.

Yu-Ling, L. (2005). Teaching vocabulary learning strategies: Awareness, beliefs and practices: A survey of Taiwanese EFL senior high school teacher. (MA thesis, University of Essex). Retrieved February 20, 2014, from http://english.tyhs.edu.tw/epaper/epaper9/thesis_eng.pdf

Wu, W. (2005). Use and helpfulness rankings of vocabulary learning strategies employed by EFL learners in Taiwan. Journal of Humanities and Social sciences, 1(2), 7-13.

Zhang, B. (2009). FL vocabulary learning of undergraduate English majors in Western China: Perspective, strategy use and vocabulary size. Canadian Center of Science and Education, 2(3), 178-185.

Zhi-liang, L. (2010). A study on English vocabulary learning strategies for non-English majors in independent college, Cross-cultural Communication, 6 (4), 152-154.

## APPENDIXES

## Appendix A

## Approval letter by the Faculty of Educational Science, Duhok University

$$
\begin{aligned}
& \text { حكومة اقلّيم كوردستان - العر اق } \\
& \text { وزارة التعليم العالمي و البحث العلمي } \\
& \text { جامعة دهو كـ } \\
& \text { فاكلنتي الـلوم اللتربوية } \\
& \text { سكول التعليم الاساسني } \\
& \text { قسم اللغة الاتكلبز ي }
\end{aligned}
$$



$$
\begin{aligned}
& \text { حكومهتا هـهرينما كورديستانتيّ - عيّر اق } \\
& \text { وهزارهتى خوينتدنى بالا و تويّريّنوهيا زانستتى } \\
& \text { زانكويا دهوك } \\
& \text { فاكولتيا زانستيتّن يـهروهرده } \\
& \text { سكولا يهزوهورده بنيات } \\
& \text { يثشكا زمانى ئينـگاليزى }
\end{aligned}
$$

Kurdistan Regional Government - Iraq
Ministry of Higher Education \& Scientific Research, University of Duhok
Faculty of Educational Science
School of Basic Education Department of English

## TO WHOM IT MAY CONCERN

## CERTIFICATION

This is to certify that the English Department, Faculty of Educational Science, School of Basic Education, has given Wisam Ali Askar, M.A student, at the Near East University permission to conduct his questionnaire on Vocabulary Learning Strategies Used by ELT and EFL students.


## Appendix B

## Approval letter by the Faculty of Humanities, Duhok University

> Kurdistan Regional Government - Iraq
> Ministry of Higher Education \& Scientific Research, University of Duhok
> Faculty of Humanities
> School of Arts
> Department of English

## TO WHOM IT MAY CONCERN

## CERTIFICATION

This is to certify that the English Department, Faculty of Humanities, has given Wisam Ali Askar, M.A student, at the Near East University permission to conduct his questionnaire on Vocabulary Learning Strategies Used by ELT and EFL Students.


Dr. Izzuddin Rajab Mohammed Head of Department of English Faculty of Humanities
University of Duhok
Email Address: izzuddin1961@yahoo.com
Cell Phone Number: 009647504315224


| Zakho Street 38 |  |  |
| :---: | :---: | :---: |
| 1006AJ Duhok | 1006 AJ دهوك |  |
| Kurdistan Region - Iraq |  |  |
| Tel: | www.uod.ac | ههرينها كوردسنانى - عيرا |

## Appendix C

## Learning strategies questionnaire

## Questionnaire of vocabulary learning strategies

Please answer the questions first, before you continue on to the following questionnaire.

1. Sex: male / female (circle one)
2. Grade level: $1^{\text {st }}$ grader $/ 2^{\text {nd }}$ grader $/ 3^{\text {rd }}$ grader $/ 4^{\text {th }}$ grader (circle one)

The following list is a list of vocabulary learning strategies. Learning strategies here refer to the methods by which you learn vocabulary. I would like to know what you actually do, NOT what you should do or want to do. I would like you to indicate how often you have used a certain strategy over the last two weeks, irrespective of the skills (i, e. listening, reading, speaking, and writing) and of the place of learning. Please indicate the frequency of the strategies you use.

1. Paraphrase the word's meaning by yourself.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :--- |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

2. Learn words from paper tests (learn from failure)

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

3. Guess from textual context in reading.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

4. Ask your school teacher for Kurdish translation.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

5. Test yourself with word tests.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :--- |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

6. Put English labels on physical objects.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :--- |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

7. Use English-language songs.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

8. Ask your teacher to check your word lists for accuracy.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :--- |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

9. Learn by group work in class.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

10. Use a monolingual dictionary.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :--- |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

11. Connect the word to its synonyms and antonyms.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

12. Use spaced word practice.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

13. Test with your parents, if they know English.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

14. Do written repetition.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

15. Learn by pair work in class.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

16. Use new word in sentences.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

17. Study and practice meaning in a group outside of class.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

18. Connect word to already known words.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

19. Take notes in class.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

20. Memorize parts of speech.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

21. Group words together within a storyline.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

22. Keep a vocabulary notebook.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

23. Image word's meaning.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

24. Connect a word to a personal experience.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

25. Listen to English- radio program.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

26. Use a bilingual dictionary.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

27. Learn words written or commercial items.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

28. Ask your teacher for paraphrase or synonym.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

29. Ask your teacher for sentence including the new word.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

30. Associate the word with its coordinates.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

31. Ask your classmates for paraphrase or synonym.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

32. Read an English language newspaper.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |


| 33. Say new word aloud when studying. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Never | occasionally | often | usually | always |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |


| 34. Ask your classmate for Kurdish translation. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Never | occasionally | often | usually | always |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

35. Use English language internet.

| Never | occasionally | often | usually | always |
| :---: | :---: | :---: | :---: | :---: |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |


| 36. Use physical action when learning a new word. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Never | occasionally | often | usually | always |
| $0 \%$ | $25 \%$ | $50 \%$ | $75 \%$ | $100 \%$ |

Please write any other strategies you have used that are not written above, if any. Thank you very much for your cooperation. I will use your answers as effectively as I can.

Researcher: Wisam Ali Askar
Supervisor: Asst. Prof. Dr. Doina Popescu
University: Near East University - Cyprus
Email: wissamaskar87@yahoo.com
Phone number: +964 7504028107

## Appendix D

T-test results of students' VLSs based on gender

|  | gender | N | M | Std. D. | S.D. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Paraphrase the word's meaning by yourself. | male | 199 | 2.99 | 1.10 | . 375 |
|  | female | 267 | 3.02 | 1.11 |  |
| 2. Learn words from paper tests (learn from failure) | male | 199 | 3.32 | 1.10 | . 850 |
|  | female | 267 | 3.34 | 1.06 |  |
| 3. Guess from textual context in reading. | male | 199 | 3.21 | . 86 | . 838 |
|  | female | 267 | 3.23 | . 85 |  |
| 4. Ask your school teacher for Kurdish translation. | male | 199 | 2.04 | 1.12 | . 689 |
|  | female | 267 | 2.02 | 1.08 |  |
| 5. Test yourself with word tests. | male | 199 | 2.82 | 1.07 | . 888 |
|  | female | 267 | 2.90 | 1.06 |  |
| 6. Put English labels on physical objects. | male | 199 | 2.62 | 1.14 | . 923 |
|  | female | 267 | 2.61 | 1.14 |  |
| 7. Use English-language songs. | male | 199 | 3.37 | 1.28 | . 844 |
|  | female | 267 | 3.42 | 1.26 |  |
| 8. Ask your teacher to check your word lists for accuracy. | male | 199 | 2.26 | 1.08 | . 301 |
|  | female | 267 | 2.35 | . 99 |  |
| 9. Learn by group work in class. | male | 199 | 3.00 | 1.17 | .002* |
|  | female | 267 | 3.32 | 1.05 |  |
| 10. Use a monolingual dictionary. | male | 199 | 3.48 | 1.15 | . 281 |
|  | female | 267 | 3.54 | 1.09 |  |
| 11. Connect the word to its synonyms and antonyms. | male | 199 | 3.12 | 1.10 | . 346 |
|  | female | 267 | 3.05 | 1.05 |  |
| 12. Use spaced word practice. | male | 199 | 2.62 | 1.12 | . 443 |
|  | female | 267 | 2.83 | 1.11 |  |
| 13. Test with your parents, if they know English. | male | 199 | 1.72 | 1.00 | .003* |
|  | female | 267 | 2.03 | 1.17 |  |
| 14. Do written repetition. | male | 199 | 3.07 | 1.08 | . 468 |
|  | female | 267 | 3.23 | 1.07 |  |


| 15. Learn by pair work in class. | male | 199 | 2.90 | 1.09 | $.001 *$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 16. Use new word in sentences. | female | 267 | 3.22 | 1.01 |  |
| 17. Study and practice meaning in a group outside of | male | 199 | 2.66 | 1.16 | .561 |
| class. | male | 199 | 3.28 | 1.03 | .414 |
| female | 267 | 3.24 | 1.09 |  |  |
| 18. Connect word to already known words. | female | 267 | 2.63 | 1.13 |  |
| 19. Take notes in class. | male | 199 | 3.05 | .93 | .352 |
| 20. Memorize parts of speech. | female | 267 | 3.16 | .94 |  |
| 21. Group words together within a storyline. | female | 199 | 367 | 3.58 | 1.10 |


| 31. Ask your classmates for paraphrase or synonym. | male | 199 | 2.90 | 1.08 | 290 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | female | 267 | 3.02 | 1.16 |  |
| 32. Read an English language newspaper. | male | 199 | 2.61 | 1.15 | .906 |
|  | female | 267 | 2.41 | 1.14 |  |
| 33. Say new word aloud when studying. | male | 199 | 3.13 | 1.26 | .158 |
|  | female | 267 | 3.31 | 1.13 |  |
| 34. Ask your classmate for Kurdish translation. | male | 199 | 2.73 | 1.29 | .089 |
|  | female | 267 | 2.97 | 1.24 |  |
| 35. Use English language internet. | male | 199 | 3.79 | 1.19 | .641 |
|  | female | 267 | 3.81 | 1.16 |  |
| 36. Use physical action when learning a new word. | male | 199 | 2.83 | 1.23 | .226 |
|  | female | 267 | 2.97 | 1.21 |  |

## Appendix E

## LSD results of students VLSs based on their grade levels

| Dependent variable | (I) grade (J) | grade | M.D. | Std. E. | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Paraphrase the word's meaning by yourself. | first grade | second grade | -. 21482 | . 13491 | . 112 |
|  |  | third grade | -. 19548 | . 14467 | . 177 |
|  |  | fourth grade | -.45779** | . 15059 | . 003 |
|  | second grade | first grade | . 21482 | . 13491 | . 112 |
|  |  | third grade | . 01934 | . 14230 | . 892 |
|  |  | fourth grade | -. 24296 | . 14832 | . 102 |
|  | third grade | first grade | . 19548 | . 14467 | . 177 |
|  |  | second grade | -. 01934 | . 14230 | . 892 |
|  |  | fourth grade | -. 26231 | . 15724 | . 096 |
|  | fourth grade | first grade | . $45779{ }^{*}$ | . 15059 | . 003 |
|  |  | second grade | . 24296 | . 14832 | . 102 |
|  |  | third grade | . 26231 | . 15724 | . 096 |
| 2. Learn words from paper tests (learn from failure) | first grade | second grade | . $40104 *$ | . 13101 | . 002 |
|  |  | third grade | . $36310{ }^{*}$ | . 14048 | . 010 |
|  |  | fourth grade | . $35920{ }^{*}$ | . 14623 | . 014 |
|  | second grade | first grade | -.40104** | . 13101 | . 002 |
|  |  | third grade | -. 03794 | . 13818 | . 784 |
|  |  | fourth grade | -. 04184 | . 14402 | . 772 |
|  | third grade | first grade | -. $36310^{*}$ | . 14048 | . 010 |
|  |  | second grade | . 03794 | . 13818 | . 784 |
|  |  | fourth grade | -. 00390 | . 15269 | . 980 |
|  | fourth grade | first grade | -.35920** | . 14623 | . 014 |
|  |  | second grade | . 04184 | . 14402 | . 772 |
|  |  | third grade | . 00390 | . 15269 | . 980 |
| 9. Learn by group work in class. first grade |  | second grade | . 13401 | . 13521 | . 322 |
|  |  | third grade | . 06845 | . 14499 | . 637 |
|  |  | fourth grade | -.40243* | . 15092 | . 008 |


|  | second grade | first grade | -. 13401 | . 13521 | 322 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  | third grade | -. 06556 | . 14262 | . 646 |
|  |  | fourth grade | -. $53644^{*}$ | . 14865 | . 000 |
|  | third grade | first grade | -. 06845 | . 14499 | . 637 |
|  |  | second grade | . 06556 | . 14262 | . 646 |
|  |  | fourth grade | -. $47088^{*}$ | . 15759 | . 003 |
|  | fourth grade | first grade | . $40243^{*}$ | . 15092 | . 008 |
|  |  | second grade | . $53644^{*}$ | . 14865 | . 000 |
|  |  | third grade | . $47088^{*}$ | . 15759 | . 003 |
| 11. Connect the word to its synonyms and antonyms. | first grade | second grade | -. $47443^{*}$ | . 12877 | . 000 |
|  |  | third grade | $-.55872{ }^{*}$ | . 13808 | . 000 |
|  |  | fourth grade | $-.57718^{*}$ | . 14373 | . 000 |
|  | second grade | first grade | . $47443^{*}$ | . 12877 | . 000 |
|  |  | third grade | -. 08429 | . 13582 | . 535 |
|  |  | fourth grade | -. 10275 | . 14157 | . 468 |
|  | third grade | first grade | . $55872^{*}$ | . 13808 | . 000 |
|  |  | second grade | . 08429 | . 13582 | . 535 |
|  |  | fourth grade | -. 01846 | . 15009 | . 902 |
|  | fourth grade | first grade | . $57718{ }^{*}$ | . 14373 | . 000 |
|  |  | second grade | . 10275 | . 14157 | . 468 |
|  |  | third grade | . 01846 | . 15009 | . 902 |
| 13. Test with your parents, if they know English. | first grade | second grade | . $55083{ }^{*}$ | . 13169 | . 000 |
|  |  | third grade | . $57357^{*}$ | . 14122 | . 000 |
|  |  | fourth grade | . $80224 *$ | . 14700 | . 000 |
|  | second grade | first grade | $-.55083^{*}$ | . 13169 | . 000 |
|  |  | third grade | . 02274 | . 13891 | . 870 |
|  |  | fourth grade | . 25141 | . 14478 | . 083 |
|  | third grade | first grade | $-.57357^{*}$ | . 14122 | . 000 |
|  |  | second grade | -. 02274 | . 13891 | . 870 |
|  |  | fourth grade | . 22867 | . 15349 | . 137 |
|  | fourth grade | first grade | -.80224* | . 14700 | . 000 |
|  |  | second grade | -. 25141 | . 14478 | . 083 |
|  |  | third grade | -. 22867 | . 15349 | . 137 |

15. Learn by pair work in class.


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## Appendix F

Mean and standard deviation scores based on students' grade levels

| Strategies | Grades | N | M | S.D |
| :---: | :---: | :---: | :---: | :---: |
| 1. Paraphrase the word's meaning by yourself. | first grade | 129 | 2.81 | 1.17 |
|  | second grade | 139 | 3.02 | 1.12 |
|  | third grade | 106 | 3.00 | 1.12 |
|  | fourth grade | 92 | 3.27 | . 93 |
| 2. Learn words from paper tests (learn from failure) | first grade | 129 | 3.58 | 1.08 |
|  | second grade | 139 | 3.23 | 1.06 |
|  | third grade | 106 | 3.31 | . 998 |
|  | fourth grade | 92 | 3.21 | 1.13 |
| 3. Guess from textual context in reading. | first grade | 129 | 3.32 | . 95 |
|  | second grade | 139 | 3.15 | . 81 |
|  | third grade | 106 | 3.17 | . 80 |
|  | fourth grade | 92 | 3.25 | . 83 |
| 4. Ask your school teacher for Kurdish translation. | first grade | 129 | 2.23 | 1.15 |
|  | second grade | 139 | 1.88 | 1.03 |
|  | third grade | 106 | 1.97 | 1.14 |
|  | fourth grade | 92 | 2.05 | 1.05 |
| 5. Test yourself with word tests. | first grade | 129 | 2.76 | 1.00 |
|  | second grade | 139 | 2.99 | 1.05 |
|  | third grade | 106 | 2.88 | 1.17 |
|  | fourth grade | 92 | 2.81 | 1.05 |
| 6. Put English labels on physical objects. | first grade | 129 | 2.62 | 1.11 |
|  | second grade | 139 | 2.49 | 1.15 |
|  | third grade | 106 | 2.80 | 1.15 |
|  | fourth grade | 92 | 2.60 | 1.13 |
| 7. Use English-language songs. | first grade | 129 | 3.47 | 1.28 |
|  | second grade | 139 | 3.37 | 1.30 |
|  | third grade | 106 | 3.41 | 1.21 |
|  | fourth grade | 92 | 3.31 | 1.29 |


| 8. Ask your teacher to check your word lists for accuracy. | first grade | 129 | 2.39 | 1.12 |
| :---: | :---: | :---: | :---: | :---: |
|  | second grade | 139 | 2.40 | . 97 |
|  | third grade | 106 | 2.17 | 1.04 |
|  | fourth grade | 92 | 2.22 | . 95 |
| 9. Learn by group work in class. | first grade | 129 | 3.16 | 1.17 |
|  | second grade | 139 | 3.02 | 1.12 |
|  | third grade | 106 | 3.09 | 1.15 |
|  | fourth grade | 92 | 3.56 | . 91 |
| 10. Use a monolingual dictionary. | first grade | 129 | 3.48 | 1.06 |
|  | second grade | 139 | 3.46 | 1.18 |
|  | third grade | 106 | 3.60 | 1.12 |
|  | fourth grade | 92 | 3.54 | 1.09 |
| 11. Connect the word to its synonyms and antonyms. | first grade | 129 | 2.70 | 1.06 |
|  | second grade | 139 | 3.17 | 1.03 |
|  | third grade | 106 | 3.26 | 1.02 |
|  | fourth grade | 92 | 3.28 | 1.10 |
| 12. Use spaced word practice. | first grade | 129 | 2.66 | 1.16 |
|  | second grade | 139 | 2.72 | 1.12 |
|  | third grade | 106 | 2.72 | 1.09 |
|  | fourth grade | 92 | 2.90 | 1.10 |
| 13. Test with your parents, if they know English. | first grade | 129 | 2.35 | 1.26 |
|  | second grade | 139 | 1.80 | 1.10 |
|  | third grade | 106 | 1.78 | 1.01 |
|  | fourth grade | 92 | 1.55 | . 77 |
| 14. Do written repetition. | first grade | 129 | 3.06 | 1.20 |
|  | second grade | 139 | 3.18 | . 98 |
|  | third grade | 106 | 3.25 | 1.13 |
|  | fourth grade | 92 | 3.17 | . 97 |
| 15. Learn by pair work in class. | first grade | 129 | 3.34 | 1.07 |
|  | second grade | 139 | 2.86 | . 97 |
|  | third grade | 106 | 3.11 | 1.11 |
|  | fourth grade | 92 | 3.05 | 1.04 |


| 16. Use new word in sentences. | first grade | 129 | 3.25 | 1.12 |
| :---: | :---: | :---: | :---: | :---: |
|  | second grade | 139 | 3.05 | 1.03 |
|  | third grade | 106 | 3.46 | . 98 |
|  | fourth grade | 92 | 3.34 | 1.08 |
| 17. Study and practice meaning in a group outside of class. | first grade | 129 | 2.75 | 1.16 |
|  | second grade | 139 | 2.48 | 1.09 |
|  | third grade | 106 | 2.66 | 1.09 |
|  | fourth grade | 92 | 2.73 | 1.23 |
| 18. Connect word to already known words. | first grade | 129 | 3.14 | . 98 |
|  | second grade | 139 | 3.09 | . 98 |
|  | third grade | 106 | 3.23 | . 92 |
|  | fourth grade | 92 | 2.97 | . 82 |
| 19. Take notes in class. | first grade | 129 | 3.89 | 1.03 |
|  | second grade | 139 | 3.66 | . 99 |
|  | third grade | 106 | 3.74 | 1.11 |
|  | fourth grade | 92 | 3.82 | . 99 |
| 20. Memorize parts of speech. | first grade | 129 | 3.01 | 1.08 |
|  | second grade | 139 | 3.22 | . 90 |
|  | third grade | 106 | 3.32 | 1.09 |
|  | fourth grade | 92 | 3.58 | 1.06 |
| 21. Group words together within a storyline. | first grade | 129 | 2.81 | 1.08 |
|  | second grade | 139 | 2.59 | . 99 |
|  | third grade | 106 | 2.72 | 1.00 |
|  | fourth grade | 92 | 2.75 | . 97 |
| 22. Keep a vocabulary notebook. | first grade | 129 | 3.48 | 1.31 |
|  | second grade | 139 | 3.22 | 1.34 |
|  | third grade | 106 | 3.37 | 1.24 |
|  | fourth grade | 92 | 3.42 | 1.25 |
| 23. Image word's meaning. | first grade | 129 | 3.55 | 1.14 |
|  | second grade | 139 | 3.51 | 1.06 |
|  | third grade | 106 | 3.53 | 1.15 |
|  | fourth grade | 92 | 3.54 | 1.12 |


| 24. Connect a word to a personal experience. | first grade | 129 | 3.06 | . 99 |
| :---: | :---: | :---: | :---: | :---: |
|  | second grade | 139 | 3.08 | 1.05 |
|  | third grade | 106 | 3.26 | 1.01 |
|  | fourth grade | 92 | 3.32 | 1.08 |
| 25. Listen to English- radio program. | first grade | 129 | 2.21 | 1.17 |
|  | second grade | 139 | 2.41 | 1.22 |
|  | third grade | 106 | 2.54 | 1.25 |
|  | fourth grade | 92 | 2.75 | 1.28 |
| 26. Use a bilingual dictionary. | first grade | 129 | 3.75 | . 96 |
|  | second grade | 139 | 3.68 | 1.08 |
|  | third grade | 106 | 3.64 | 1.08 |
|  | fourth grade | 92 | 3.68 | 1.08 |
| 27. Learn words written or commercial items. | first grade | 129 | 3.04 | 1.23 |
|  | second grade | 139 | 2.94 | . 94 |
|  | third grade | 106 | 3.01 | . 99 |
|  | fourth grade | 92 | 3.02 | . 82 |
| 28. Ask your teacher for paraphrase or synonym. | first grade | 129 | 2.71 | 1.00 |
|  | second grade | 139 | 2.69 | 1.17 |
|  | third grade | 106 | 2.46 | 1.02 |
|  | fourth grade | 92 | 2.51 | 1.03 |
| 29. Ask your teacher for sentence including the new word. | first grade | 129 | 2.60 | 1.17 |
|  | second grade | 139 | 2.35 | 1.23 |
|  | third grade | 106 | 2.69 | 1.19 |
|  | fourth grade | 92 | 2.54 | 1.09 |
| 30. Associate the word with its coordinates. | first grade | 129 | 2.48 | . 99 |
|  | second grade | 139 | 2.43 | . 77 |
|  | third grade | 106 | 2.71 | . 97 |
|  | fourth grade | 92 | 2.47 | . 80 |
| 31. Ask your classmates for paraphrase or synonym. | first grade | 129 | 2.93 | 1.05 |
|  | second grade | 139 | 2.86 | 1.14 |
|  | third grade | 106 | 3.12 | 1.15 |
|  | fourth grade | 92 | 3.02 | 1.19 |


| 32. Read an English language newspaper. | first grade | 129 | 2.50 | 1.26 |
| :---: | :---: | :---: | :---: | :---: |
|  | second grade | 139 | 2.31 | 1.06 |
|  | third grade | 106 | 2.57 | 1.14 |
|  | fourth grade | 92 | 2.67 | 1.12 |
| 33. Say new word aloud when studying. | first grade | 129 | 3.27 | 1.19 |
|  | second grade | 139 | 3.19 | 1.22 |
|  | third grade | 106 | 3.33 | 1.18 |
|  | fourth grade | 92 | 3.14 | 1.16 |
| 34. Ask your classmate for Kurdish translation. | first grade | 129 | 3.03 | 1.31 |
|  | second grade | 139 | 2.82 | 1.28 |
|  | third grade | 106 | 2.87 | 1.33 |
|  | fourth grade | 92 | 2.70 | 1.09 |
| 35. Use English language internet. | first grade | 129 | 3.48 | 1.31 |
|  | second grade | 139 | 3.92 | 1.06 |
|  | third grade | 106 | 3.69 | 1.22 |
|  | fourth grade | 92 | 4.20 | . 93 |
| 36. Use physical action when learning a new word. | first grade | 129 | 2.72 | 1.29 |
|  | second grade | 139 | 2.88 | 1.20 |
|  | third grade | 106 | 3.01 | 1.17 |
|  | fourth grade | 92 | 3.11 | 1.18 |

## Appendix G

## T-test results of students' VLSs based on field of study

| Strategies | field | N | M | Std.D. | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Paraphrase the word's meaning by yourself. | ELT | 223 | 3.10 | 1.07 | . 212 |
|  | ELL | 243 | 2.93 | 1.13 |  |
| 2. Learn words from paper tests (learn from failure) | ELT | 223 | 3.39 | 1.04 | . 219 |
|  | ELL | 243 | 3.27 | 1.11 |  |
| 3. Guess from textual context in reading. | ELT | 223 | 3.25 | . 82 | . 451 |
|  | ELL | 243 | 3.19 | . 88 |  |
| 4. Ask your school teacher for Kurdish translation. | ELT | 223 | 2.00 | 1.06 | . 413 |
|  | ELL | 243 | 2.05 | 1.13 |  |
| 5. Test yourself with word tests. | ELT | 223 | 2.95 | 1.06 | . 962 |
|  | ELL | 243 | 2.79 | 1.07 |  |
| 6. Put English labels on physical objects. | ELT | 223 | 2.63 | 1.07 | . 059 |
|  | ELL | 243 | 2.60 | 1.20 |  |
| 7. Use English-language songs. | ELT | 223 | 3.36 | 1.24 | . 543 |
|  | ELL | 243 | 3.43 | 1.30 |  |
| 8. Ask your teacher to check your word lists for accuracy. | ELT | 223 | 2.47 | 1.08 | .013* |
|  | ELL | 243 | 2.17 | . 96 |  |
| 9. Learn by group work in class. | ELT | 223 | 3.13 | 1.10 | . 305 |
|  | ELL | 243 | 3.23 | 1.12 |  |
| 10. Use a monolingual dictionary. | ELT | 223 | 3.48 | 1.09 | . 410 |
|  | ELL | 243 | 3.55 | 1.14 |  |
| 11. Connect the word to its synonyms and antonyms. | ELT | 223 | 3.27 | 1.03 | .000* |
|  | ELL | 243 | 2.91 | 1.08 |  |
| 12. Use spaced word practice. | ELT | 223 | 2.78 | 1.08 | . 115 |
|  | ELL | 243 | 2.70 | 1.15 |  |
| 13. Test with your parents, if they know English. | ELT | 223 | 1.89 | 1.02 | . 837 |
|  | ELL | 243 | 1.91 | 1.19 |  |
| 14. Do written repetition. | ELT | 223 | 3.21 | 1.06 | . 828 |
|  | ELL | 243 | 3.12 | 1.10 |  |
| 15. Learn by pair work in class. | ELT | 223 | 3.07 | 1.02 | . 253 |
|  | ELL | 243 | 3.10 | 1.09 |  |
| 16. Use new word in sentences. | ELT | 223 | 3.44 | 1.07 | .000* |
|  | ELL | 243 | 3.08 | 1.03 |  |
| 17. Study and practice meaning in a group outside of class. | ELT | 223 | 2.65 | 1.10 | . 327 |
|  | ELL | 243 | 2.64 | 1.18 |  |
| 18. Connect word to already known words. | ELT | 223 | 3.04 | . 91 | . 102 |
|  | ELL | 243 | 3.18 | . 96 |  |
| 19. Take notes in class. | ELT | 223 | 3.87 | . 94 | . 067 |
|  | ELL | 243 | 3.69 | 1.10 |  |
| 20. Memorize parts of speech. | ELT | 223 | 3.51 | . 99 | .000* |
|  | ELL | 243 | 3.02 | 1.04 |  |
| 21. Group words together within a storyline. | ELT | 223 | 2.75 | . 93 | 402 |
|  | ELL | 243 | 2.67 | 1.08 |  |


| 22. Keep a vocabulary notebook. | ELT | 223 | 3.40 | 1.20 | . 533 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ELL | 243 | 3.33 | 1.38 |  |
| 23. Image word's meaning. | ELT | 223 | 3.55 | 1.12 | . 686 |
|  | ELL | 243 | 3.52 | 1.11 |  |
| 24. Connect a word to a personal experience. | ELT | 223 | 3.22 | 1.04 | . 181 |
|  | ELL | 243 | 3.11 | 1.03 |  |
| 25. Listen to English- radio program. | ELT | 223 | 2.48 | 1.15 | . 568 |
|  | ELL | 243 | 2.42 | 1.31 |  |
| 26. Use a bilingual dictionary. | ELT | 223 | 3.75 | . 94 | . 199 |
|  | ELL | 243 | 3.63 | 1.13 |  |
| 27. Learn words written or commercial items. | ELT | 223 | 2.88 | 1.00 | . 187 |
|  | ELL | 243 | 3.11 | 1.02 |  |
| 28. Ask your teacher for paraphrase or synonym. | ELT | 223 | 2.56 | 1.03 | . 351 |
|  | ELL | 243 | 2.65 | 1.09 |  |
| 29. Ask your teacher for sentence including the new word. | ELT | 223 | 2.82 | 1.17 | .000* |
|  | ELL | 243 | 2.27 | 1.13 |  |
| 30. Associate the word with its coordinates. | ELT | 223 | 2.58 | . 78 | . 124 |
|  | ELL | 243 | 2.46 | . 97 |  |
| 31. Ask your classmates for paraphrase or synonym. | ELT | 223 | 3.05 | 1.10 | . 138 |
|  | ELL | 243 | 2.89 | 1.15 |  |
| 32. Read an English language newspaper. | ELT | 223 | 2.53 | 1.23 | . 525 |
|  | ELL | 243 | 2.46 | 1.07 |  |
| 33. Say new word aloud when studying. | ELT | 223 | 3.25 | 1.18 | . 819 |
|  | ELL | 243 | 3.22 | 1.20 |  |
| 34. Ask your classmate for Kurdish translation. | ELT | 223 | 2.82 | 1.17 | . 451 |
|  | ELL | 243 | 2.91 | 1.35 |  |
| 35. Use English language internet. | ELT | 223 | 3.64 | 1.22 | .010* |
|  | ELL | 243 | 3.95 | 1.12 |  |
| 36. Use physical action when learning a new word. | ELT | 223 | 3.03 | 1.15 | . 056 |
|  | ELL | 243 | 2.81 | 1.27 |  |


[^0]:    *. The mean difference is significant at the 0.05 level.

