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**The Impact of Using Vocabulary Learning Strategies on Vocabulary Learning
and Learners' Attitudes towards them**

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ملخص الرسالة

تهدف هذه الدراسة إلى معرفة توجهات الطلاب نحو استخدام استراتيجيات تعلم مفردات اللغة الانجليزية. وشملت عينة الدراسة ستين طالبا تم تقسيمهم إلى مجموعة تجريبية من 32 طالبا ومجموعة ضابطة من 28 طالبا. وقد تم تدريب طلاب المجموعة التجريبية على استخدام خمس من استراتيجيات تعلم المفردات وهي: استخدام النص لمعرفة المعنى واستخدام الصورة الذهنية واستخدام الحفظ واستخدام القاموس أثناء الحصة وأخيرا طلب مساعدة المعلم أو الزملاء لمعرفة معاني المفردات الجديدة. وقد استخدم الطلاب هذه الاستراتيجيات خلال الفصل الدراسي الأول لمدة أربعة أشهر. ولقياس العلاقة بين مستوى معرفة الطلاب بالمفردات واستخدامهم لاستراتيجيات تعلم المفردات تم تنفيذ اختبار مستوى قبلي لطلاب المجموعة التجريبية. وتم كذلك تنفيذ اختبار مفردات تحصيلي نهاية الفصل الدراسي للمجموعتين لمعرفة أثر وفعالية استخدام استراتيجيات تعلم المفردات في تعلم المفردات الجديدة وذلك بمقارنة نتائج المجموعتين. وقد أظهرت نتائج الدراسة أن استخدام استراتيجيات تعلم المفردات قد ساهم في تعزيز تحصيل الطلاب في تعلم المفردات. فقد تبين أن طلاب المجموعة التجريبية تفوقوا على المجموعة الضابطة في الاختبار التحصيلي بمعدل 72.4% مقارنة بـ 43.8% للمجموعة الضابطة. وقد أظهرت النتائج أيضا أن الطلاب الذين تم تدريبهم على استخدام استراتيجيات تعلم المفردات قد أبدوا توجهها ايجابيا عموما نحو استخدام هذه الاستراتيجيات لتعلم المفردات الجديدة, حيث تبين أن 57.27% من طلاب المجموعة التجريبية يدعمون استخدام استراتيجيات تعلم المفردات, بينما فقط 47.51% من طلاب المجموعة الضابطة أبدوا ذلك. غير أن الطلاب لم يبدوا دعما لاستخدام كل من استراتيجية استخدام الصورة الذهنية والقاموس أثناء الحصة. أخيرا أظهرت النتائج أن الطلاب الأقوى قد أظهروا توجهها أكبر نحو استخدام استراتيجيات تعلم المفردات بمعدل 65% مقارنة بالطلاب الأضعف والذين أبدوا توجهها أقل بمعدل 59.7%. وقد أظهرت نتائج الاختبار التحصيلي أن الطلاب الأقوى قد استفادوا بشكل أكبر من استخدام استراتيجيات تعلم المفردات وذلك بمعدل 86.25%, بينما حصل الطلاب الأضعف على معدل 66.13% وفي ضوء هذه النتائج خلصت الدراسة إلى عدد من التوصيات.

Dedication

To the one who always supports and cares

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The Impact of Using Vocabulary Learning Strategies on Vocabulary Learning and Learners' Attitudes towards them

Abstract

This study aimed at investigating the learners' attitudes towards using training-based vocabulary learning strategies. sixty 11th graders from a government high school participated in the study. They were divided into an experimental group of 32 students and a control group of 28 students. The experimental group had training on using five VLSs which were practiced over a semester. To investigate the correlation between the learners' vocabulary proficiency levels and VLS use, a pre-test was conducted at the beginning of the semester. A vocabulary achievement test (VAT) was also given to both groups at the end of the semester to measure the effectiveness of VLS use on vocabulary learning. Results show that using VLSs enhances the learners' achievement in vocabulary learning. The learners in the experimental group outperformed those in the control group in the VAT with an average of 72.4% compared to 43.8% for the control group. Results also reveal that students who were trained on using VLSs were more positive than those who were not. Finally, the more proficient learners showed greater tendency towards using VLSs. 65% of the higher level learners supported using VLSs, whereas 59.73% of the lower level learners did. The VAT results show that the higher level learners benefited more from using VLSs at an average of 86.25%, while the lower level learners only scored 66.13%.

Chapter One

1.1 Introduction

Language learning strategies (LLSs) comprise a core element in the learning process. This view is in line with the trends towards learner-centered approaches, and therefore, autonomous learning. Thus, it is important to introduce this subject into our teaching/learning system in the EFL contexts. Concerning the educational environment in Palestine, despite the permanent calls for more learner-centered approaches, the more traditional teacher-centered approaches are still dominant. Therefore, learners' language learning strategies (LLSs) are worth introducing and investigating. Educators as well as learners have to be aware of the importance of applying these strategies to cope up with the global trends of the modern teaching/learning process.

Research on LLSs was inspired from the trends in second language acquisition (SLA) research about the good learner strategies. Therefore, the learner's role is no longer a passive one, but rather the learner is being viewed as an active participant. Thus, there has been an increase in research focusing on language learners' characteristics which include their LLSs. In this context, Rubin (1975) says: "initially research on language learning strategies was conducted in the discipline of Second Language Acquisition and consisted of attempts to identify strategies of successful learners, assuming such strategies could be identified and made available to less successful learners". Schmitt (1997) also found that the role of the learner as an active participant in language learning experience led to considerable research into the area of language learning strategies.

Building vocabulary for high school students is a key issue in developing English language competence. However, few decades ago research was more

oriented to the direction of language aspects like grammar and language skills; vocabulary seems to have received less attention for guiding students to develop their language. It is a common trend in today's methods to have communication as a primary goal. Thus, it should be understood that a learner cannot go very far in communication without sufficient vocabulary knowledge.

Since communicative competence is highly recommended in our schools, students need to acquire the language learning strategies including vocabulary learning strategies (VLSs) that help to enhance this approach. Oxford (1990) states that language learning strategies "... are especially important for language learning because they are tools for active, self-directed movement, which is essential for developing communicative competence". Assuming that good language learners use better language learning strategies, such strategies could be adopted by other learners to develop learning. Lessard-Clouston (1997) states:

"besides developing the communicative competence of the students, teachers who train students to use language learning strategies can help them become better language learners" (p. 4).

Helping students understand good language learning strategies and training them to develop and use such good language learning strategies can be considered to be a characteristic of a good language teacher.

Furthermore, learning a language lexicon is the key element for communication since the right choice of the vocabulary guarantees figuring out the message. Although structural mistakes might make the message imperfect, they will not hinder it. Supporting this view, Segler et al. (2002) quotes Krashen saying "when students travel, they don't carry grammar books, they carry dictionaries". Therefore, learning vocabulary should be stressed over grammar which requires equipping the

learners with effective vocabulary learning strategies that are expected to enhance their learning, and consequently, their ability to effectively communicate in the target language.

Similarly, emphasizing learning vocabulary over grammar, Li (2004, p. 4) gives the following quotes:

- 1- "Without grammar very little can be conveyed, without vocabulary *nothing* can be conveyed" (Wilkins, 1972: 111).
- 2- "Grammar provides the overall patterns, vocabulary the material to put in the patterns" (Cook, 1991: 37).
- 3- "One cannot speak, understand, read or write a foreign language without knowing a lot of words. Vocabulary learning is at the heart of mastering a foreign language" (Rubin & Thompson, 1994: 79).
- 4- "Vocabulary is central to language and is of critical importance to the typical language learner" (Coady & Huckin, 1997: 5).

Now that the significance of vocabulary learning has become clear, it is important to talk about strategies of vocabulary learning. In the context of Palestine, like any other foreign language situation, awareness of helpful strategies is almost absent. Actually, surveying school and university syllabi one can hardly find any obvious inclusion of teaching vocabulary learning strategies (VLSs). The literature reports many vocabulary strategies used by EFL learners of which five prominent ones will be tested to measure the learners' attitudes towards using these strategies and to find the effectiveness of using them in vocabulary learning.

1.2 Statement of the problem

Since the learner has become the center of the teaching/learning process, his/her own learning styles and strategies should be enhanced to help establish the

autonomous learning. Vocabulary learning strategies are obviously a core element of the general language learning strategies (LLSs) used by the learner to develop his/her general language proficiency. From experience, it has been noticed that VLSs have not been incorporated in teaching vocabulary. Most teachers and students are not aware of such strategies. Thus, it is necessary to train the students on using VLSs and to investigate their attitudes towards using such strategies for vocabulary learning.

1.3 Significance of the study

The absence of awareness to the effective use of VLSs and their usefulness make this study significant. It is hoped that the results of this study will be brought to the attention of practitioners in the field to help out in better teaching strategies and training techniques.

1.4 Objectives of the study

This study will investigate the learners' attitudes or reaction towards practice in using the following VLSs:

1. The key word method (KW) (also known as the interactive image strategy).
2. Guessing from context strategy.
3. Memorization strategy.
4. Using dictionaries in class.
5. Asking the teacher or classmates for meaning.

According to published research (Pressly, 1977; Schmitt, 1997; Moir and Nation, 2002; Sahbazian, 2004; Wu, 2008 and Gu, 2010) the above VLSs could be the most common VLSs used by the learners. Therefore, it has been decided to explore their effectiveness in the Palestinian classrooms.

The study will also investigate the correlation between the learners' vocabulary proficiency level and using the VLSs.

1.5 Research questions

The study aims at answering the following questions:

1. What is the impact of using VLSs on learners' achievement in vocabulary learning?
2. What are the learners' attitudes towards using the VLSs for vocabulary learning?
3. What are the learners' attitudes towards using the “interactive image (KW)” strategy for vocabulary learning?
4. What are the learners' attitudes towards using the “guessing from context” strategy for vocabulary learning?
5. What are the learners' attitudes towards using the “memorization” strategy for vocabulary learning?
6. What are the learners' attitudes towards using the “asking the teacher or classmates for meaning” strategy for vocabulary learning?
7. What are the learners' attitudes towards using the “using a dictionary” strategy for vocabulary learning?
8. Does vocabulary proficiency level correlate with strategy use?

1.6 Hypotheses of the study

1. Using VLSs will have a positive impact on learners' achievement in vocabulary learning.

2. Learners will have positive attitudes towards using the VLSs for vocabulary learning.
3. Learners will have positive attitudes towards using the “interactive image (KW)” strategy for vocabulary learning.
4. Learners will have positive attitudes towards using the “guessing from context” strategy for vocabulary learning.
5. Learners will have positive attitudes towards using the “memorization” strategy for vocabulary learning.
6. Learners will have positive attitudes towards using the “asking the teacher or classmates for meaning” strategy for vocabulary learning.
7. Learners will have positive attitudes towards using the “using a dictionary” strategy for vocabulary learning.
8. There will be correlation between using VLSs and achievement in vocabulary learning.

1.7 Limitations of the study

Though it is assumed that the experimental class is representative of other Palestinian students, the sample could have its environmental conditions some of which may not exist in other contexts.

1.8 Definition of terms:

1. Language learning strategy LLS

Learning strategies are defined as “specific actions, behaviors, steps, or techniques --

such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task -- used by students to enhance their own learning” (Scarcella & Oxford, 1992, p. 63 as in Oxford, 2003, p. 2).

2. Vocabulary learning strategy VLSs

Rubin (1987) (as in Schmitt 1997) explains that learning is “the process by which information is obtained, stored, retrieved and used ... Therefore vocabulary learning strategies could be any which affect this broadly defined process” (p. 203) .

3. Interactive image/ Key word method

It involves the establishment of an acoustic and image link between an L2 word to be learned and a word in L1 that sounds similar. (www.gre.ms-phd.com/2006/04/vocabulary-learning-techniques.html).

1.9 Summary

Research proves that using LLSs improves learners' language proficiency and skills. Moreover, the importance of vocabulary learning strategies instruction is emphasized among learners because their vocabulary knowledge contributes greatly in enhancing their communicative competence. To this end, teachers should consider the learners' willingness and readiness to receive training and think of the most appropriate ways to introduce these strategies in their practices.

Since it is necessary to find out about the learners' learning strategies in a particular context, the five strategies in hand are expected to give a clear picture about the effectiveness of strategy training and use among Palestinian teachers and learners. These strategies pertain to EFL context since they can be employed and tested by making use of the available conditions.

Chapter Two

Literature Review

2.1 Introduction

Since the sixties, recognition of the importance of the vocabulary role in language learning has been growing. The dominant teaching theories before that time emphasized grammatical rules over lexicon assuming that once the learners master the structure of the language, they will then be able to use the lexical items effectively. Thus, vocabulary learning strategies are seen as promising in developing the learners' ways of learning the target language in the foreign language (FL) context where vocabulary learning needs effective guidance.

Recently, there has been a shift from the teacher-centered view of education to a more learner-centered view. This shift enhances the recognition of learners as individuals with unique learning needs and abilities. Moreover, this view provides awareness about the independent learning which allows learners more control over the ways they learn. This concept is an attempt leading to the more autonomous learning concept that is realized in a focus on learner strategies. The use of language learning strategies, including vocabulary learning strategies, has accompanied this shift from the teacher-oriented to the more learner-oriented education.

It has been suggested that one way to speed up learning a foreign language is to teach learners how to learn more efficiently and effectively. This could be achieved by training students to apply their own learning strategies. This leads to assist students in becoming independent and confident learners. According to Nation (2001), it is important to understand the goals of LLSs and to train learners on using these strategies effectively. This helps in choosing the suitable strategies that learners can use to facilitate learning in their own context.

The literature in this chapter sheds light on two main sections. First, it introduces a theoretical background which focuses on the concept of LLSs in general and VLSs in particular. It mainly presents the well known taxonomies of LLSs and VLSs, the importance of these strategies in the instructional field, the learners' strategy training and some details about the five strategies under investigation. The second part of this chapter provides a review of empirical studies related to the current study. It includes a number of previous studies that were applied to similar contexts, the EFL contexts. It is hoped that this review will help conducting the current study appropriately by enhancing the researcher's knowledge on both the theory and practice aspects related to this study.

2.2. Theoretical Background

2.2.1. Language Learning Strategies (LLSs)

Before going into the empirical part of the study, there will be a review of the theory behind the empirical aspect. Actually, many scholars as Oxford (1990), O'Malley and Chamot (1990), Wenden and Rubin (1987), Faerch Claus and Casper (1983) and Thornbury (2006) came with definitions of LLSs. Such strategies furnish the background of VLSs, the subject of this study.

To begin with definitions, the following ones are the most widely accepted. Wenden and Rubin (1987) define learning strategies as "any sets of operations, steps, plans, routines used by the learner to facilitate the obtaining, storage, retrieval, and use of information". Other researchers like O'Malley & Chamot (1990) consider LLSs as "special ways of processing information that enhance comprehension, learning, or retention of the information". It could be concluded that LLSs involve the different actions taken by the learners to deal with their learning tasks.

LLSs are part of the instructional process the learners go through. Wenden (1987) points out that language learning strategies have to include different aspects of the language learning process. She identifies three areas in particular that language learning strategies refer to: (a) the actual behavior of learners (what do learners do to learn an L2), (b) strategic knowledge (what do learners know about the strategies they use?), and (c) knowledge about aspects (other than strategies) of the L2 learning process, such as personal/motivational factors. These areas are summed up by Rubin (1987) as “what learners *do* to learn and *do to regulate* their language learning.”

2.2.1.1 Taxonomy of Language Learning Strategies

After looking at the definitions, the most adopted strategies will now be reviewed. The literature on taxonomy of (LLS) shows that it has been classified by many scholars. Yet, it is obvious that most of these attempts to classify language learning strategies reflect more or less the same categorizations of language learning strategies without major differences. Below are the classifications proposed by prominent scholars in the field (O'Malley's, 1985; Rubin's, 1987; Oxford's, 1990; and Stern's, 1992).

O'Malley et al. (1985) divide language learning strategies into three main subcategories: Metacognitive strategies, cognitive strategies, and socioaffective strategies. Rubin (1987) suggests three main types of LLSs: learning strategies, communication strategies, and social strategies. Oxford (1990) divides language learning strategies into two main classes: direct and indirect, further subdivided into six groups: memory strategies, cognitive strategies, compensation strategies, meta-cognitive strategies, affective strategies, and social strategies. According to Stern (1992), there are five main language learning strategies: management and planning

strategies, cognitive strategies, communicative - experiential strategies, interpersonal strategies, and affective strategies.

Although Rubin considers "communication" and "social" strategies as separate categories from the learning category, it could be part of the learning strategies and not another separate type. Another point is that Rubin ignores the affective strategies such as lowering anxiety, encouraging one's self, and taking the emotional temperature (Oxford, 1990) that could have a prominent role in the language learning process.

It is obvious that most of the proposed taxonomies are based on empirical research on learners which resulted in similar taxonomies. This similarity is reflected in the overlap through those taxonomies. However, Oxford's (1990) taxonomy of LLSs is reported as the most comprehensive one which most researchers use as the basis for VLSs classification as well. Thus, language learning strategies including taxonomies such as that of Oxford (1990) can be used for vocabulary learning tasks too (e.g., all strategies in the "memory" category). The following section introduces in more details the vocabulary learning strategies in which the direct relation with the general learning strategies is obvious.

2.2.2 Vocabulary Learning Strategies (VLSs)

The concept of VLSs is derived from the above definitions of LLSs since VLSs are a subset of general LLSs. As pointed out earlier, O'Malley and Chamot (1990) define learning strategies as "the special thoughts or behaviors that individuals use to help them comprehend, learn or retain new information". According to Rubin (1987) (as in Schmitt, 1997), learning is "the process by which information is

obtained, stored, retrieved and used...Therefore vocabulary learning strategies could be any which affect this broadly defined process” (p. 203).

Consequently, language teachers and learners should be aware of the VLSs and of the different proposed taxonomies. This helps adopting the ones that are suitable for the different settings. The following section introduces the most common VLS taxonomies as suggested by some prominent scholars.

2.2.2.1 Taxonomies of Vocabulary Learning Strategies

Recognizing the LLs and VLS taxonomy directs the teachers and learners towards the most appropriate strategies that are useful for their own context which enhances dealing with language learning tasks. Below is a presentation of the taxonomy proposed by some researchers (Gu and Johnson, 1996; Schmitt, 1997; and Nation, 2001).

Gu and Johnson (1996) identified six types of VLSs:

- 1- Guessing strategies: using background knowledge/wider context and using linguistic cues/immediate context.
- 2- Dictionary strategies: dictionary strategies for comprehension, extended dictionary strategies, and looking-up strategies.
- 3- Note-taking strategies: meaning-oriented note-taking strategies and usage-oriented note-taking strategies.
- 4- Rehearsal strategies: using word lists, oral repetition, and visual repetition.
- 5- Encoding strategies: association/elaboration, imagery, visual encoding, auditory encoding, using word-structure, semantic encoding, and contextual encoding.

6- Activation strategies: Gu and Johnson (1996) suggest three types of VLS on activation strategies:

- 1) memorizing lists of facts by linking them to familiar words or numbers by means of an image.
- 2) remembering lists by picturing them in specific locations.
- 3) establishing an acoustic and image link between an L2 word to be learned and a word in L2 that sounds similar.

It seems that although cognitive strategies are the focus of this taxonomy and metacognitive strategies are addressed too, still, the affective strategies are neglected in Gu and Johnson's classification. To address this gap, (Schmitt 1997) worked on proposing an extensive list of VLS. He primarily referred to Oxford's (1990) classification of LLSs and adopted four strategy groups (Social, Memory, Cognitive, and Metacognitive). Schmitt proposed a new category, the *Determination Strategies*, which is not included in Oxford's system which deals with LLSs in general. This system does not cover certain VLS, and thus, Schmitt tends to introduce this category that learners use when dealing with new words.

Schmitt's (1997) categorization of VLS includes six main groups with 58 individual strategies as follows:

- 1- Discovery-determination strategies: analyze part of speech, affixes and roots, check for L1 cognate, analyze pictures and gestures, guess from textual context, bilingual dictionary, monolingual dictionary, word lists, and flash cards.
- 2- Discovery-social strategies: ask teacher for L1 translation, ask teacher for paraphrase or synonym of new word, ask teacher for a sentence including new

word, ask classmates for meaning, discover new meaning through group work activity.

- 3- Consolidation-social strategies: study and practice meaning in a group, teacher checks students' flashcards or word lists for accuracy, interact with native speakers.
- 4- Consolidation-memory strategies: study word with a pictorial representation of its meaning, connect word to a personal experience, associate the word with its coordinates, connect the word to its synonyms and antonyms, use semantic maps, use 'scales' for gradable adjectives, group words together: to study them spatially on page, use new word in sentences, group words together within a storyline, study word spelling, study sound of word, say word aloud, image of word form, underline initial letter, configuration, use keyword method, affixes and roots/parts of speech, paraphrase word meaning, use cognates in study, learn words of an idiom together, use physical action, use semantic feature grids.
- 5- Consolidation-cognitive strategies: verbal/written repetition, word lists, flash cards, note-taking, use vocabulary section in textbooks, listen to tape of word lists, put L2 labels on physical objects, keep vocabulary notebook.
- 6- Consolidation-metacognitive strategies: use L2 media, testing oneself with word tests, use spaced word practice, skip/pass new word, continue to study word over time."

Concerning the classification of metacognitive strategies, it is clear that there are some differences between Schmitt's (1997) and Gu and Johnson's (1996). Schmitt's taxonomy (1997) includes strategies such as "using English-language media" or "testing oneself with word tests"; Gu and Johnson (1996) treat metacognitive strategies as overarching strategies that control the whole process of

vocabulary learning by planning, monitoring, and evaluating the cognitive strategies (Mizumoto, 2010).

Nation (2001) introduces the following taxonomy:

- 1- Planning: this strategy includes choosing what to focus on and when to focus on it such as: choosing words, choosing the aspects of word knowledge, choosing strategies, and planning repetition.
- 2- Sources: including finding information about words such as: analyzing the word, using context, consulting a reference source in L1 and L2, and using parallels in L1 and L2.
- 3- Processes: including establishing knowledge such as: noticing, retrieving, and generating.

It seems that Nation's taxonomy is different from the above classifications in the sense that he does not classify the strategies into categories like cognitive, social, or metacognitive. Instead, he introduces the *actions* done by the learners. It also lacks the social and affective categories which makes it less comprehensive.

Exploring the above classification shows that *Affective strategies* are neglected in the VLS taxonomy. Affective strategies, involve strategies such as "taking control of the emotional (affective) conditions" (Dörnyei, 2005). This might be due to the fact that researchers may consider the affective strategies as part of the metacognitive strategies, and therefore, do not present them as a separate title.

Making use of the above introduction, the researcher decided to choose five VLSs from the aforementioned strategies to be the target strategies for investigation in the current study. These strategies cover some aspects of the cognitive and social

strategies, particularly, "discovery–determination" (guessing from context and using a dictionary), "discovery-social" (asking the teacher or a classmate for meaning), and "consolidation-memory" (KW method) (Schmitt, 1997), "Sources" (using context and consulting a reference source in L1 and L2) (Nation, 2001), and "guessing strategies, dictionary strategies, rehearsal strategies and encoding strategies (KW method) (Gu and Johnson (1996). These strategies were chosen as they are more practical for investigation in the instructional environment of the study which is a foreign context where certain strategies like interacting with native speakers or applying certain types of metacognitive strategies are either not possible due to some reasons like time limitations or the nature of the learning environment or difficult for the subjects of the current study.

Being aware of the VLSs taking place in the educational process is not enough for both teachers and learners to apply without being well trained in advance. Strategy training is an important aspect in investigating the effect of VLS. Therefore, the next section presents the skills learners and teachers need to apply VLSs in their classes.

2.2.3 Strategy Training: Guidelines for training learners to use strategies

It is important that learners be equipped with learning strategy skills. To achieve this goal, learners should be given the sufficient training and time to acquire these skills. Clarifying this, Nation (2008, p. 4) says "strategy training has the eventual aim of getting the learners to become independent in their vocabulary learning.... A strategy is not learned in one training session. Skill and understanding need to be developed, and learners need to become fluent in its use". Achieving this leads to enhancing the learner-centered view in approaching the learning process through which the learner is able to take control of his/her own learning.

There have been different models for language learning strategies proposed by scholars in the field. Omalley and Chamot (1990) suggest different procedures for teaching strategies. These procedures involve five stages. First, learners are helped to *identify* the strategies that they are already using. Then, a new strategy is *presented* with enough explanation with a rationale for using it. Now the teacher could *model* the strategy. At the fourth stage learners *practice* the strategy at first with support or "scaffolding", but gradually reducing this to encourage autonomous use. Finally, learners are helped to *evaluate* their success.

Thus, in order for teachers to effectively introduce the VLS into their classrooms, they have to be familiar with the vocabulary instruction techniques to train their students to on using them. Oxford and Crookall (1990, p.26-27) recommend integrating this training with normal classroom activities. They introduce the following training sequence relevant to both VL techniques and to other types of LL tools:

- "(1) determine learners' needs by exploring expectations and current vocabulary learning techniques;
- (2) choose relevant techniques to teach;
- (3) find ways to integrate these techniques into everyday language instruction;
- (4) consider issues of student motivation and anxieties concerning learning L2 vocabulary;
- (5) prepare materials and activities;
- (6) conduct completely informed training, in which learners are explicitly told how to use a particular technique to learn a given word, how to evaluate the success of the technique, and how to transfer it to a new word or set of words;

(7) evaluate the training in terms of improvement in vocabulary learning, attitudes, and self-confidence;

(8) revise the training as needed".

Following such a sequence in VLS instruction enhances vocabulary learning and, therefore, better autonomous learning progress.

Along similar lines, the current study attempts to investigate the effectiveness of training learners on using five VLSs. The section below introduces each of these strategies with some details.

2.2.4 Target Strategies

2.2.4.1 The Key Word method (KW) or Interactive Image strategy

This strategy is also called by Oxford and Crookall (1990) a "semi-contextualizing technique". They explain that the context comes from associations with other words or word-sounds through the stages involved in applying the KW technique as being "an example of a combination of two semi-contextualizing modes, aural imagery and visual imagery. The first step is to identify a familiar word in one's own language that sounds like the new word; this is the auditory link. The second step is to generate a visual image of some relationship between the new word and a familiar one; this is the visual link. For example, to learn the new French word *potage* (soup), the English speaker associates it with a pot and then mentally pictures a pot full of potage" (Oxford and Crookall, 1990, p. 18-19).

There has been some impressive empirical evidence to show the superiority of KW as one of the most useful vocabulary learning strategies (e.g. Atkinson and Raugh, 1975, as cited in Ellis, 1995b and Brown and Perry, 1991). However, KW method has its own drawbacks. Segler (2001) explains that KW has been criticized on various accounts:

- _ As the keyword is merely an approximation of the L2 form; ‘proper’ learning of correct L2 phonology and orthography is unnecessarily delayed.
- _ It strongly depends on nature of words (KW can only be used for concrete nouns, rarely for abstract ones).
- _ It is much less effective for *productive* purposes.
- _ It suffers from the fundamental assumption that vocabulary acquisition largely means list learning.
- _ It only helps establish *one* of the necessary meaning links.
- _ It may be effective in laboratory-like conditions, but has questionable naturalness.
- _ It may not provide necessary grammatical information (such as morphophonemic clues) to successfully use the word.

In fact, the usefulness of KW method has received some criticism since it takes time and cognitive effort to create an appropriate image. Moreover, if the learner's native language and the target language are linguistically distant, such as Arabic and English, finding acoustically similar words will not be very common. However, if the native language and the target language are close, this strategy could be more useful. Stternberg (1987) (reported in Mizumuto, 2009), points out that there is a concern for too much mental effort on the part of learners. He criticizes the KW method suggesting that such a demanding method will likely to be abandoned by learners. Oxford and Crookall (1990) also comment that despite the success of the KW technique, it seems to be of little use in language classroom due to the difficulty in the auditory links.

However, Nation (2008) points out that the only limit is the learner's imagination. He maintains that the keyword does not have to sound exactly like the foreign word to be learned, and it does not have to be like all of the word. If the form

of the keyword is like the beginning of the foreign word, then that is usually enough. Thus, it might be concluded that despite the fact that the application of KW may be limited, its effectiveness has been supported by some research. It is perhaps best seen as a helpful addition, but not a substitute to other vocabulary learning strategies.

2.2.4.2 Guessing from Context strategy (GFC)

Guessing from Context (GFC) could be the most commonly used strategy among foreign language learners mainly when they deal with comprehension texts and in situations where other strategies may not be used, **in exams**, for instance. This strategy moves the learners away from shallow, mechanical repetition to deeper methods. According to Nation (2008), guessing the meaning of unknown words from context is considered the most useful of VLSs because it can apply to thousands of words. It can account for most of the vocabulary growth of a learner who has lots of meaning-focused input. Guessing can also be used incidentally while reading and listening. Moreover, Nation (1990) recommends using GFC especially for low frequency words as their rarity does not afford the learning effort.

GFC strategy requires learners to make use of both the linguistic context; i.e. the form and the topic or the theme around which the text revolves. Kelly (1990) distinguishes two types of GFC: *formal guessing* and *contextual guessing*. The former is based on formal (morphological) word features and relies in its simplest form on assessing word resemblance. On the other hand, contextual guessing, i.e. GFC in its purest form that relies solely on context, stands a poor chance of succeeding when unaided by formal clues. Gu and Johnson (1996) also say that research has demonstrated that vocabulary can be acquired through reading or fully contextualized activities.

Nation (2008) presents the following as sources of information to work out the meaning of an unknown word in context. They can be used as guidelines for teachers when they train their learners in GFC strategy:

1. The clues that are in the clause or sentence in which an unknown word occurs.
2. The clues that are in the immediately surrounding sentences or clauses.
3. The information that has been built up so far from all of the previous parts of the text.
4. Knowledge of the nature of such texts.
5. Background content information from outside the text.
6. The reader's commonsense knowledge of the world.
7. The morphological form of the unknown word.

However, GFC also has its drawbacks. Huckin and Coady (1999) give the following list that shows the most serious problems of GFC:

- _ It is inherently imprecise.
- _ It takes time (far more so than formal guessing).
- _ It requires accurate word recognition.
- _ The context must be well understood, which in turn requires previous lexical knowledge.
- _ Even if it leads to comprehension, it may not translate into acquisition.
- _ It requires good reading strategies.
- _ It is not effective for the acquisition of multi-word items.

Moreover, Mizumoto and Takeuchi (2009) clarify that depending on guessing from context alone for vocabulary acquisition in ESL/EFL learning environments is not an advisable approach and will not be an adequate source of vocabulary growth in EFL environments. However, they assure that guessing from context offers learners opportunities to expand the depth of familiar words and recognize words faster (automaticity).

It could be concluded that GFC does not always guarantee a right precise meaning of a word. The guess may take the learner a step forward in his/her knowledge of a certain word which can be satisfying even if that step is only a small step. Besides, learning words using GFC strategy is most effective when there is plenty of appropriate input (Nation, 2008). Although GFC obviously has an important role to play in the overall scheme of vocabulary learning strategies, it cannot solve all reading comprehension problems (Segler, 2001). Therefore, there should be a good balance between using GFC strategy and the more explicit strategies such as memorizing and dictionary look-up.

2.2.4.3 Dictionary Look-up

Dictionary use is the most traditional strategy used by learners of a foreign language. To Nation (2008), it is a useful vocabulary learning strategy and when used for high frequency or technical words, it has the double benefits of helping develop a useful strategy and giving attention to useful words. When it is used for low frequency words, the main goal is not the learning of the low frequency word, but the development of skill in using the strategy. Moreover, Oxford and Crookall (1990) point out that "dictionary lookup" is based on the idea that "a reference book containing the meanings of new words helps the learner who would otherwise have no

way of knowing what those words meant, and that the physical action of looking up the word somehow helps learners remember the meanings".

Looking up a word in a dictionary is not merely a simple mechanical procedure. On the contrary, good dictionary user "is often required to formulate and pursue several hypotheses and make use of prior knowledge of various sorts, especially information derived from context" (Scholfield, 1982). Nation (2008) clarifies that effective dictionary use involves finding the common underlying meaning of the word, to relate it to already known words, to help fix its form in memory, and to gain some wider knowledge of its use. He adds that dictionaries can be consulted to confirm the guess. Therefore, consulting a dictionary needs learners to be skilled and well trained in order to effectively make use of it as a VLS.

However, reviewing the related literature shows that the benefit of dictionary look-up for vocabulary acquisition is not guaranteed. As Ellis (1995b) points out that traditional bilingual dictionaries fall far short of providing complete coverage of word meanings, which means vocabulary learning from dictionaries is an "error-prone" process which requires cognitive sophistication. Moreover, Bensoussan and Laufer (1984) demonstrate that the use of bilingual dictionaries does not significantly increase reading comprehension. Emphasizing this idea, Swaffar (1988) cites several studies showing that using dictionaries as VLS fails to improve performance in reading. Swaffar (1988) concludes that decontextualizing the words hinders the interaction between the learner and the text.

Therefore, using dictionaries as a VLS needs learners to be well trained and equipped with certain skills to get the benefit of it. Moreover, dictionary use should be accompanied with other VLSs where it fails to enhance vocabulary learning.

2.2.4.4 Memorization

The acquisition of vocabulary items is one of the most challenging aspects in the process of language learning. To help learners overcome this challenge, teachers may include mnemonic devices into their classes as they could enhance vocabulary learning and recall. Below is a discussion of this viewpoint since scholars seem not to have a consensus on the effectiveness of this strategy as a means of vocabulary acquisition.

The theoretical rationales that stand behind memory strategies are the dual-coding theory proposed by Paivio (1986) and the depth of processing theory, identified by [Fergus I. M. Craik](#) and Robert S. Lockhart in 1972 (cited in Wikipedia, 2011); which is also known as the levels-of-processing effect. The dual-coding theory, a theory of cognition, indicates that both visual and verbal information are processed differently and along distinct channels with the human mind creating separate representations for information processed in each channel. Secondly, the depth of processing theory describes [memory recall](#) of [stimuli](#) as a function of the depth of mental processing. Depth of processing falls on a shallow to deep continuum. Shallow processing (e.g., processing based on [phonemic](#) and [orthographic](#) components) leads to a fragile memory trace that is susceptible to rapid decay. Conversely, deep processing (e.g., [semantic](#) processing) results in a more durable memory trace. (Wikipedia, 2011, retrieved April 2011). It is clear that the difference between both theories lies in the fact that the dual-coding theory deals with the visual and verbal information; while the depth of processing theory is more concerned with other types of information (e. g., context).

Cognitive rehearsal strategies such as repetition and rote learning are usually considered as not requiring deep mental processing. This often indicates that they are shallow and mechanical, and therefore, usually preferred by learners. Oxford and

Crookall (1990) indicate that the assumptions that underlie this technique appear to be that learners do not need much, if any, context to learn vocabulary, and that rote memorization is perfectly adequate. They add that L2 word lists are sometimes offered alone, without any native language (L1) equivalents. This kind of list can be termed an unpaired list.

However, Oxford and Crookall (1990) argue that "paired lists are not very useful. The degree of context offered by a paired list is minimal or even nil; and even if learners are able to memorize the L2-L1 pairs in a list, they might not be able to use the new words in communication" (p. 12). They recommend that "teachers should reassess the utility of decontextualizing techniques such as word lists" (p. 26). This indicates that decontextualized strategies should be modified into more contextual strategies.

Although some researchers, such as Oxford and Crookall (1990) above, criticize decontextualized vocabulary learning strategies, there is still some research that supports the role of using strategies like word lists and memorization. This encourages the researcher to direct the participants of the current study towards using memorization as a strategy for vocabulary learning since they already have a preference for using word lists and repetition. This is meant to draw their attention to intentional *repetition*, and thus learning of new words.

The above presentation indicates that memorization, as well as most mnemonic strategies, is frequently preferred by learners and that empirical research has proved its usefulness. However, it is mostly recommended that it should be properly employed to successfully commit a new word to memory. To achieve this, learners need to combine this strategy with deeper processing strategies and new words should be contextualized and not presented in isolation.

2.2.4.5 Asking the teacher or classmates for meaning

This strategy is one of the social strategies that could be applied to enhance interaction inside the classroom. This strategy is specially recommended in language learning classes as a means to enhance communication as well. In fact the basic concept of social interaction in learning (as reported in Mizumito, 2009) originated with Vygotsky (1978). Vygotsky asserts that "the development of cognition (i. e., learning) takes place in the interaction with other people. In the classroom, the teacher or other more capable classmates can give support called *scaffolding* (e.g., van Lier, 2004) to the learners". Despite this firm theoretical background, social strategies are rarely reported in the literature on VLSs. For example, reviewing more than 30 years of VLS research, Nyikos and Fan (2007) do not mention social strategies in VLS at all (Mizumito, 2009).

The above section presents a theoretical background on VLSs as a means for vocabulary learning as viewed by educators and scholars. The following section introduces an empirical background on the topic to enhance the knowledge on both aspects; the theory and practice. This introduction will guide the researcher through the research process by providing a road map that facilitates the work. Thus, the following section reviews some of the previous studies carried out on VLSs. It sheds light on the results the research came up with to draw conclusions about the effectiveness of these strategies and to later compare them with the current study's results.

2.3. Empirical Studies in the field

There has recently been research about the LLSs in general and the VLSs in particular. Vocabulary is no longer ignored in the applied linguistic research. On the contrary, during the last few decades, it seems that there has been a great interest in

this area as a result of the awareness of the importance of vocabulary knowledge for foreign learners which plays an important role in their language acquisition and improves their learning. This has been of great help when teaching and learning methods that are of a more communicative nature are followed. Below are some of the studies that were carried out in different foreign contexts like China, Taiwan, Japan, and Turkey. They are presented according to the research method followed in those studies. Survey studies investigated the VLSs, while other types of research methods like the experimental and observation methods aimed at investigating the effectiveness of one or more VLSs and the effectiveness of using VLS training on vocabulary learning.

2.3.1 Survey studies

1) Fan (2003) aimed at exploring students' vocabulary size to find out the best efficient vocabulary strategies in general and those strategies that were efficient for high and low frequency vocabulary. The number of participants in this study was 1067 students in their first year coming from different disciplines. 40% of this students were male and 60% were female. Two instruments were used in this study. The first one was a vocabulary test to identify the students' vocabulary knowledge and the other was a vocabulary learning strategy questionnaire used to know the most frequent VLSs students use. Results revealed that using the dictionary showed a significant usage as learners need to look up the word in order to understand the meaning. The other strategies that showed preferences from students were: revising new words; paying attention to words' different meanings in contexts; reading stories, magazines, and newspapers; using the dictionary for knowing the word's grammatical function; and analyzing the word by dividing it into sound segments. The students didn't show any preference toward the keyword strategy as they perceived it as being

un-useful. The researcher also found that learners used strategies such as guessing and knowing the words more than grouping, association, and management. Moreover, high level proficiency students used memorization strategies while low level students used associations and repetition strategies more. Dictionary and guessing strategies were used more in high and low frequency words while repetition and association strategies were the least used.

2) Wei-Shiwu (2005) aims at identifying the vocabulary-learning strategies adopted by 303 Taiwanese EFL students by demonstrating the strategies they used, their perceptions of the helpfulness of these strategies, the helpfulness ratings of the strategies, and whether the patterns of strategy use change for students of different age groups. The results of the study show that the use of electronic dictionaries, bilingual dictionaries, and guessing from context are the most popular strategies shared by students from different age groups. “Ask classmates for meaning” and “guess from textual context” were both reported at 70 per cent. There are four most-used discovery strategies commonly shared by the three different age groups of students. These strategies are “electronic bilingual dictionary”, “bilingual dictionary”, “guess from textual context”, and “ask classmates for meaning”.

3) Çelik and Toptaş (2010) survey the Turkish EFL students’ vocabulary learning strategy use. The major findings of the study were as follows: there was a positive relation between the frequency of the strategy use and the language levels, except for the social strategies, in that the elementary level learners’ related preferences were higher than those of the upper level learners. The finding in relation to the most and least used strategies shows that the cognitive strategies were not operated as much as the other strategies. Further, the intermediate level learners reported a more frequent use of the memory strategies than the elementary level learners. Results show that

learners did not frequently use strategies, as well as did not perceive them as very useful and thus vocabulary learning strategy instruction needs to be improved. Moreover, language learning programs should be revised to promote teaching of vocabulary learning strategy use across all language levels.

4) Gu and Johnson (1996) carried out a large-scale study on Chinese university learners' VLSs. Researchers used a questionnaire to collect the data. They correlated responses to the questionnaire with results on a vocabulary size test and a general English proficiency measure. They found a significant positive correlation between the two metacognitive strategies (Self-Initiation and Selective Attention) and the two test scores, whereas mnemonic devices (e.g. imagery, visual associations, and auditory associations), semantic encoding strategies, and word list learning probably correlated highly with vocabulary size, but not with general English proficiency. The study also revealed that Visual Repetition and Imagery Encoding were both strong negative predictors of vocabulary size and English proficiency.

5) Schmitt (1997) also conducted a large-scale survey on VLSs. In this study a questionnaire was used to gather information about what VLSs were used and how useful they were rated. Results show that bilingual dictionaries were favored by the learners, with 85% of the sample giving a positive response to the use of a bilingual dictionary to discover word meaning. Repetition was the second most-used strategy. The researcher justifies this result due to the fact that vocabulary is presented in word lists. Moreover, Japanese school contexts students are required to memorize English grammar and vocabulary usually through repetition.

6) Li (2005) conducted a study on the learning beliefs of Chinese EFL university learners with regard to rote learning as a VLS. The data for the study was obtained through three instruments: questionnaires, interviews and an English vocabulary test.

The findings of the study indicate that Chinese EFL learners generally hold highly positive beliefs about rote learning in EFL vocabulary learning. The subjects' beliefs also suggest that they believe rote learning is an effective way of learning EFL vocabulary, but not the best way.

7) Zhang (2009) investigated the foreign language vocabulary learning situation of 481 undergraduates in terms of their perspective of vocabulary learning, strategy use and vocabulary size. The researcher used a questionnaire and vocabulary level tests. The most frequently used strategies included dictionary use, guessing the meaning and note-taking. There was a significant difference existed in the use of some strategies between different graders and different majors. Moreover, four strategies (cognitive & meta-cognitive) significantly correlated with vocabulary size.

8) Wu (2005) investigated the VLSs used by 203 Taiwanese EFL secondary and university students. A questionnaire on metacognitive, social, memory, cognitive and determination strategies was administered to collect the data. The results revealed that most students used the following discovery strategies: 1) using bilingual dictionaries; 2) guessing from textual context; and 3) asking classmates for the meaning of words. As for consolidating strategies, the following strategies were most popular among the students: 1) studying the sound of a word; and 2) repeating a word's form. The researcher comments that traditional methods of rote learning such as memorizing words and grammatical forms of the words in word lists still exist in Taiwan.

9) Lo (2007) aims at finding out the perceptions of low achieving Chinese EFL learners from a secondary school in Hong Kong, particularly, what VLSs they perceive to be useful and use frequently. Students were given a pre-questionnaire that contained a list of 19 VLSs for students to choose from among. The following VLSs

were most frequently used and found to be most useful by students: 1) repeatedly spelling the words; 2) taking notes in vocabulary textbooks; 3) repeating and reviewing strategies; and 4) analyzing strategies.

2.3.2 Experimental studies

The following studies used the experimental method to investigate the effectiveness of VLS use. However, most of these studies aimed at investigating the effectiveness of mnemonic devices:

1) Atay and Ozbulgan (2007) investigated the effects of memory strategy instruction along with learning through context on the ESP vocabulary recall of Turkish EFL learners. Participants were 50 male pilots enrolled in a Turkish army course of learning languages. Data was collected through a multiple-choice vocabulary test prepared by the researchers consisting of 50 items. The target words were selected randomly from the target vocabulary of Air Traffic terminology words. The results show that memory strategies can improve vocabulary learning. On one hand, students in the experimental group reported that using memory strategies inside the classroom motivated them to use the strategies before the teachers' explanation. On the other hand, students in the control group were losing focus and attention in the last hour of class. The result of the study also recommends that first; strategy instruction should be integrated into contextual vocabulary learning.

2) Raugh and Atkinson (1975) conducted a study in which four experiments evaluated the effectiveness of a two-stage mnemonic procedure, the keyword method, for learning foreign language vocabulary. Stage 1, the acoustic link stage, involves associating the spoken foreign word to an English "keyword". Stage 2, the imagery link stage, requires the formation of a mental image of the keyword interacting with

the English translation. The experiments compare the keyword method with various control procedures for learning a Spanish vocabulary. In all cases, the keyword method proved to be highly effective, yielding in one experiment a final test score of 88% correct for the keyword group compared to 28% for the control group.

3) Similarly, Pressley (1977) assessed children's ability to use a mnemonic procedure to learn foreign language vocabulary, the keyword method, using 107 2nd and 5th graders. To remember a foreign word translation, the keyword method user (a) associates the foreign word to an English word (the keyword) and (b) remembers a picture of the keyword and translation referents interacting. Students who were instructed in keyword method use and provided with interactive pictures for each vocabulary item remembered more simple Spanish vocabulary translations than did control students not instructed to use the keyword method. Learning the acoustic links without a keyword method instruction did not improve vocabulary learning.

4) Moreover, Pressley et al (1981) applied a study on children 3 to 6 years of age learning simple Spanish vocabulary items through keyword method. The results showed that children who used the keyword method remembered more vocabulary than children who were not instructed in keyword method usage. The following year, Pressley et. al. (1982) conducted a study on fourth-grade students who learned a list of relatively complex English vocabulary words in two experiments. In Experiment 1, pupils used either a mnemonic ("keyword") contextual or a verbal contextual procedure. In Experiment 2, three other conditions were compared to the keyword context condition. They included a no-strategy control condition and two other contextual variations: (a) an experiential context condition that had been used previously, and (b) a nonkeyword pictorial context condition where the KW method

was not introduced. In both experiments, the keyword method proved effective for enhancing children's acquisition of new vocabulary words. Moreover, in the second experiment, neither of the two nonkeyword contextual variations improved students' performance.

5) Similarly, In McDaniel and Pressley (1989), the researchers taught new vocabulary by one of three methods: keyword, semantic context, and no strategy control. The researchers point out that despite theoretically motivated concerns that keyword-method acquisition of definitions might inhibit comprehension of vocabulary in discourse relative to a semantic context method, none of the reaction time or performance analyses reported here supported those hypotheses.

6) [Shapiro](#) and Waters (2005) designed an experiment to investigate the cognition underlying the effectiveness of the KW method. Each subject was asked to memorize 30 Latin vocabulary words. Subjects were either provided with both keywords and interactions (the Given condition) or instructions to generate their own keywords and interactions (the Self-Generated condition). Retention was tested in both immediate and delayed post-tests. Results revealed a strong effect of imagery level in both post-tests. Results indicate that the KW method is effective because it provides a meaningful visual image upon which to base memory for a new word's meaning.

7) Chen and Hsiao (2009) aimed at investigating the keyword method training effect in ESP vocabulary instruction. With the use of quasi-experimental design and the open-ended questionnaire, forty students from two intact classes in a university in central Taiwan were randomly assigned as the keyword group and the traditional group. The keyword group received the keyword strategy training, while the traditional group focused on teaching and learning specific words by means of

presenting definitions or synonyms. The results indicated that after the training, students in the keyword group recalled more target vocabulary than the traditional group did.

Moreover, the following experimental studies reviewed by Abdel Latif (2006) showed that vocabulary learning strategy training is effective in the language learning context:

- 1) Cohen and Apeh (1981) found that training students to learn vocabulary using mnemonic associations was effective.
- 2) Crow and Quigley (1985) used semantic field strategy training to enhance learning vocabulary.
- 3) O'Malley (1987) found that training EFL students to use a metacognitive strategy (self-evaluation) and two cognitive strategies (grouping and imagery) improved their vocabulary learning.
- 4) Alseweed's (2000) study showed that training students in using word-solving strategies increased high proficiency students' strategy use than low proficiency ones.
- 5) Rasekh and Ranjbari (2003) found that metacognitive strategy training had a positive impact on enhancing EFL learners' lexical knowledge.
- 6) Tassana-ngam (2005) also found that training Thai EFL university students in using five vocabulary learning strategies (dictionary work, keyword method, semantic context, grouping and semantic mapping) improved their ability to learn English words and enhanced awareness of how to learn vocabulary.

Similarly, Mizumoto and Takeuchi (2009) attempted to prove that an explicit instruction on vocabulary learning strategies helps learners to develop vocabulary items in academic reading passages when compared to other traditional or paper-based strategies or activities. The researchers used the explicit instructions with the

experimental group in their ordinary language lessons, while the control group didn't receive any vocabulary learning strategy. The same test and questionnaire were given to students at the end of the semester to trace the change in their test scores. The results showed that explicit vocabulary language instructions were very effective in vocabulary acquisition.

2.3.3 Observational studies

However, few studies used observation to collect the data. For instance, Lawson and Hogben (1996) used the observation method to find out what types of procedures, including use of contextual cues that students would use for this task. They observed the students as they attempted to learn the meanings of the new words in the sentences presented to them. The study involved the learners in a deliberate vocabulary acquisition task in which they knew that their recall for the word meanings would be tested. The results showed the procedures that students could access to acquire the meanings of new words. The results also showed that there was a strong positive correlation between students' overall frequency of strategy use and their recall test scores. Thus, there was a strong tendency for those students employing many strategies for word learning to recall more word definitions than those students employing fewer strategies. Moreover, there was no evidence of use of the full keyword procedure, and mnemonic procedures similar to some component of the keyword method were used by only 3 students.

2.3.4 Conclusion of empirical studies

The above empirical background on using LLSs and VLSs shows that though there are mixed results concerning the effectiveness of applying these strategies, still, it is mostly recommended that these strategies could be experienced to enhance language learning. For example, research seems to provide extensive support to the

effectiveness of GFC strategy in the process of vocabulary learning. Moreover, though memorization might be viewed as a simple mechanical technique, it is widely employed by the learners and viewed as an effective strategy for vocabulary learning. Research reveals that more mechanical strategies are often favored over more complex ones. It is also revealed that social strategies seem to be common among the learners, mainly when they are encouraged to use them. Concerning using dictionaries as a VLS, most studies support the effectiveness of using this strategy to enhance vocabulary knowledge. There is also evidence that there is a positive correlation between vocabulary proficiency level and the use of VLSs.

2.4. Conclusion

Previous research has shown different views and different methods in testing the effectiveness of strategies in language learning and vocabulary learning. The context where such research was conducted includes: China (Fan, 2003; Gu and Johnson, 1996; Li, 2005; Lo, 2007), Turkey (Atay and Ozbulgan, 2007; Çelik and Toptaş, 2010, Nacera, 2010), Japan (Mizumoto and takeuchi, 2009; Schmitt, 1997) and Taiwan (Wei-Shiwu, 2005; Chen and Hsiao, 2009; Wu, 2005) among others. It seems obvious that such contexts belong to the EFL situation which is similar to the context of Palestine.

Empirical research testing the various strategies shows variation in the choice of types of strategies. Some chose only one; others chose multiple strategies in their attempts to find the effectiveness and use of such strategies. However, survey research aimed at finding out the types of strategies used by learners ending up in revealing the multi type of strategies. The most prevailing strategies which received attention and recognition in vocabulary learning are as follows: cognitive strategies, metacognitive strategies, encoding strategies, discovery strategies and consolidation strategies with a

number of sub-strategies as examples on each. For testing and researching such strategies, the following design methods were used:

- Survey method (Fan, 2003; Wei-Shiwu, 2005; Çelik and Toptaş, 2010; Gu and Johnson, 1996; Schmitt, 1997; Li, 2005; Zhang, 2009; Wu, 2005; Lo, 2007; and Nacera, 2010).
- Experimental approach (Mizumoto and takeuchi, 2009; Atay and Ozbulgan, 2007; Raugh and Atkenson, 1975; Pressley, 1977; Pressley et al., 1981; McDanial and Pressley, 1989; Shapiro and Waters, 2005 and Chen and Hsiao, 2009).
- Observation (Scafaru et al, 2006 and Lawson and Hogben, 1996).
- Interview (Scafaru et al, 2006).

Based on this conclusion, the current study will use the experimental method to investigate the effectiveness of using VLSs in learning vocabulary. A questionnaire will also be used to find out the learners' attitudes towards using the target VLSs. In order to measure the effect of using VLSs on learners' achievement, a vocabulary achievement test (VAT) will be used at the end of the semester. Moreover, a vocabulary proficiency level test (VPT) is applied at the beginning of the semester before the training takes place to find out whether there is a correlation between vocabulary proficiency level and VLS use or not.

The current study will investigate five VLSs from among the subcategories of the reviewed VLSs: Key word method (KW), memorization, guessing from context (GFC), using dictionaries, and asking the teacher or classmates for the meaning. These strategies are thought to be suitable for investigation within the time and the environmental setting of the study. Metacognitive strategies are not tested due to limitations like the learners' lack of acquaintance with such strategies and time

limitations. However, social strategies will be tested through the "asking the teacher or classmates" strategy as an example on social strategies. Moreover, cognitive strategies are tested using both examples on "simple" strategies which are the "memorization" and the "dictionary use" strategies; and "deeper" strategies which are the "guessing from context GFC" and the "key word (KW)" method.

It is important to realize that investigating the effect of VLS use needs a sufficient training for the learners before getting them to practice these strategies. This training involves first introducing the strategies and explaining them well to the learners to guarantee that the task of applying VLSs is going right. The researcher makes use of the suggestions and recommendations reported in the literature on the importance of VLS training and the ways it should be introduced. Moreover, the knowledge about each of the five target VLSs enhances the researcher's awareness about each strategy and therefore, helps in introducing it at the best possible way.

Having reviewed the relevant research on LLSs in general and VLSs in particular, the next chapter can now be introduced for the methodology and procedures of the current study.

Chapter three

Methodology & Procedures

This chapter discusses the population, the instruments, and the methodology used in the study.

3.1 Participants

The population of the study was the 11th graders in the public schools in Palestine who were enrolled in Fall 2010/2011. The sample contained 63 students at the 11th grade in Majid Abu-sharar High School at Southern Hebron. 32 students for the experimental group and 31 for the control group though only 26 of them cooperated. The researcher followed some previous studies in choosing the size of the sample for the experimental research. This size is acceptable in line with (Lessard-Clouston, 2008; Lawson and Hogben, 1996; Kato, 2005; Essam, 2010; Kiliçkaya and, Krajka 2010; Alshwiah, 2009; Chen, I-Ju. and Hsiao, Hui-Jing, 2009).

This particular sample was used based on some considerations. First, the students have been learning English for 11 years which makes it satisfying to choose them for the sample since they are not too young to handle the strategies in hand. For example, Guessing from Context strategy is easier to use by advanced learners than by younger ones. Second, the 12th graders are not chosen because they are usually too busy preparing themselves for the final general exams and they may not be motivated to cooperate with researchers. Another point is that the students and the teachers in this school are familiar with cooperating with researchers as their school is a central one and most researchers carry out their studies there.

3.2 Instruments

In order to answer the study questions, the following four instruments were used:

3.2.1 Questionnaire

The questionnaire was designed to investigate the learners' attitudes towards using the target VLSs. It contained 20 items spread onto the five main strategies: Guessing from Context (GFC), Key Word method (KW), Memorization, Asking the teacher or classmates for the meaning and Using a dictionary. The learner has to decide on the frequency degree of the use and effectiveness of using the strategies as experienced through the training and practice time. He has to choose either always, sometimes, rarely or never. In the later analysis later, *always* and *sometimes* choices are interpreted as supporting the strategy, whereas, *rarely* and *never* are interpreted as not supporting the strategy.

The questionnaire items were compiled by the researcher and modified based on Gu and Johnson's (1996), Schmitt's (1997) VLS taxonomy and Fan (2003) questionnaire. Schmitt's list is widely adopted by researchers (such as Kudo, 1999; Wang2004; Hsiao, 2008; and Wu, 2005). It included the following: five items on the GFC, three on the KW, four on the Asking the teacher or classmates, four on the Memorization, and four on Using a dictionary. The KW method was not highly stressed in the questionnaire because it was noticed during the training and practice times that learners did not like this strategy and thus did not use it frequently. The items were randomly spread on the five strategies to make sure the answers were reliable. However, similar items were given on the preference and evaluation of each strategy such as "I prefer using X strategy over other strategies" and "X strategy is easy to apply". Other items like "GFC needs good knowledge of the subject" and "I

create an image to link the new vocabulary item with the similar one of Arabic" were used to make sure the learners well understand the strategy (Appendix1).

The questionnaire was submitted to five referees: three TEFL University teachers and two teachers of English at schools. It was modified in line with the jury's comments. The questionnaire was administrated to both the experimental and the control groups during a regular English lesson.

Since the questionnaire may not be enough to provide a clear view about the learners' attitudes towards using VLSs as well as the effectiveness of using these strategies, other tools were used to complement the questionnaire. After applying the questionnaire, it was noticed that the questionnaire does not include all the aspects related to using the VLSs such as giving the reasons why a learner likes or dislikes certain VLS. Thus, an interviews were used to uncover those aspects.

3.2.2 Interview

Structured interviews were conducted with ten students whom the researcher managed to interview as a sample to question the learners' reasons for their preferences of certain vocabulary learning strategies and rejection of others. The interviews aimed at providing verifications of the learners' responses to the questionnaire. Moreover, the learners were asked to provide some examples on the strategies they employed to make sure they really did practice them. More elaboration onto the effectiveness of the strategies on the learners' vocabulary learning was also discussed with the interviewees.

The researcher chose the structured interview to prepare questions on each strategy in advance in order to save time and to cover the target aspects of the

interview. However, learners were given the chance to add or elaborate on any aspect of the program and to give their own impressions on the overall experience. The researcher met each student individually in the school library. Each interview took ten to fifteen minutes.

The researcher took notes of the students' answers. Later, all the answers were compiled and arranged to get a better view about the learners' VLSs used during the semester (see appendix 9)

3.2.3 Vocabulary Achievement Test (VAT) (Appendix 8)

This post test was designed to evaluate the learners' knowledge of vocabulary at the end of the semester. It aims at providing an indication about the effectiveness of using VLSs on vocabulary learning. It also aims at finding the correlation between vocabulary proficiency level and learners' achievement as a result of using VLSs. The test was given to both the experimental and the control groups.

Nation (2008) comments that a vocabulary test may be used to give a grade at the end of a course. Such tests are usually based on the material that the learners have studied and because of this they are called "achievement tests". They try to measure how well the learner has achieved the goals of the course. To be reliable and valid, the test should test a reasonably large number of items (at least 30).

Nation (2008) adds that if all learners share the same first-language, then test items can be more easily made using the learners' first-language. Following Nation's suggestion, the Achievement test of the current study includes a question in which the learners have to give the Arabic translation of some vocabulary items.

The test contains 40 vocabulary items which were tested throughout four main questions; each deals with 10 items in a subjective manner. The words are listed at the end of the text book in the Word List section. Every other five word is chosen to be tested. The tested vocabulary items are from the items students learned in their textbooks throughout the first semester during which training took place. Both the experimental and the control groups covered the same material during the course. In the first question students have to translate the 10 items into Arabic. The second question is a multiple choice one where the four choices are also among the target vocabulary items. In the third question students have to fill in 10 blanks from a given list. The fourth question contains a list of 10 items to be matched with their meanings from an opposing list.

3.2.4 Vocabulary Proficiency Level Test (VPLT) (see appendix 11)

This test was administered at the beginning of the semester to investigate the correlation between learners' vocabulary proficiency level and their use of vocabulary learning strategies later on. Schmitt and McCarthy (1997) discuss that language proficiency may play a great role in determining a vocabulary strategy's effectiveness. For example, word lists proved better for beginners, but more advanced students benefited more from contextualized words. They quote Cohen and Aphek (1980) saying that they found that more proficient students are better able to use associations in recall tasks.

The test is adopted from *The Vocabulary Levels Test* (VLT) (Nation, 2008). This test is designed to measure vocabulary size. Nation (2008) says that it is a widely used, ready available test that has been well researched. It samples vocabulary from the 2nd 1,000- word level, the 3rd 1,000-word level, the 5th 1,000-word level, the

10th 1,000-word level and the Academic Word List. Each level contains 30 items. The 1st 1,000-word level is not tested in the VLT because it is very difficult to make items at the 1st 1,000-word level where the answers or meanings given are easier to understand than the tested words (Nation, 2008).

Each word in the test represents 33 words (1,000 divided by 30). For instance, a score of 20 out of 30 on a level means that a learner knows 667 words out of the 1,000 at that level, and does not know 333 from that level. To see if the 2nd 1,000 level is known well, Nation (2010) suggests that it may be necessary to also look at the learners' score on the 3rd 1,000 level. If that is also reasonably high then the 2nd 1,000 level is probably well known. Taking Nation's suggestion into account, the VPLT used in this study tests both the 2nd and the 3rd 1,000-word levels.

Learners were classified into two groups according to their VPLT results; "higher level learners" who were considered as "good learners" and "lower level learners" who were considered as "less proficient learners". Learners who could pass the test with a 50% mark were considered as "higher level learners" while those who failed it were considered as "lower level learners". 31% of the learners could pass the VPLT with an average mark of 65.3%, whereas 69% of the learners failed the test with an average mark of 30%.

3.3 Procedure

3.3.1 Training phase

To make sure the students in the experimental group know the various types of strategies and how to use them, training was first conducted to guarantee there were no misconceptions about the strategies or wrong use before getting them involved in

strategy use. The students were trained by the researcher during their regular English classes. The overall period of training and practice is about four months which was over a whole semester. However, the first few meetings were devoted to introducing and explaining the strategies and the way students were going to use them.

The researcher visited the students regularly for follow up during the practice phase. She also revised the target strategies regularly to make sure students are aware of the task. Their English teacher also cooperated with a continuous reminding and follow up.

The researcher made use of the following procedures in training the learners on using the VLSs as suggested by some researchers (Oxford, 1992, Cohen, 2003; Winograd and Hare, 1988) as reported in Saleh (2005):

1. Explain to students that you will be showing them specific techniques that they can use on their own to improve their English. Inform them that many of these techniques were suggested by successful language learners, and that if they use them, they too will be successful language learners.
2. Tell students why they are learning about the strategy. Explaining the purpose of the lesson and its potential benefits seems to be a necessary step for moving from teacher control to student self-control of learning.
3. Describe, model and give examples of potentially useful strategies.
4. Teach the strategy in conjunction with a typical class activity, such as listening comprehension, pronunciation drills, grammar practice, or reading and writing lessons.
5. Elicit additional examples from students based on the students' own learning experiences.

6. Delineate appropriate circumstances under which the strategy may be employed. Teachers may describe inappropriate instances for using the strategy.
7. Lead small-group and whole-class discussion about strategies.
8. After the strategy has been practiced in class, ask students to practice it on their own outside of class. Suggest specific situations in which they could practice the strategy, and ask for their own suggestions for additional situations.
9. Encourage students to experiment with a broad range of strategies.
10. Integrate strategies into everyday class material, explicitly and implicitly embedding them into the language tasks to provide for contextualized strategy practice.
11. Have students report on their use of the strategy outside of class.
12. Remind students about using a learning strategy when you introduce new material and make assignments.
13. Check with students after exercise or assignment to find out if they remembered to use a learning strategy. Show students how to evaluate their successful/unsuccessful use of the strategy, including suggestions for fix-up strategies to resolve remaining problems.

At the presentation phase, the learners were given some examples to familiarize them with the KW strategy as it was new to them. An example of how to remember and retain the meaning of a word using the KW method was on the word *feel*. Passing by the word *feel*, the closest phonetic associate in Arabic is the word [fi:l] which means "elephant". The image brought to mind when encountering the word *feel* is the "feeling" created from seeing an elephant. Another example from the list in the students' textbook is the word *drug* [dr^g]. The associate interactive image is keeping the drugs in the [durj]; (the Arabic word for "drawer"). The learners also

reported using more examples like the word *decorate* for which the associate interactive image is drawn making use of the Arabic word [di:ko:r]; which is a cognate (the Arabic word for "design"). Another example is of the word *damage* which is associated to the Arabic word [damaar], meaning *damage*. In his interview, one of the learners gave an interesting example of the word *support*. His associate interactive image emerges from a familiar word in English and not in his L1 which is *sport*. He created an image of some fans *supporting* a player in a sport match. Some more examples were also discussed and introduced during the practice phase.

Regarding the language of strategy instruction, this issue is particular to teaching language learning strategies. It is probably not possible to avoid using the first language during strategy instruction for beginner to low intermediate level students (Macaro, 2001, as reported in Chamot, 2005). Following Chamot's suggestion, the researcher used the learners' native language, in the strategy instruction during the training phase of the current study. However, the names of the strategies were given in English after being enough explained in Arabic for the students. The questionnaire was given in English and each item was orally translated for the students to make sure they well understand the item before responding.

Chapter Four

Findings and Discussion

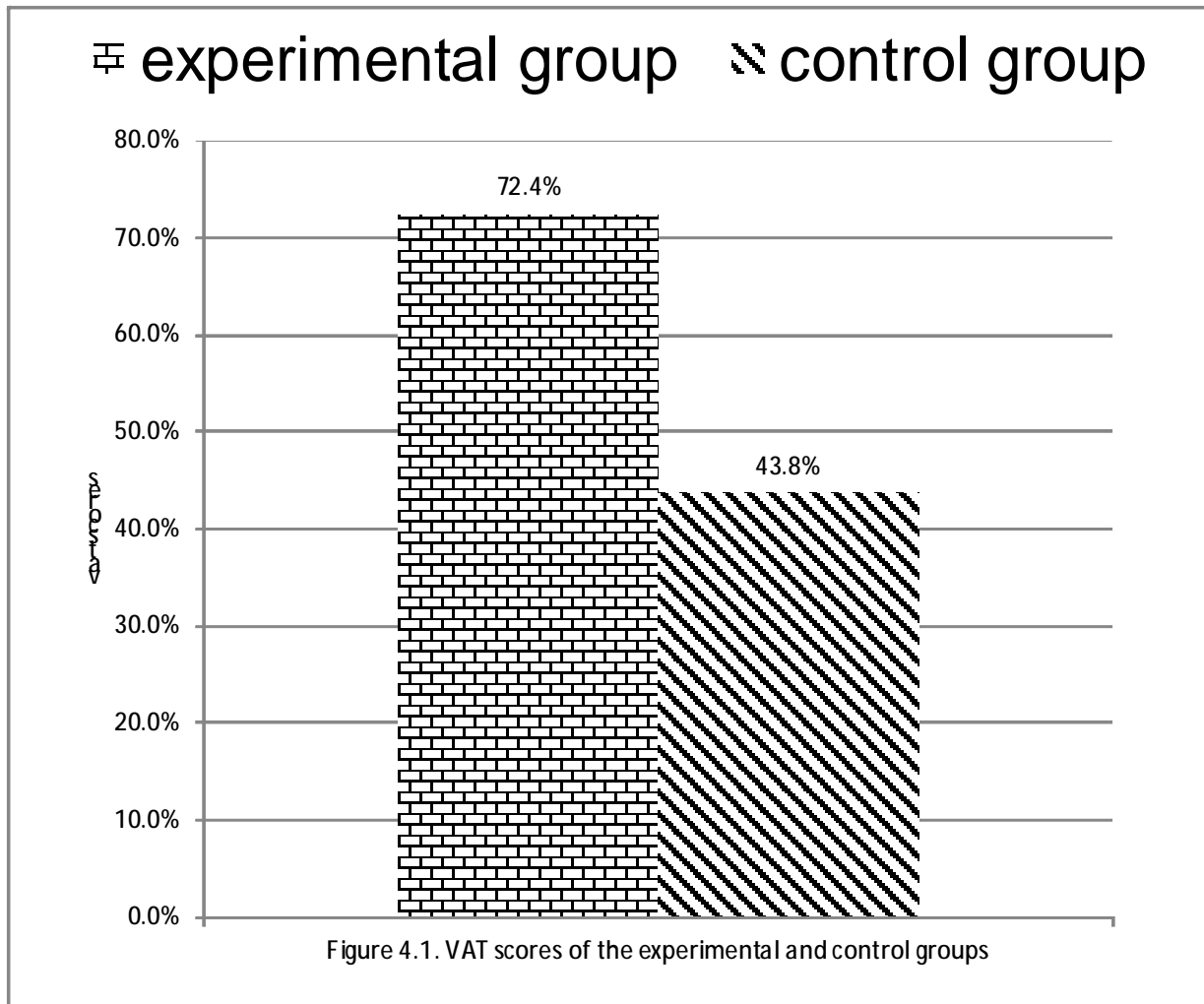
4.1 Introduction

In this chapter, the findings will be discussed and presented according to the research questions. Question one examines the effectiveness of using the five VLSs. Question two examines the learners' overall attitudes towards using the five vocabulary learning strategies. Questions three-seven are discussed in details to draw a conclusion on the learners' attitudes towards using VLSs for vocabulary learning. Finally, question eight investigates the correlation between vocabulary achievement as a result of using VLSs and vocabulary proficiency level.

4.2 Research question 1: What is the impact of using VLSs on learners' achievement in vocabulary learning?

To answer this question, learners were instructed on the use of five vocabulary learning strategies selected to examine their effectiveness and were given a chance to practice using these strategies over one school semester. At the end of the semester the learners were given a vocabulary achievement test (VAT) to both the experimental and the control groups. The results of the test show that the experimental group outperformed the control group. Despite the similarity in the proficiency level for both groups (41% for the experimental group and 37% for the control group), their scores in the VAT were in favor of the experimental group. Their average mark was 72.4% while the control group only scored 43.8% (diagram 4.1). These percentages are the averages of the learners' marks in the VAT. This difference is due to the use of

the five target vocabulary learning strategies since it was the only variable in the study. Both groups used the same textbooks and had the same teacher.



It is assumed that using learning strategies leads to autonomous learning which, in turn, leads to better learning and achievement. Results support this claim since employing the vocabulary learning strategies contributes to enhancing the learners' vocabulary learning. As mentioned earlier in chapter two, Fedderholdt (1997) indicates that the language learner is capable of using a wide variety of language learning strategies appropriately to improve his/her language skills in a

better way. Building LLSs skills leads to autonomous learning where learners can take control of their own learning.

This result is in line with Cohen and Aphek (1981) who found that training students to learn vocabulary using mnemonic associations was effective. O'Malley (1987) also found that training EFL students to use a metacognitive strategy (self-evaluation) and two cognitive strategies (grouping and imagery) improved their vocabulary learning. Coady (1997) revealed that vocabulary learning strategies are beneficial to lexical learning. Several strategies have been found to be effective in learning vocabulary. Rasekh and Ranjbari (2003) found that metacognitive strategy training had a positive impact on enhancing EFL learners' lexical knowledge. Tassana-ngam (2005) also found that training Thai EFL university students in using five vocabulary learning strategies (dictionary work, keyword method, semantic context, grouping and semantic mapping) improved their ability to learn English words and enhanced awareness of how to learn vocabulary.

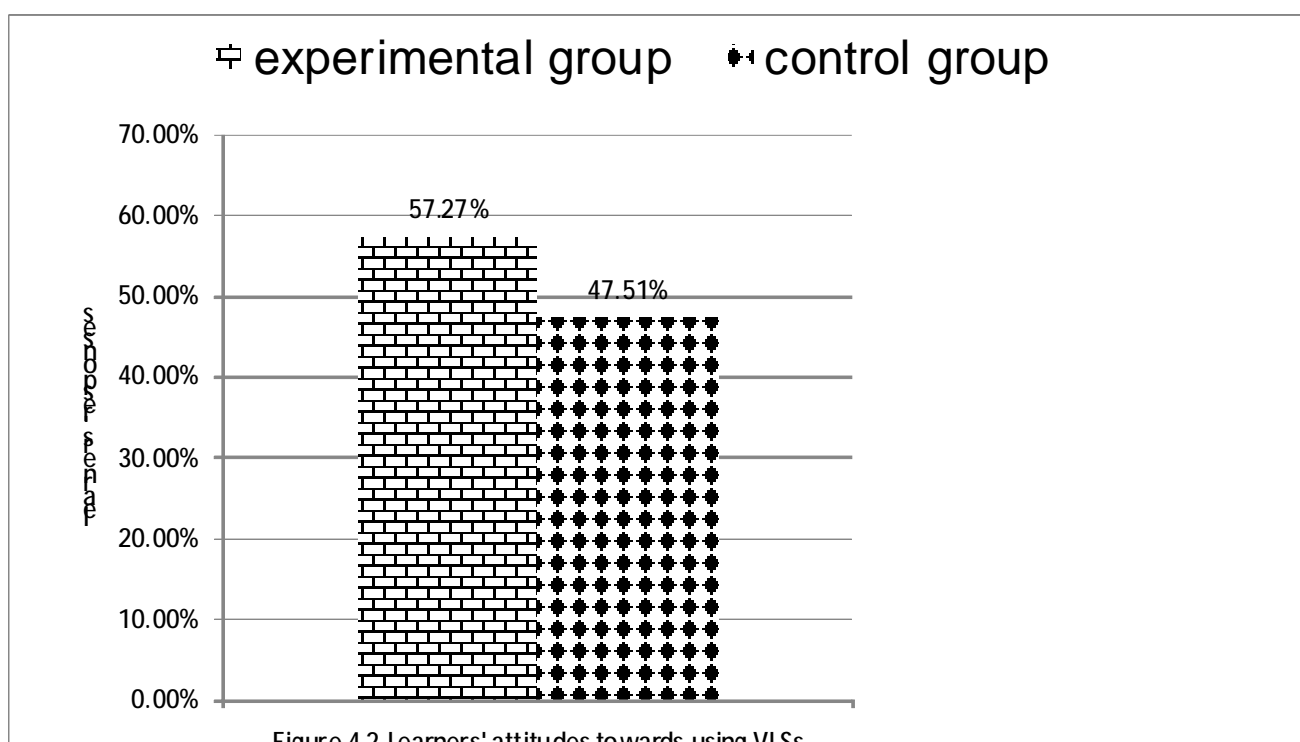
More recently, Mizumoto and Takeuchi (2009) examined the effectiveness of the explicit instruction of vocabulary learning strategies (VLSs) over a 10-week semester. They found that the experimental group outperformed the control group in the vocabulary test. It is also found that (1) strategy training is effective for both changing the repertoire of strategies used and improving their frequency of use, (2) the training increases the use of certain strategies more than it does for other strategies, and (3) different types of learners exhibit different responses to the strategy instruction.

Contrary to the above studies, although O'Malley and Chamot (1990) found that Hispanics who had strategy training improved their vocabulary scores compared to a Hispanic control group, Asians in strategy training groups resisted VLS training and performed worse than the Asian control group who used their familiar rote repetition strategy. The researchers justify this as a result of cultural differences.

It could be concluded that research results on vocabulary learning strategies support its effectiveness in the instructional field.

4.3 Research question 2: What are the learners' attitudes towards using the vocabulary learning strategies for vocabulary learning?

The learners' responses to the questionnaire were analyzed at the end of the training and practice phase. The overall responses of the participants in the experimental group regarding the five vocabulary learning strategies show that the majority of the learners support using the strategies for vocabulary learning at an average of 57.27%. However, an average of 42.5% of the responses shows that learners do not support using these strategies. Compared with the control group, this result indicates that learners are willing to employ VLSs to develop their knowledge



when they are encouraged and trained to do so. Analyzing the responses of the participants in the control group shows that the learners support using the vocabulary learning strategies at an average of 47.51% whereas, 52.46% of the learners' responses do not support using these strategies (figure 4.2). The **concepts of the strategies were understood by both groups. However, the control group was introduced in the study for comparative reasons only. That is why lack of training on using strategies seems obvious in the control group given their lower percentage of support to using the strategies.**

This may be explained in a way showing either ignorance of such strategies or lack of training in using VLSs. The learners in the experimental group expressed a more positive attitude towards using VLSs. Although the strategies under investigation may not be quite new to the learners in the control group (except for the KW method), it seems that they either do not pay attention to their use, or do not employ them effectively which was reflected in the difference in their scores in the VAT compared to that of their peers in the experimental group; (72.4% v.s.43.8%).

Although the above result shows that there is a positive attitude towards using VLSs, in the following section the five questions are discussed to investigate in more details the learners' attitudes towards using each of the five vocabulary learning strategies: "KW method, guessing from context (GFC), memorization, using dictionaries and asking the teacher or classmates for the meaning" strategies.

4.4 research question 3: What are the learners' attitudes towards using the “interactive image (KW)” strategy for vocabulary learning?

Based on the findings of the learners' questionnaires, the overall responses on the KW method are computed by averaging results. The results show that there is a trend against using this strategy; (only 32.81% chose the strategy while 67.18% did not) (Figure 4.3). This might be due to the fact that learners are not accustomed to this strategy. They were well trained on using the strategy and a sufficient presentation on the concept of the strategy and the ways it could be employed were given to them during the whole semester. However, the feedback from the learners during the training and practice phases showed that the learners avoided using it claiming that it seemed "unfamiliar" to them and hard to apply. Moreover, 86% of them said that it was limited to few words. However, two learners who chose to support using this strategy explained that it was easier for them and that it didn't need that effort of rehearsing and memorizing which might be easily lost.

This strategy which involves elaborate processing is an example of *deep* strategies that need a *complex* process in the learner's mind. It involves "forming a linkage between a to-be-learned word and a familiar English word that sounds like part of the to-be-learned item in phonology (the keyword). Then the learner forms an interactive image between the keyword and definition referents" Pressley, et al (1981). This indicates that learners who are expected to choose using this type of the cognitive strategies need to have a relatively high cognitive ability. This highly demanding cognitive strategy requires painful effort in processing the interactive image. Learners usually like to avoid pain driven processes in learning and like to go for easy ways instead. Moreover, learners claim that the other strategies are more practical in the sense that they do not need a long time for processing and they do not have to pay more efforts using them. They also say that there are very few words with

which this strategy may be used since it necessarily needs an acoustic similarity between the target word and an L1 word.

The following studies reveal similar results concerning the use and effectiveness of using the KW method: Levin et al. (1979) (in *Lawson and Hogben, 1996*) report that about half of the high-school Spanish students used “strategies involving cognates, phoneme correspondences, and some other mnemonic tricks, though only less than 10% reported use of a keyword strategy. O’Malley et al. (1985) find that strategies involving deeper manipulation of information such as imagery, inferencing and Keyword Method were much less frequent. Schmitt (1997) also finds that "mechanical" strategies like memorization, note-taking, and repetition are used more often than strategies that involve deep processing, such as guessing, imagery, and the keyword technique. Moir and Nation (2002) also find that although all students had been instructed on the use of various strategies for learning vocabulary at the beginning of the program, most of those interviewed had veered away from using new strategies such as the KW method, preferring to rely on the tried and tested strategy of rote learning. Fan (2003) also finds that the learners did not show any preference toward the keyword strategy as they perceived it as being un-useful. Similarly, Sahbazian (2004) shows that strategies such as the Key Word method, mnemonics, and semantic mapping were not among the most popular strategies. Memory strategies were among the strategies that learner perceived to use with high frequency and mnemonic strategies, especially the ones which require cognitively deeper processing such as the keyword method, were perceived to be used with low frequency.

However, other reported studies show the effectiveness of this strategy in acquiring new vocabulary (Pressley, 1977; Pressly et al., 1981 (reported in, Amiryousefi and Ketabi, 2011); Raugh and Atkinson, 1975; Fang, 1985; McDaniel and Pressley, 1989; Shapiro and Waters, 2005 and Chen and Hsiao, 2009). Pressly et al (1981) show that children who used the keyword method remembered more vocabulary than children who were not instructed in keyword method usage. Moreover, Raugh and Atkinson (1975) find that the keyword method proved to be highly effective, yielding in one experiment a final test score of 88% correct for the keyword group compared to 28% for the control group. Pressley (1977) finds that students who were instructed in keyword method use and provided with interactive pictures for each vocabulary item remembered more simple Spanish vocabulary translations than did control students who were not instructed to use the keyword method. However, learning the acoustic links without a keyword method instruction did not improve vocabulary learning. Similarly, Fang's (1985) study indicates that the class taught to use the keyword strategy retained the medical terminology to a significantly better extent than the class taught by a traditional method. McDaniel and Pressley (1989) find that the keyword technique was significantly more facilitative to learning than the context method. The one significant difference in comprehension favored the keyword method. More recently, Shapiro and Waters (2005) reveal a strong effect of imagery level. Results indicate that the KW method was effective because it provided a meaningful visual image upon which to base memory for a new word's meaning. The researchers suggest that there was some flexibility in how the KW method was used. Similarly, Chen and Hsiao (2009) results indicate that after the treatment, students in the keyword group recalled more target vocabulary than the traditional group did.

To sum up, there are mixed results regarding the effectiveness of using the KW method for vocabulary acquisition in the TEFL context. However, the learners' involved in the current study gave their own justification for avoiding this strategy. This justification seems logical and typical to their instructional foreign context.

4.5 Research question 4: What are the learners' attitudes towards using the "Guessing from context" strategy for vocabulary learning?

Learners' responses show that 65.62% of learners supported using this strategy. Only 34.37% of learners did not. This is due to the fact that learners might be more familiar with this strategy. They used to use it previously though not necessarily effectively, as they claim in their oral feedback through the training phase. In their learning context, this strategy is sometimes the only available strategy for learners to use, mainly during the exams and classes where there may not be a room for other strategies that need more time or interrupt the lesson flow. Moreover, the textbooks usually provide a context that helps learners figure out the meaning of words they do not know. This contextualized learning deepens learners' understanding of words they are learning.

However, guessing from context strategy is far from being a simple strategy through which the guess is guaranteed. Though the learners' responses to the questionnaire show that the majority of the learners go for this strategy, yet they think that it needs a good knowledge of the linguistic context and theme at an average of 87.56% (the questionnaire; item n. 6). Laufer's (1997) emphasizes that "L2 learners tend to rely heavily on words as landmarks of meaning in text, less so on background knowledge, and to virtually ignore syntax". The learners' responses of the current study show that 92.5% of the higher level learners go for this strategy while only

69.22% of the less proficient learners do. This indication proves that this strategy needs a relatively good level of lexical proficiency to help figure out the right guess.

Learners were provided with relevant examples from their textbooks through the training phase to make sure they well understand this strategy and use it appropriately. Some of these examples were introduced and discussed by the learners themselves during the discussion and the feedback. An example of which is guessing the meaning of the word "*advantage*". The immediate context in which the word appears is

*"These are all major problems, but the Palestinians have one special **advantage**, and that is education."* (Rammal et. al, 2011, p. 33).

The linguistic clues are (*problems, but, education* and that the word is a noun). Making use of the knowledge of the general topic (theme), i.e., *learning for a better future*, along with the linguistic surrounding context, the learner could guess the meaning of the highlighted target word. Therefore, the learner can easily guess that this word stands for "something good".

An example given by one of the learners was the word "*gift*" appearing in the following context:

*"I hope you like the little Christmas **gift** from Palestine that I'm sending with this. Merry Christmas and a happy New Year!"* (Rammal et. al, 2011, p. 27).

Context clues: (*hope you like, from, sending and Merry Christmas*).

Taking into account the topic of the text; that is a letter to a friend on Christmas, the learner can make use also of the surrounding clues Thus, it would be easy to guess that this word stands for something given to friends on special occasions, like a "present"; (a word already known to the learners).

The result revealed in this study is similar to Schmitt's (1997) who finds that 74% of the intermediate level L2 learners of English used "guessing from context

strategy", and 73 % found it helpful. Fan's (2003) also finds that learners used strategies such as guessing and knowing the words more than grouping, association, and management. Wei-SHiwu (2005) also reveals that the use of guessing from context strategy was among the most popular strategies shared by students from different age groups. "Guess from textual context" was reported at 70%. Similarly Baicheng Zhang (2009) and Gu (2010) find that "guessing from context" was among the most frequently used strategies.

However, Lawson and Hogben (1996) found that this procedure was not associated with successful recall of the word meanings. They clarify that the use of contextual clues for generation of meaning from context was not associated with high levels of recall. This should be logical since meaning is connected with context and once the context disappears the connection is lost and does not go into memory.

The GFC strategy obviously has an important role in the overall scheme of vocabulary learning strategies. Research seems to provide extensive support to its effectiveness in the process of acquiring vocabulary knowledge. Therefore, learners should be guided towards an effective use of this strategy. The learners have to practice the skill of linking the linguistic context with the theme of the text.

4.6 Research question 5: What are the learners' attitudes towards using the "memorization" strategy for vocabulary acquisition?

Learners' responses show that the majority of the learners (71.8%) support using this strategy while only 28.1% of learners do not. This result is typical in the context under investigation; the Palestinian EFL context, where there are some relating factors that affect learners' choice of strategies. Learners' overall proficiency level in English language is relatively low as clear from their average marks in the school records.

Their average mark in the VPL test is also only 41%. Moreover, the traditional teaching and learning methods applied in most schools in Palestine and the least chances learners have to be exposed to English might govern their choices of learning strategies. Therefore, most students might exhibit a preference for low-demanding cognitive strategies such as "memorization". This strategy can be applied away from context and does not necessarily need a higher level of proficiency or a combination of more advanced skills and abilities such as the case with GFC and KW strategies. It also needs less time than, for example, consulting a dictionary or creating interactive images in mind.

This result is attributed to the fact that the traditional teaching system in Palestine is still common which encourages rote learning. This system requires students to memorize English vocabulary through repetition. Vocabulary is often presented through word lists on which meaning and form are the only focus. Another factor that might have affected the learners' choice of choosing more simple cognitive strategies is due to the task they are supposed to accomplish. Chamot (2005) reports Hsiao (2004) saying that if learners perceive, for example, that a task like vocabulary learning requires correct matching of a new word to its definition within a specified period of time (as in a test), they will likely decide to use a memorization strategy. Their choice of memorization strategy will depend on their understanding of their own learning processes. The school in this study is like any other traditional school in teaching methodology. Since learners are evaluated by traditional exams that focus on memorization, they naturally tend to use memorization as a strategy to recall as much information as they can. Reviewing some models of the exams used to evaluate the learners, it was noticed that exams highly focus on the memorization skill rather than

communication or productive and critical skills. All interviewees commented that they did care about getting high marks, and thus, decide to use strategies that directly serve this purpose and meet the exams requirements.

Reviewing the previous studies on VLSs shows that most studies reveal a learners' tendency towards using "memorization" for learning vocabulary. This finding is supported by the finding of Schmitt (1997) who comes up with three general conclusions about vocabulary learning strategies based on the results of general learning research and vocabulary learning studies. The second of which is that "mechanical" strategies like memorization, note-taking, and repetition are used more often than strategies that involve deep processing, such as guessing, imagery, and the keyword technique. Similarly, Moir and Nation (2002) find that although all students in the study had been instructed on the use of various strategies for learning vocabulary at the beginning of the program, most of those interviewed avoided using new strategies, preferring to rely on the tried and tested strategy of rote learning. They find that rote learning or 'memorizing' was the most common consolidation strategy used by nine of the ten informants interviewed for their study. Fan (2003) also find that high level proficiency students used memorization strategies while low level students used associations and repetition strategies more. Sahbazian's (2004) study shows that the most significant and popular way of mastering new words was by using memory, direct and simple cognitive strategies.

Reviewing vocabulary strategies studies, Uhl Chamot (2005) reports a study in which three teachers focused on teaching memorization strategies for vocabulary. The strategy instruction was generally explicit and students' metacognition was developed through a variety of consciousness-raising activities. Results show that most students were willing to adopt the new strategies. Performance on tests indicates that the

memorization strategies had been helpful for many in learning new vocabulary. Atay and Ozbulgan (2007) also investigate the effects of memory strategy instruction along with learning through context on the ESP vocabulary recall of Turkish EFL learners. The study shows that memory strategies or mnemonic strategies could improve vocabulary learning. Students in the experimental group reported that using memory strategies inside the classroom motivated them since they didn't wait all the time for the teacher's explanation. Whereas, students in the control group were losing focus and attention in the last hour of class since they didn't use any strategy that could motivate them. The researchers find that the experimental group students had significantly better vocabulary gain scores than the control students at the end of the study. Results of the post-tests show that the percentage of usage and varieties of strategies increased. The researchers clarify that the experimental group who used both memory strategies along with learning from context outperformed the control group who used learning from context only.

However, some other studies reveal the effectiveness of more deep strategies over the rote repetition strategies such as "memorization" (Cohen & Aphek, 1981; Hulstijn, 1997; O'Malley & Chamot, 1990; Schmitt, 2000; as in Xhaferi and Xhaferi 2008). Gu (2010) also finds that the participants do not believe in the memorization of words and that words should be learned through use. Moreover, Ellis (1995) states that the depth of processing hypothesis implies that shallow processing like oral rehearsal does not lead to long-term retention of words but that deep processing, whereby semantic associations are accessed and elaborated, does.

Knowing a word involves having it somehow stored in the mind, and thus, words need to be repeated in order to be learned. Though memorisation might be viewed as a simple mechanical technique, it is widely employed by the learners and

viewed as an effective strategy for vocabulary acquisition. Research reveals that more mechanical strategies are often favored over more complex ones.

4.7 Research question 6: What are the learners' attitudes towards using "Asking the teacher or classmates for meaning" strategy for vocabulary learning?

Learners' responses show that the majority of the learners (76.55%) support using this strategy. Only 23.43% of learners do not. It is obvious that learners prefer this social strategy which indicates they heavily rely on the teacher. This is probable due to the fact that the educational system still favors the teacher-centered methodology of teaching which learners may be inclined to since they were young learners. However, from my experience as a language teacher, I believe that it is preferable to encourage learners not to be embarrassed to consult their teachers and break the ice between them. Learners were encouraged by both the researcher and the teacher to do so during the training phase of the current study. This behavior is also considered as a characteristic of a good language learner.

The learners' responses show that both the good and the less proficient learners used this social strategy in a similar degree; (80% for the good learners and 75% for the less proficient ones). Moreover, 71.87% of the learners do not "feel embarrassed to ask the teacher or a classmate for the meaning of a new vocabulary item during the lesson". Amazingly, the good and the less proficient learners also expressed a similar degree of not feeling embarrassed to ask the teacher or a classmate for the meaning of new words (70% vs. 68.18%). This result indicates that learners enjoy a good social atmosphere inside the classroom. Thus, although learners may be dependent on the teacher but that they are not affectively oppressed and feel free to consult their teacher or the classmates during the lesson. During the interviews, most of them said that they

trust their teacher's knowledge of vocabulary and that his answer will be the most appropriate one; more appropriate than the dictionary or the guess they may do. Two learners said "it is a faster and easier way to get the answer with the least effort". Another learner commented "when I ask the teacher for the meaning during the class, this gives an indication that I do care". Another learner also said "asking my classmates shows that we work as a team in class".

This result is in line with Schmitt's (1997) who conducted a study in Japan showing that "asking the teacher for a paraphrase (synonym)" strategy was among the most commonly used strategies with an average of 86%. Similarly, Wei-Shiwu (2005) finds that "Ask classmates for meaning" strategy was reported at 70%. Wu's (2008) results also show that the learners favored the use of social affective strategies such as "questioning for clarification" more than the cognitive strategies. Paul Chi Hong Lip (2009) also finds that among the most frequently used and most useful vocabulary learning strategies was 'asking classmates for the meaning of the word'. Xhaferi, and Xhafer (2008) find that the participants used some good strategies such as "asking the teacher".

It can be concluded that feeling free to ask the teacher or the classmates for help seems to be a common strategy among the learners. This is a result of encouraging them to try this strategy by the researcher and by their teacher during the training and practice phases. They outperformed the control group in this strategy. The control group reports using this strategy at an average of 50% opposite to 76.55% for the learners in the experimental group, though it does not need training or special skills.

4.8 Research question 7: What are the learners' attitudes towards using the "Using a dictionary in class" strategy for vocabulary learning?

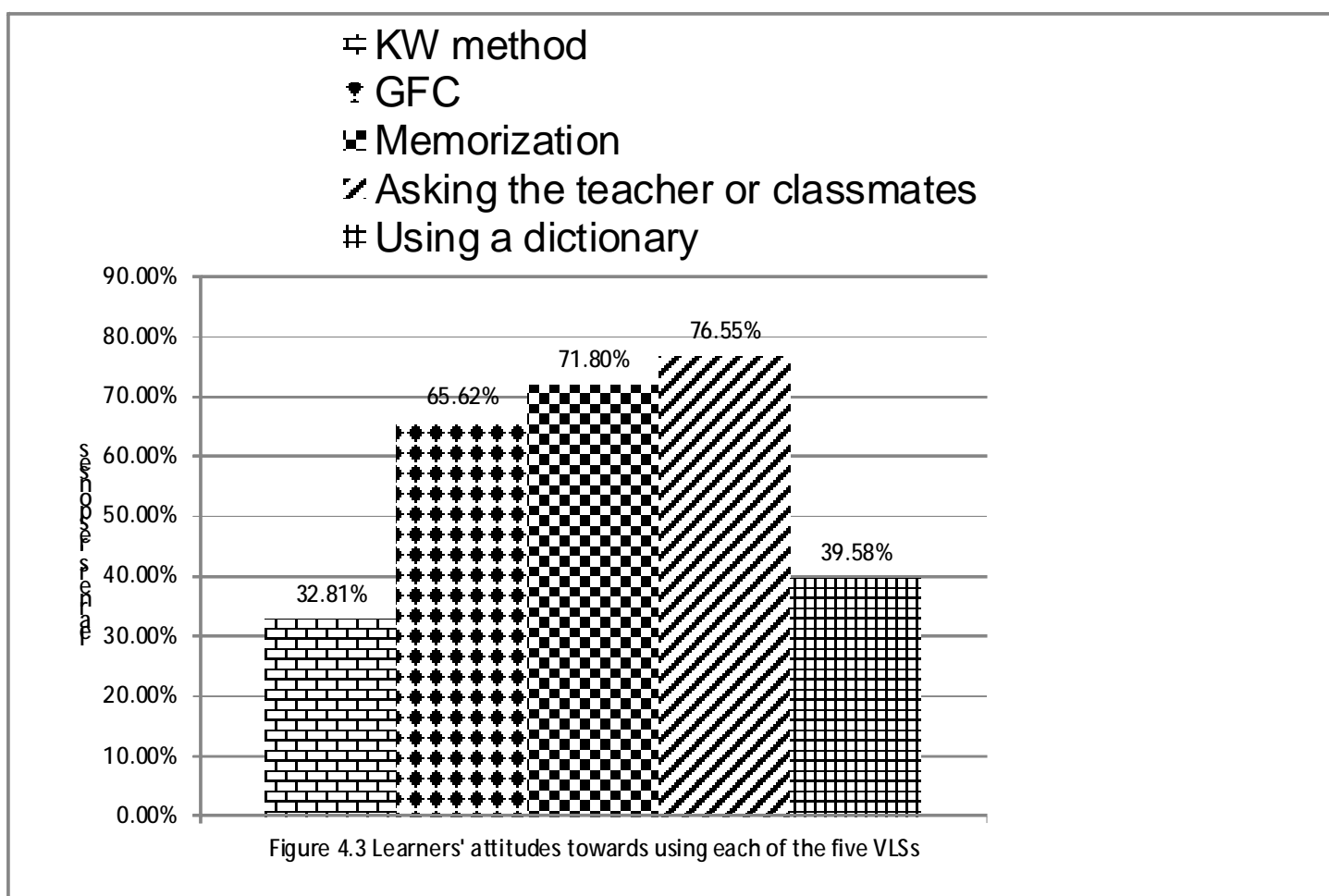
Learners' responses show that only 39.58% go for this strategy while a majority of 60.41% of learners do not. Moreover, a similar majority of the learners (59.4%) agree that "using a dictionary during the lesson is disturbing". Although consulting dictionaries is a traditional strategy that is common among EFL learners, this result might be due to narrowing it to the classroom setting and not to all the other situations where learners may consult the dictionary. In this particular setting, it seems that the learners are not familiar with using the dictionary in class and sometimes, as some of them claim, "they are not allowed to do so by their teachers because they see the dictionary as a disturbing element during the lesson and they are afraid that some students may use them during the exams", which is not permitted.

Though learners usually consult dictionaries for word meaning, they justified their avoidance of using dictionaries in class as a strategy for vocabulary learning. 59.4% of the learners say that using a dictionary during the lesson is disturbing. Some learners also say that using the dictionary, mainly the monolingual one, is not always helpful since it provides so many meanings that it becomes confusing for them on what to decide especially with decontextualized vocabulary items. Besides, the meanings provided are sometimes even more difficult for them to understand than the target words. This makes it less helpful to use the dictionary in class as a means to figure out the meanings during the lesson on the spot. Using a dictionary, specially the paper dictionaries, needs time which makes the learner loses concentration and follows up with the discussion taking place. Moreover, some learners claim that "most paper dictionaries are heavy to carry and the electronic dictionaries are not always available for some reasons". One of the learners said "I do not like dictionaries because they do not have pictures". Another one also said that instead of bothering

himself referring to the dictionary, he just asks the teacher or one of the classmates for the meaning. However, it is worth mentioning that 53.12% of the learners say "it is easier for them to learn the new vocabulary items when they are allowed to use the dictionary in class". This indicates that the learners are not basically against using the dictionaries as a strategy for vocabulary learning; but that they have difficulty using them in class.

Though the context in which using dictionaries is not limited as the case for the current study, they give an indication about the use of dictionaries as a means for vocabulary learning. Bensoussan and Laufer (1984, as cited in Zimmerman, 1997) reveal that the use of bilingual dictionaries does not significantly increase reading comprehension. On the other hand, the following studies are not in line with the current study results. Schmitt (1997) concludes that the participants used some good strategies among which was "using all types of dictionaries" with a high percentage; (95%). Fan's (2003) also indicates that one of the most frequently used strategies was using the dictionary which indicated a significant usage as learners need to look up the word in order to understand the context. The dictionary was also used for knowing the word's grammatical function. Wei-SHIwu (2005) shows that in Taiwan there was a strong tendency towards the electronic bilingual dictionary. He points out that it was the most widely used strategy in Taiwan. Bilingual dictionary was the next most frequently used discovery strategy, reported at 75%. More recently, Baicheng Zhang (2009) and Gu (2010) also show that among the most frequently used strategies was "dictionary use". Xhaferi, and Xhafer, (2008) find that the participants used some good strategies such as using all types of dictionaries. Wu's (2008) findings also reveal that learners used checking the dictionary to find out the meaning of words.

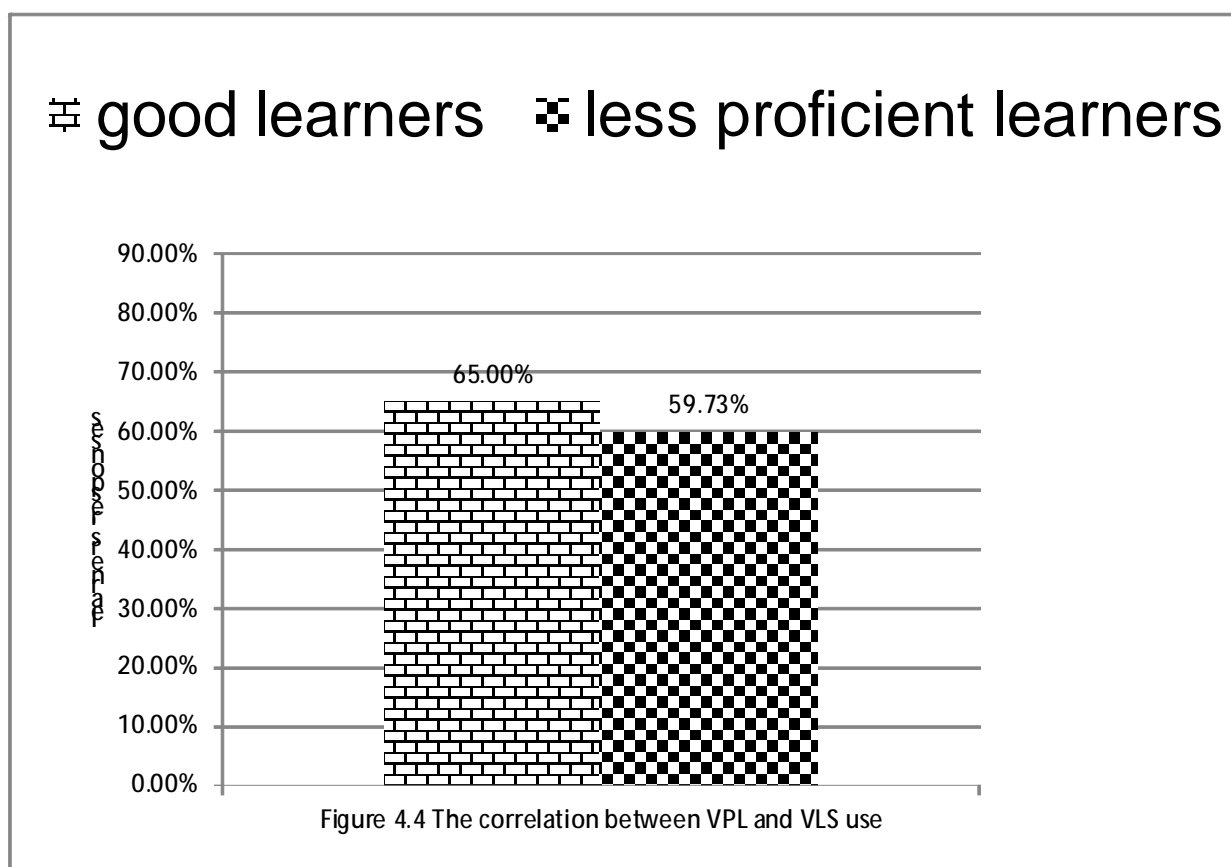
Although the above studies support the effectiveness of using a dictionary to enhance vocabulary knowledge, these studies investigate the use of dictionaries in different settings and not only during the class. It can be concluded that learners are not against using dictionaries as a means for vocabulary learning in general, but that they have some reservations toward using dictionaries during classes.



4.9 Research question 8: Does vocabulary proficiency level correlate with VLS use?

To investigate the correlation between learners' vocabulary proficiency level and their vocabulary achievement as a result of strategy use, their responses to the questionnaire was analyzed. The results show that 65% of the good learners support using vocabulary learning strategies whereas only 59.73% of the less proficient

learners do. This indicates that the more proficient learners show more tendency towards using vocabulary learning strategies. The learners' Vocabulary Achievement Test (VAT) results were also analyzed against their Vocabulary Proficiency Test (VPT). It is clear that the good learners benefited more from using the VLSs as appears from their VAT results which was carried out at the end of the program. The good learners' average of VAT was 86.25% while the less proficient learners only scored an average of 66.13% (figure 4.4).



Using language learning strategies could be an indication of autonomous characteristics of the learning process which is, in turn, a characteristic of the good language learner. Thus, the current results meet with the expectations that the learners with a better proficiency level tend to use VLSs more than their less proficient peers.

For instance, one of the learners who scored 80% in the VPLT expressed a high degree of supporting VLS use at (85.7%); whereas, another one who scored only 20% in VPLT expressed a low degree of supporting VLS use at (64%).

However, the KW method which needs a complex cognitive process was more supported by the less proficient learners. They supported it at an average of 43.16% while the good learners only expressed an average of 10%. This result could be attributed to the fact that good learners do not bother themselves or waste a long time on the effort involved in memorizing words in this manner when they are able to use strategies like GFC relying on their better level of proficiency. On the contrary, less proficient learners may tend to use it to compensate for their lack of the guessing skill that needs a good vocabulary repertoire. This view is clear in both groups' responses on the GFC strategy. The good learners expressed a more positive attitude towards GFC at an average of 92.5%, whereas the less proficient peers' average was only 69.22% (appendix 4 and 5). Moreover, none of the higher level learners shows negative attitudes towards VLSs, whereas three of them explained that they were not serious enough in answering the VPLT. Each of them got only 20% in the VPLT and 95% in the VAT. Against expectations, they showed more support in using VLSs.

These results are in line with Gu and Johnson (1996) who carried out a large-scale study on Chinese university learners' VLSs. They found that there were significant positive correlations between the two metacognitive strategies (Self-Initiation and Selective Attention) and the two test scores (vocabulary size test and a general English proficiency measure).

Fan's (2003) also identified important implications for strategy instruction. He finds that students with higher vocabulary proficiency used strategies significantly

more often even when they did not perceive them as useful. This finding suggests that students might use more learning strategies if teachers were to first convince them of their usefulness. Similarly, Scafaru, Tofan, & Coanda (2006) find that proficient students relied more on a variety of strategies in acquiring new vocabulary, while poor students didn't follow the same style of learning. Ahmed (1989), Magogwe and Oliver (2007) and Yilmaz (2010) findings also reveal that good learners with a better proficiency level used vocabulary learning strategies more than the less proficient peers. Yao Li's (2009) study also shows that successful learners are more in favor of using learning strategies to learn vocabulary, and they think most of the strategies are useful. However, unsuccessful learners have different opinions, they seem not to favor using learning strategies in their study and only a few of them think these strategies are very useful. Concerning the strategy type, Nacera (2010) finds that the strategies often used by students with higher vocabulary size were different from those used by students with lower vocabulary size. The formers were distinguished by using specific strategies that require more efforts and time and lead to an effective learning, such as using English in different ways, making summaries, guesses. While the latter's were differentiated by making less effort in learning and using surface strategies, as rote memory and gesture strategies, that lead to surface learning. Çelik and Toptaş (2010) also show a positive correlation between the frequency of the strategy use and the learners' language levels except for the social strategies. Qingquan et al (2008) also find that successful students used a wider range of learning strategies significantly more frequently than unsuccessful students. It was also found that the strategies often employed by the successful students are different from those often preferred by their unsuccessful peers. The former often used deep, L2-based, association, active participation, language use, positive-attitude taking and learning-process monitoring

strategies that are likely to make more contributions to successful L2 learning while the latter tended to use surface, L1-based, word-level, rote memory and gesture strategies.

It can be concluded that there is a positive correlation between vocabulary proficiency level and using VLSs. This result is in congruent with the characteristics of good learners who usually show an autonomous style in learning which basically involves the use of learning strategies.

Conclusion

Investigating the research questions shows that using VLSs has a positive effect on learners' vocabulary learning. Moreover, it is found that learners generally have a positive attitude towards employing VLSs for vocabulary learning. A positive correlation is also revealed between learners' vocabulary proficiency level and using VLSs.

Chapter Five

Conclusion and Recommendations

This chapter sums up the major findings of the study. Then, it presents some recommendations in light of the results. Finally, suggestions for further research are pointed out.

5.1 Summary of the major findings of the study

The major findings of the study include the impact of using VLSs on learners' achievement in vocabulary learning, the learners' attitudes towards using VLSs for vocabulary learning and the correlation between learners' vocabulary proficiency level (VPL) and using VLSs.

1. Regarding the impact of using VLSs on learners' achievement in vocabulary learning, results showed that using VLSs contributed to enhancing the learners' achievement in vocabulary learning. The learners in the experimental group outperformed those in the control group in the VAT. Their average marks were 72.4% and 43.8% respectively. This result indicates that when learners are well trained and encouraged to use VLS, their vocabulary knowledge is developed as a result. Thus, it is expected that including VLSs in the teaching and learning process guarantees a better learning outcome. Strategy instruction should, then, be integrated into lesson plans and text books.

2. It was revealed that students who were trained on using VLSs were positive about using VLSs for vocabulary learning. 57.27 % of the learners' in the experimental group supported using VLSs, while only 47.51% of the learners in the control did.

This result reflected the learners' overall attitudes towards using the five target VLSs, whereas, their attitudes were different towards each VLS separately.

- Only 32.81% of the learners supported using the KW method for learning vocabulary. This was due to some reasons given by the learners who claimed that this strategy was unfamiliar to them and that it was hard to apply with most new vocabulary items. In fact, the literature reports mixed results regarding the effectiveness of using the KW method.
- Concerning the GFC strategy, 65.62% of the learners supported using it as a VLS. This is due to the learners' familiarity with this strategy as it is sometimes the only available strategy during classes. The literature provides extensive support to the effectiveness of this strategy in the EFL learning context. Therefore, it is expected that when learners are equipped with the skills of making use of the linguistic knowledge and the theme of the text, they could effectively make use of this strategy.
- Learners' responses showed that 71.8% supported using the memorization. This result is typical to the Palestinian TEFL context, as the cases in most TEFL contexts, where traditional rote learning is still dominant. Moreover, this strategy is cognitively less demanding which learners usually prefer. The literature shows that memorization is widely used by the learners and viewed as effective.
- "Asking the teacher or classmates for the meaning" was supported the most by the learners with 76.55%. This social strategy result indicated that the learners had a good social class atmosphere. They justified that they trust their teachers' knowledge and that this strategy is the fastest and easiest one to get the meaning. Therefore, it is expected that learners are willing to work as a

team in the class; which helps applying communicative activities that are widely recommended for language learning.

- Finally, learners' responses showed that only 39.58% of the learners supported "using a dictionary in class" as a VLS. Although dictionaries are commonly used for vocabulary learning, this result is due to narrowing it to the classroom setting in the study. They claimed that using dictionaries, mainly the paper ones, in class is disturbing. They also claimed that monolingual dictionaries are not usually helpful as they provide so many meanings which are sometimes more difficult than the target words. They pointed out that they were not against using dictionaries as a VLS, but that they had some reservations towards using them during classes.

3. To find the correlation between learners' vocabulary proficiency level (VPL) and their strategy use, learners were given a vocabulary achievement test (VAT) at the end of the semester. Their scores were analyzed against their VPT results. Their responses to the questionnaire were also analyzed in light of their scores and proficiency levels. 65% of the higher level learners supported using VLSs, whereas only 59.73% of the lower level learners did. This indicates that the more proficient learners showed greater tendency towards using VLSs. The VAT results also showed that the higher level learners benefited more from using VLSs at an average of 86.25%, while the lower level learners only scored 66.13%. This result is in line with the expectations that the good learners tend to use learning strategies as one of their learning characteristics more than the lower level learners. Thus, it is concluded that there is a positive correlation between vocabulary proficiency level and using VLSs.

5.2 Recommendations

Based on the findings of the study, the following recommendations are addressed to the following:

5.2.1 For the Ministry of Education

1. Embedding explicit vocabulary strategy instruction into the regular English teaching courses.
2. Carrying out workshops to train teachers on integrating VLSs in regular language lessons.
3. Including appropriate training programs on using LLSs and VLSs for EFL/ESL university students.

5.2.2 For the teachers

1. Integrating strategy training into the language curriculum under the guidance of the teacher and implementing it into the regular language lessons. It should be planned and carefully prepared (as recommended by [Cohen, 2002](#)). Oxford (1999) is also of the opinion that training should be integrated into regular L2 activities over a long period of time rather than taught separately.
2. Teachers should help their students be aware of the important role of using VLSs in enhancing their vocabulary knowledge and autonomous learning.
3. Teachers should inform their learners of varieties of VLSs that are suitable for the individual learners to foster their vocabulary development.
4. Teachers should encourage their students to practice using VLSs in class in order to be able to use them in other contexts as well.

5.2.3 For the students

1. The students should learn about the vocabulary learning strategies they might use in order to improve their own vocabulary use.

2. Students should practice using VLSs they find appropriate in the process of learning vocabulary.

5.3 Suggestions for further research

Some recommendations for further research are suggested:

1. This study investigated the correlation between learners' vocabulary proficiency levels and their use of VLSs. However, next research could investigate how other variables like learners' motivations and gender differences correlate with learners' use of VLSs.

2. The current study does not identify how effective each strategy is in improving vocabulary learning. The learners were directed to use the five VLSs simultaneously. However, examining the retention efficacy of each strategy remains difficult. Therefore, next research can go further to investigate which type of VLSs is particularly relevant to committing certain vocabulary items into memory.

3. The current study investigated the learners' attitudes towards using VLSs with the 11th graders in the government schools. It would be more comprehensive and larger scale research if the population and the sample are of a wider range to yield more generalizable findings.

4. The current study investigates the learners' attitudes towards using VLSs taking five VLSs as examples. Further research could target a greater variety of VLSs.

5.4 Conclusion

It is hoped that in the light of this study results, the teachers and the learners will be encouraged to adopt more VLSs in the language learning process. Furthermore, it is hoped that this study stimulates further research in the area of VLSs

to enrich the knowledge of the teachers and the learners about the effectiveness of integrating VLSs in the instructional field. Finally, it is hoped that the Palestinian educators will get better insights about the VLSs that can be used in this particular TEFL context.

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Appendices

Appendix 1 The questionnaire

Read the following items and tick the most appropriate choice

number	Item	always	sometimes	rarely	Never
1	I feel free to ask my teacher about the meaning of an unknown VI				
2	I prefer to use the "guessing from context" strategy over other strategies				
3	Asking the teacher for the meaning of a new VI during the lesson is embarrassing				
4	I ask a classmate for the meaning of an unknown VI				
5	I create an image to link the new VI with the similar one of Arabic				
6	Guessing from context needs a good knowledge of the surrounding context				
7	I link the new VI with an acoustically similar VI in Arabic				
8	I prefer to memorize the new VIs by repetition				
9	KW strategy is easy to apply				
10	Using a dictionary is easy to apply during the lesson				
11	Memorizing lists of new VIs limits my knowledge about a VI to a single connotation				
12	It is easier for me to memorize the meaning of the new VIs than to apply other strategies				
13	KW method is limited to a few number of VIs				
14	Guessing from context needs a good knowledge of the subject				
15	I keep the new VIs in a notebook for later rehearsing				
16	Guessing from context needs more time than other strategies				
17	Using a dictionary during the lesson is disturbing				
18	Asking a classmate for the meaning of a new VI during the lesson is embarrassing				
19	Guessing from context is easy for me to apply and more applicable				
20	I consult a dictionary during the class to find the meaning of an unknown VI				

KW (key word method and also referred to as interactive image). VI (vocabulary item)

Appendix 2: The detailed analysis of the items that express the learners' attitudes (The experimental group)

number	vocabulary learning strategy	Related items	Number and average of Ss saying "always"	Number and average of Ss saying "sometimes"	Number and average of Ss saying "rarely"	Number and average of Ss saying "never"	Total
1	Guessing from context	1) I prefer to use the "guessing from context" strategy over other strategies	7 21.87%	14 43.75%	7 21.87%	4 12.5%	32 100%
		2) Guessing from context needs a good knowledge of the linguistic surrounding context	20 62.6%	5 15.62%	7 21.87%	0 0%	32 100%
		3) Guessing from context needs a good knowledge of the subject	20 62.6%	11 34.37%	1 3.12%	0 0%	32 100%
		4) Guessing from context is easy for me to apply and more applicable	3 9.37%	18 56.25%	7 21.87%	4 12.5%	32 100%
			50 50/4 =12.5 39.06%	48 48/4=12 37.5%	22 22/4=5.5 17.18%	8 8/4=2 6%	128 128/4= 32 100%
	50/128=39.06%	48/128=37.5%	22/128=17.18%	8/128= 6	128/128 100%		
2	KW method	1) KW strategy is easy to apply	4 12.5%	10 31.3%	9 28.1%	9 28.1%	32 100%
		2) I create a mental image to link the new VI with an acoustically similar one in Arabic	1 3.12%	6 18.75%	14 43.75%	11 34.37%	32 100%
			5 5/2=2.5 7.81%	16 16/2=8 25%	23 23/2=11.5 35.93%	20 20/2=10 31.25%	64 64/2=32 100%
	5/64= 7.81%	16/64= 25%	23/64= 35.93%	20/64= 31.25%	64/64= 100%		

3	Keeping a notebook and memorizing lists of VIs	1) I prefer to memorize the new VIs by repetition	12 37.5%	15 46.87%	3 9.37%	2 6.25%	32 100%
		2) It is easier for me to memorize the meaning of the new VIs than to apply other strategies	7 21.87%	16 50%	5 15.62%	4 12.5%	32 100%
		3) I keep the new VIs in a notebook for later rehearsing	10 31.3%	9 28.1%	9 28.1%	4 12.5%	32 100%
			29 29/3=9.66 30.2% 29/96= 30.2%	40 40/3=13.33 41.66% 40/96= 41.66%	17 17/3=5.66 17.7% 17/96= 17.7%	10 10/3=3.33 10.4% 10/96= 10.4%	96 96/3=32 100% 96/96= 100%
4	Asking the teacher or a classmate for the meaning of the new VI	1) I ask a classmate for the meaning of an unknown VI	5 15.62%	20 62.6%	4 12.5%	3 9.37%	32 100%
		2) I feel free to ask my teacher about the meaning of an unknown VI	10 31.3%	14 43.75%	8 25%	0 0%	32 100%
			15 15/2=7.5 23.43% 15/64= 23.43%	34 34/2=17 53.12% 34/64= 53.12%	12 12/2=6 18.75% 12/64= 18.75%	3 3/2=1.5 4.68% 3/64= 4.68%	64 64/2=32 100% 64/64= 100%
5	Using a dictionary) Using a dictionary is easy to apply during the lesson	6 18.75%	8 25%	5 15.62%	13 40.62%	32 100%
		2) I consult a dictionary during the class to find the meaning of an unknown VI	1 3.12%	6 18.75%	12 37.5%	13 40.62%	32 100%
		3) It is easier for me to learn the new VI when I am allowed to use the dictionary in class	6 18.75%	11 34.37%	7 21.87%	8 25%	32 100%
			13 13/3=4.33 13.54% 13/96= 13.54%	25 25/3=8.33 26.04% 25/96= 26.04%	24 24/3=8 25% 24/96= 25%	34 34/3=11.3 35.41% 34/96= 35.41%	96 96/3=32 100% 96/96= 100%

Appendix 3: The analysis of the items that express the learners' attitudes (The control group)

vocabulary learning strategy	Related items	Number and average of Ss saying "always"	Number and average of Ss saying "sometimes"	Number and average of Ss saying "rarely"	Number and average of Ss saying "never"	Total
Guessing from context	1) I prefer to use the "guessing from context" strategy over other strategies	5	13	5	3	26
	2) Guessing from context needs a good knowledge of the linguistic surrounding context	10	10	6	0	26
	3) Guessing from context needs a good knowledge of the subject	14	5	4	3	26
	4) Guessing from context is easy for me to apply and more applicable	5	16	3	2	26
KW method	1) KW strategy is easy to apply	1	8	7	10	26
	2) I create a mental image to link the new VI with an acoustically similar one in Arabic	1	5	8	12	26
Memorization	1) I prefer to memorize the new VIs by repetition	6	10	4	6	26
	2) It is easier for me to memorize the meaning of the new VIs than to apply other strategies	1	10	4	11	26
	3) I keep the new VIs in a notebook for later rehearsing	5	5	3	13	26
Asking the teacher or a classmate for the meaning of the new VI	1) I ask a classmate for the meaning of an unknown VI	8	3	7	8	26
	2) I feel free to ask my teacher about the meaning of an unknown VI	11	4	6	5	26

Using a dictionary	1) Using a dictionary is easy to apply during the lesson	2	3	12	9	26
	2) I consult a dictionary during the class to find the meaning of an unknown VI	1	2	4	19	26
	3) It is easier for me to learn the new VI when I am allowed to use the dictionary in class	6	3	9	8	26
		-----	-----	-----	-----	-----
		76	97	82	109	14×26
		364/76	364/97	364/82	364/109	364/364
		20.87%	26.64%	22.52%	29.94%	%100

Total

With: 47.51

Against: 52.46

Appendix 4: Analyzing the "good learners"' responses on the questionnaires about vocabulary learning strategy use (ten learners).

vocabulary learning strategy	Related items	Number and average of Ss saying "always"	Number and average of Ss saying "sometimes"	Number and average of Ss saying "rarely"	Number and average of Ss saying "never"	Total
Guessing from context	1) I prefer to use the "guessing from context" strategy over other strategies	3	6	1	0	10
	2) Guessing from context needs a good knowledge of the linguistic surrounding context	8	1	1	0	10
	3) Guessing from context needs a good knowledge of the subject	7	3	0	0	10
	4) Guessing from context is easy for me to apply and more applicable	2	7	1	0	10
		20	17	3	0	40
		50%	42.5%	7.5%	0%	100%
KW method	1) KW strategy is easy to apply	0	1	5	4	10
	2) I create a mental image to link the new VI with an acoustically similar one in Arabic	0	1	7	2	10
		0	2	12	6	20
		0%	10%	60%	30%	100%
Memorization strategy	1) I prefer to memorize the new VIs by repetition	1	7	2	0	10
	2) It is easier for me to memorize the meaning of the new VIs than to apply other strategies	1	6	3	0	10
	3) I keep the new VIs in a notebook for later rehearsing	2	4	3	1	10
		4	17	8	1	30

		13.3%	56.66%	26.66%	3.33%	100%
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Asking the teacher or a classmate for the meaning of the new VI	1) I ask a classmate for the meaning of an unknown VI	0	8	2	0	10
	2) I feel free to ask my teacher about the meaning of an unknown VI	5	3	2	0	10
		5	11	4	0	20
		25%	55%	20%	0%	100%
Using a dictionary	1) Using a dictionary is easy to apply during the lesson	2	4	2	2	10
	2) I consult a dictionary during the class to find the meaning of an unknown VI	0	3	4	3	10
	3) It is easier for me to learn the new VI when I am allowed to use the dictionary in class	3	3	2	2	10
		5	10	8	7	30
		16.66%	33.33%	26.66%	23.33%	100%
Total use of strategies/ average		34	57	35	14	140
	14 items $14 \times 10 = 140$	24.28%	40.71%	25%	10%	100%

Appendix 5: Analyzing the "less proficient learners'" responses on the questionnaire about vocabulary learning strategy use (22 learners).

vocabulary learning strategy	Related items	Number and average of Ss saying "always"	Number and average of Ss saying "sometimes"	Number and average of Ss saying "rarely"	Number and average of Ss saying "never"	Total
Guessing from context	1) I prefer to use the "guessing from context" strategy over other strategies	4	8	6	4	22
	2) Guessing from context needs a good knowledge of the linguistic surrounding context	12	4	6	0	22
	1) I prefer to use the "guessing from context" strategy over other strategies	13	8	1	0	22
	4) Guessing from context is easy for me to apply and more applicable	1	11	6	4	22
		30	31	19	8	88
		34%	35.22%	21.59%	9%	100%
KW method	1) KW strategy is easy to apply	4	9	4	5	22
	2) I create a mental image to link the new VI with an acoustically similar one in Arabic	1	5	7	9	22
		5	14	11	14	44
		11.36%	31.8%	25%	31.8%	100%
Memorization strategy	1) I prefer to memorize the new VIs by repetition	11	8	1	2	22
	2) It is easier for me to memorize the meaning of the new VIs than to apply other strategies	6	10	2	4	22
	3) I keep the new VIs in a notebook for later rehearsing	8	5	6	3	22
		25	23	9	9	66
		37.87%	34.8%	13.63%	13.63%	100%

Asking the teacher or a classmate for the meaning of the new VI	1) I ask a classmate for the meaning of an unknown VI	5	12	2	3	22
	2) I feel free to ask my teacher about the meaning of an unknown VI	5	11	6	0	22
		10	23	8	3	44
		22.7	52.27	18.18%	6.8%	100%
Using a dictionary	1) Using a dictionary is easy to apply during the lesson	4	4	3	11	22
	2) I consult a dictionary during the class to find the meaning of an unknown VI	1	3	8	10	22
	3) It is easier for me to learn the new VI when I am allowed to use the dictionary in class	3	8	5	6	22
		8	15	16	27	66
		12.12%	22.7%	24.24%	40.9%	100%
Total use of strategies/ average	14 items	78	106	63	61	308
	$14 \times 22 = 308$	25.32%	34.41%	20.45%	19.8%	100%

Appendix 6

Vocabulary Achievement Test (VAT)

Name: -----

1) Give an Arabic translation for each of the following vocabulary items:

- 1- nationality
- 2- security
- 3- communicate
- 4- globalization
- 5- quantity
- 6- pressure
- 7- contribute (to)
- 8- victim
- 9- optimistic
- 10- consumer

2) Circle the letter of the correct answer:

1- *estimate*

- a) calculate b) contribute c) carry out d) graduate

2- *apply*

- a) equip b) use c) drop out of d) package

3- *cure*

- a) conference b) traveler c) treat d) check in

4- *globe*

- a) universe b) ancestor c) revise d) ratio

5- *gift*

- a) vacation b) present c) period d) muscle

6- *proper*

- a) particular b) pretty c) appropriate d) profit

7- *supply*

- a) manage b) fragile c) decorate d) provide

8- *damage*

- a) break b) export c) remind d) endanger

9- *influence*

- a) reduce b) afford c) affect d) target

10- *sum up*

- a) mention b) attention c) conclude d) organise

3) Fill in the blanks with the suitable words from the list:

book delivery up to date drug partner army unfairly
possibility survive luggage

- 1) Nowadays we can ----- hotels on the internet before we travel abroad.
- 2) When we travel, we mustn't carry heavy ----- because we have to pay for the extra weight.
- 3) There is always a ----- to discover new things in the world of science.
- 4) You must educate yourself on the most ----- issues in this fast changing universe.
- 5) Most types of viruses manage to survive the ----- that used to kill them.
- 6) Last year the Israeli ----- severely attacked and bombed the innocent people in Gaza.
- 7) If you are in a hurry, you can just call for a ----- from a near restaurant.
- 8) When students face a difficult task, they usually ask for help of a good -----.
- 9) In the United States of America, African Americans were ----- treated just because of the color of their skin.
- 10) The Palestinian people struggle a lot in life to ----- despite the occupation.

4) Match the following words in the left column with their meanings from the right column:

1	likely	a	guiding list
2	prevention	b	incapable- cannot
3	unable	c	possible-probable-expected
4	keep on	d	avoidance
5	route	e	would rather
6	in return	f	continue
7	voyage	g	convince
8	had better	h	journey –trip
9	persuade	i	way – road – path
10	catalogue	j	for (something)

Appendix 7: VAT and VPLT results (The experimental group)

number	VPLT 30% 2000/3000w	VPLT tests average	VAT 40%
1	10/11	11	19
2	10/11	11	38
3	9/8	9	26
4	8/16	12	38
5	4/8	6	9
6	21/17	19	37
7	12/10	11	30
8	5/6	6	38
9	5/7	6	9
10	18/18	18	38
11	12/7	10	33
12	17/18	18	36
13	8/6	7	15
14	17/14	16	27
15	12/11	12	29
16	17/14	16	28
17	8/10	9	21
18	27/21	24	29
19	10/6	8	29
20	7/5	6	38
21	4/6	5	38
22	25/17	21	39

23		18/13	16	35
24		11/15	13	18
25		13/11	12	34
26		29/23	26	38
27		10/4	7	26
28		7/5	6	23
29		12/11	12	21
30		10/10	10	33
31		14/3	9	17
32		27/17	22	38
Average			12.3125	28.97
			$12.3125/30=41\%$	$28.97/40=72.4\%$

Vocabulary Achievement Test (VAT)

Vocabulary Proficiency Levels Test (VPLT)

2000/3000 w (The first most frequent 2000 and 3000 words)

Appendix 8: VAT and VPLT results (The control group)

number	Proficiency 30% 2000/3000w	Proficiency tests average	Proficiency tests average %	VAT 40%
1.	1/4	3	10%	11
2.	11/8	10	33%	28
3.	17/18	18	60%	19
4.	16/5	11	37%	32
5.	29/22	26	87%	39
6.	7/7	7	23%	1
7.	13/5	9	30%	20
8.	13/11	12	40%	26
9.	16/19	18	60%	26
10.	15/9	12	40%	29
11.	7/6	7	23%	12
12.	12/8	10	33%	5
13.	6/7	7	23%	11
14.	10/5	8	27%	10
15.	12/6	9	30%	9
16.	13/9	11	37%	17
17.	15/7	11	37%	24
18.	17/10	14	47%	22
19.	21/19	20	67%	14
20.	19/11	15	50%	17
21.	15/9	12	40%	25

22.	18/8	13	43%	4
23.	5/6	6	20%	6
24.	13/6	10	33%	9
25.	2/4	3	10%	16
26.	15/3	9	30%	8
27.	12/9	16	53%	18
28.	5/5	5	17%	17
29.	18/8	13	43%	34
average		$325/29=11.2$ $11.2/30= 37.3\%$	37%	$509/29=17.55$ $17/40=43.8\%$

Appendix 9
The Vocabulary Proficiency Levels Test (VPLT)
The 2,000 word level

Write the correct number next to the meaning:

- 1 copy
- 2 event _____ end or highest point
- 3 motor _____ this moves a car
- 4 pity _____ thing made to be like another
- 5 profit
- 6 tip

- 1 accident
- 2 debt _____ loud deep sound
- 3 fortune _____ something you must pay
- 4 pride _____ having a high opinion of yourself
- 5 roar
- 6 thread

- 1 coffee
- 2 disease _____ money for work
- 3 justice _____ a piece of clothing
- 4 skirt _____ using the law in the right way
- 5 stage
- 6 wage

- 1 clerk
- 2 frame _____ a drink
- 3 noise _____ office worker
- 4 respect _____ unwanted sound
- 5 theater
- 6 wine

- 1 dozen
- 2 empire _____ chance
- 3 gift _____ twelve
- 4 opportunity _____ money paid to the government
- 5 relief
- 6 tax

1 admire
 2 complain _____ make wider or longer
 3 fix _____ bring in for the first time
 4 hire _____ have a high opinion of someone
 5 introduce
 6 stretch

1 arrange
 2 develop _____ grow
 3 lean _____ put in order
 4 owe _____ like more than something else
 5 prefer
 6 seize

1 blame
 2 elect _____ make
 3 jump _____ choose by voting
 4 manufacture _____ become like water
 5 melt
 6 threaten

1 ancient
 2 curious _____ not easy
 3 difficult _____ very old
 4 entire _____ related to God
 5 holy
 6 social

1 bitter
 2 independent _____ beautiful
 3 lovely _____ small
 4 merry _____ liked by many people
 5 popular
 6 slight

The 3,000 word level

- 1 bull
- 2 champion _____ formal and serious manner
- 3 dignity _____ winner of a sporting event
- 4 hell _____ building where valuable objects are shown
- 5 museum
- 6 solution

- 1 blanket
- 2 contest _____ holiday
- 3 generation _____ good quality
- 4 merit _____ wool covering used on beds
- 5 plot
- 6 vacation

- 1 comment
- 2 gown _____ long formal dress
- 3 import _____ goods from a foreign country
- 4 nerve _____ part of the body which carries feeling
- 5 pasture
- 6 tradition

- 1 administration
- 2 angel _____ group of animals
- 3 frost _____ spirit who serves God
- 4 herd _____ managing business and affairs
- 5 fort
- 6 pond

- 1 atmosphere
- 2 counsel _____ advice
- 3 factor _____ a place covered with grass
- 4 hen _____ female chicken
- 5 lawn
- 6 muscle

- 1 abandon
- 2 dwell _____ live in a place
- 3 oblige _____ follow in order to catch
- 4 pursue _____ leave something permanently
- 5 quote
- 6 resolve

1 assemble
2 attach _____ look closely
3 peer _____ stop doing something
4 quit _____ cry out loudly in fear
5 scream
6 toss

1 drift
2 endure _____ suffer patiently
3 grasp _____ join wool threads together
4 knit _____ hold firmly with your hands
5 register
6 tumble

1 brilliant
2 distinct _____ thin
3 magic _____ steady
4 naked _____ without clothes
5 slender
6 stable

1 aware
2 blank _____ usual
3 desperate _____ best or most important
4 normal _____ knowing what is happening
5 striking
6 supreme

Appendix 10 The structured interview

The following questions were prepared in advance for the learners to answer during the interview:

- 1) Did you use the KW method/ GFC/ Memorization/ Using a dictionary/ or Asking the teacher or classmates for meaning for vocabulary learning?
- 2) Did you find X strategy/s useful and practical?
- 3) Why did you find X strategy useful?
- 4) Why did you find X strategy less useful?
- 5) What was the most frequent strategy you used? Why?
- 6) Why didn't you use X strategy?
- 7) Would you give examples on the strategies you used?
- 8) Would you like to add anything more?

The following are samples of the learners' answers:

* It was hard for me to form an interactive image. It is also hard to find acoustically similar words .n Arabic.

* Using g the KW method is a process that takes a long time and we do not always have time to use it; mainly in class.

* KW method is so easy to use because it does not need keeping lists of synonyms or rehearsing. It can also be used with other strategies like memorization to enhance the recall.

- * Four learners liked using GFC and found it useful mainly in exams.

- * Dictionaries are heavy to carry into the class. They also do not have pictures. They preferred to consult the teacher or classmates for meaning which was easier and faster. Sometimes it was difficult to decide on the most appropriate meaning. Moreover, dictionaries are not allowed in classes mainly during exams.

- * Asking the teacher or classmates was easier and faster to use. They used this strategy to give an impression that they worked care and work as a team.

- * Three learners supported the Memorization strategy because it was helpful mainly for communication. They considered it the most common because they got used to it and it was useful to get good marks in exams. They also used it along with other strategies to better commit the new items to memory. All the interviewees agreed that it is exam-oriented and traditional.

- * Two learner did not support this strategy as they considered it hard for them. They claimed that they easily forgot the words they learn through memorization as they are decontextualized and not practiced enough.