LEBANESE AMERICAN UNIVERSITY

Learning Vocabulary Through Memorization: Is It Enough?

By

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Dedication

To my family, thank you for your endless support and for being patient with me throughout this whole process. Without you, I would not be who I am today. Your love and encouragement has helped me carry on with my thesis. Thank you for always being there for me.

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Learning Vocabulary Through Memorization: Is It Enough?

Zeina Al Deeb

ABSTRACT

Limited vocabulary knowledge can be a crucial problem for second language learners, and understanding whether memorization strategies are effective in helping students learn and retain new vocabulary words is important. Memorization has long been used as a strategy in learning English as a second or foreign language (ESL or EFL) and is still prominent in the Lebanese context, especially in vocabulary learning, where students are taught a large number of vocabulary words through memorization and learning by heart. While some ESL and EFL teachers argue that memorization facilitates the establishment of information in the memory, others believe that memorization is a tedious and boring task that hinders critical thinking and learning in general. Therefore, the purpose of this study is to explore the effectiveness of memorization as a strategy for learning new vocabulary words in English as a Second Language classroom, especially for students in grade 9. The study is qualitative in nature and employs three instruments, a vocabulary test, student questionnaires, and teacher interviews. Qualitative data analysis yielded results showing that memorization produces good retention rates on the short-term, but does not ensure full understanding and usage of the words for all types of students; it is used by students but is often misused in learning new English vocabulary words.

Keywords: Memorization, Rote Learning, Vocabulary Learning Strategies, Repetition, Retention.

Table of Contents

Introduction.....	1
1.1 Definition of key term	3
1.2 Problem Statement	4
1.3 Purpose and Rationale	4
1.4 Significance of the Study	5
1.5 Research Context.....	5
1.6 Research Question.....	6
1.7 Thesis Division.....	6
Literature Review.....	7
2.1 The Brain and Memory Learning	8
2.2 The Working Memory	11
2.3 Vocabulary in Second Language Teaching	16
2.4 Repetition and Retention	18
2.5 Confucianism and the Far Eastern Cultures	22
2.6 Vocabulary Learning Strategies	26
2.7 Memorization Versus Other Vocabulary Learning Strategies	27
Methodology	35
3.1 Design of the Study	35
3.2 Sampling.....	36
3.3 Data Collection: Instruments.....	37
3.3.1 Vocabulary Test.....	39
3.3.2 Questionnaire	40
3.3.3 Interviews.....	40
3.4 Credibility and Trustworthiness	41
3.5 Ethical Considerations.....	42
Results	43
4.1 Results of the Vocabulary Test	43
4.2 Results of the Questionnaires	50
4.2.1 Results of the Questionnaires for Section A.....	51
4.2.2 Results of the Questionnaires for Section B	55

4.2.3 Results of the Questionnaires for Section C	59
4.3 Results of the Teachers' Interviews	65
Discussion.....	76
Conclusion.....	86
6.1 Limitations.....	87
6.2 Suggestions for further research.....	87
References	89
Appendices	95
Appendix A	95
Appendix B.....	97
Appendix C.....	100

List of Tables

Table 1 Summary of the overall results of the Vocabulary Test.....	50
Table 2 The strategies used by the students who passed the test	51
Table 3 The strategies used by the students who failed the test.....	52
Table 4 The strategies used by the students who scored a zero on the test.....	54
Table 5 The strategies used by the students who passed the test	55
Table 6 The strategies used by the students who failed the test.....	56
Table 7 The strategies used by the students who scored a zero on the test.....	58
Table 8 The strategies used by the students who passed the test	59
Table 9 The strategies used by the students who failed the test.....	60
Table 10 The strategies used by the students who scored a zero on the test.....	62
Table 11 A Summary of the commonly used strategies by all the students in sections A B C ...	63

List of Figures

Figure 1 The components of Working Memory adapted from Baddeley and Hitch (1974)	13
Figure 2 The multi-component model of Working Memory from Baddeley, 2000	13
Figure 3 Typical pattern of forgetting.....	19
Figure 4 Pattern of forgetting with expanded rehearsal	20

Chapter One

Introduction

When languages first emerged, none of them was written. All languages around the world started and survived because of oral tradition, which was maintained by the human memory. Had it not been for the humans' ability to mentally record information and pass it on across the generations, none of the languages or pieces of history and literature that we know of today would have survived. The human memory, therefore, is an intricate thing and is the essence of every behavior or habit we practice daily. That is why the role of memory started to appear little by little in the education sectors.

According to Yu (2014), all literature in all cultures of the world was oral until around 4000 B.C. after which people learned how to write and transcribe their speech and languages.

Due to its importance and wide-spread practices in the different religious and cultural aspects of the human life, memorization strategies started to appear more prominently in the education field. Educational institutions and schools adopted this method in teaching their students subject matter, in general, and foreign languages in particular. According to Nasrollahi-Mouziraji and Nasrollahi-Mouziraji (2015), "Traditionally, second language teaching methods were based on the assumption that language consists of a series of rules and patterns. Therefore, learning a second language was equivalent to learning the L2 code" (p. 870). The easiest and most practical way to learn these foreign languages, back then, was to memorize rules and chunks of language, and try to apply them in the second language contexts. However, with the development

of new educational techniques and theories that emphasize methods of cooperative learning and critical thinking, the role of memorization in teaching and learning started to deteriorate.

Memorization is no longer considered a favorable learning strategy for many students because it requires a lot of training and preparation, and it is time-consuming. Many teachers even refrain from using such a strategy because they consider it not endorsed in critical thinking, and often, students with such a learning style are called surface learners (Ahmad & Iqbal, 2015). However, despite all the criticism saying that rote learning (RL) and memorization are processes that rarely involve understanding and merely focus on the repetition of information which will soon be forgotten, memorization remains to be an integral and necessary method in education, and is still witnessed in many aspects of language teaching especially vocabulary and grammar. According to Kyaw and Sinhaneti (2012), “RL should not be left in learning, especially in vocabulary learning. The repeated stimulus of hearing new words recited in public, on TV, at a sporting event, etc., causes the mere sound of the phrasing of the words and inflections to be “written”, as if hammer-to-stone, into the long-term memory” (p. 991). This means that without repetition and rehearsal of the information in the memory, this information will soon be lost. The importance of memory learning appears in more than one field when teaching English as a second language, in particular. Mainly, memorization is the number one strategy to be used in the teaching of vocabulary. To learn the largest number of vocabulary words in the shortest time possible, memorization seems to be the most efficient method. In addition to that, one encounter with a vocabulary word is not enough for someone to learn it. What is needed is frequent

repetition, thus memorization, of the word so that a person can learn it, understand it, and retain it for later usage (Kyaw & Sinhaneti, 2012).

Therefore, memorization is still used until today as a learning and teaching strategy of vocabulary in second language learning. However, this strategy has attracted and still attracts a lot of criticism as to what extent it is effective in helping students learn new words and retain them later on for usage in the proper contexts. Before I proceed to discuss the purpose of this study and its research question, let me define what memorization is.

1.1 Definition of key term

According to Richards and Schmidt (2002), “memorization is the process of establishing information in memory. The term ‘memorizing’ usually refers to the conscious processes. Memorizing may involve rote learning, practice, associative learning, etc.” (p. 327). This means that memorization is not a passive strategy, but involves the activation of the brain centers and working memory in order to process the information and store it in the long term memory. Therefore, memorization is a conscious process according to Richards and Schmidt’s definition.

Another definition of memorization in the Oxford Advanced Dictionary (2005) is “to learn something carefully so that you can remember it exactly.” This definition focuses on memorization as a strategy used to retain information without mentioning anything related to how we process the information as we memorize it. Kesen and Ozkan (2008) believe that the focus in memorization is on the storage and retrieval of language, and that memorization is a strategy used to recall information. They believe that the ability to speak and write language stems from a person’s ability to retrieve the

stored information, and here lies the importance of memorization as a learning and teaching strategy.

1.2 Problem Statement

Memorization is criticized by many as a strategy that lacks or even hinders critical thinking, and that teaching students new vocabulary words through memorization is useless or ineffective because students will forget these words shortly afterwards. However, other teachers and learners of English as a Second Language rely on memorization in teaching and learning vocabulary because they believe that this strategy is inevitable and indispensable to the learning of new words. Teachers and educators can't seem to make up their minds on the effectiveness of memorization strategies in the learning of vocabulary words in a foreign or second language context. Therefore, I was interested in investigating whether memorization is an effective strategy for learning new vocabulary words in English as a Second Language classrooms.

1.3 Purpose and Rationale

Because of this controversy regarding the issue of memorization and because of my interest in the topic, the purpose behind this study is to explore the effectiveness of memorization as a strategy used to learn new vocabulary words in English as a Second Language classrooms.

This study is important due to the “essential nature of the Memory Strategies’ role in vocabulary learning, and their contribution to the storage and retrieval of vocabulary” (Omid & Rashidi, 2011, p. 140). Memory strategies are mostly useful in the

field of vocabulary for they are believed to be the most practical way to store vocabulary words in the memory in order to retrieve them later. In addition to that, it is worth investigating whether memory strategies are truly effective in helping students understand vocabulary words rather than just storing them in their memory without comprehending them or making proper use of them. Memory strategies can be a good way to store vocabulary words in the memory; however, if learners are not comprehending the meanings of these words or fail to use them in the right context, memorization is no longer considered an effective strategy. It is, therefore, worth investigating whether memorization is helpful to students and whether teachers should encourage using this method or not.

1.4 Significance of the Study

To my knowledge there hasn't been any research studies that investigated the effectiveness of memorization as a strategy used to learn vocabulary words in Lebanese EFL and ESL contexts. Therefore, this study seems to be necessary for it adds to the repertoire of studies in Lebanese contexts and it relates to our culture and school philosophies that heavily rely on memorization in some cases.

1.5 Research Context

Memorization is used in many aspects of our daily lives, to memorize a phone number, an address, the way to work or school etc. However, when studying the effect of memorization on learning in ESL contexts, in particular, then the research context should be mainly the classroom. In this study students' learning strategies and memory

skills are tested, and the only place for such an assessment to happen is within the classroom. Therefore, the research context for this study is my grade 9 English class.

1.6 Research Question

The intent of this study is to address the following research question:

- How effective is memorization in helping grade 9 students learn new vocabulary words in ESL context?

1.7 Thesis Division

This thesis is made up of six chapters. The first chapter introduces the topic of research, discusses its purpose, problem statement, significance, research context and research question, and provides a definition of the key term ‘memorization’. The second chapter provides a review of the literature regarding the memorization strategies used in learning vocabulary. The third chapter explains the methodology which includes a description of the design of the study, the instruments used, the participants involved, and the ethical considerations. Chapter four presents the results yielded by the three instruments that were used. Chapter five discusses the study’s findings, and chapter six concludes the study with a discussion of the limitations and suggestions for further research. The next chapter is the literature review chapter on the topic under study.

Chapter Two

Literature Review

This chapter presents a review of the relevant literature regarding the different strategies used to learn vocabulary and whether memorization is the best among them. This chapter includes sections on the functioning of the brain and the working memory, the teaching of vocabulary in second language contexts, repetition and retention, Confucianism and Eastern cultures, vocabulary learning strategies, and a comparison of these strategies with memorization.

Using memorization to teach vocabulary has long been a widely used strategy. Teachers would claim that memorization is the only practical and time-efficient way to teach students the largest number of vocabulary words in the shortest time possible. Recently, however, this method started to be seen in a negative light, and has attracted a lot of criticism for it was said to be time-consuming for students to learn and it lacked critical thinking. Regardless of all that, many schools and teachers still use this strategy believing in its efficiency and importance. However, Thompson (1987) stated that, “It is difficult to think of any educational goal for which the ability to retain information is unimportant. Human memory is crucial to the concept of learning” (p. 43). None of the information that is to be retained later on can be transferred to the long-term memory without a sufficient amount of rehearsal and repetition. One encounter with a word is often not enough to learn this word and have it transferred to the long-term memory for later use. Here lies the importance of memorization as a strategy that involves plenty of repetition and rehearsal on behalf of the learner. However, this does not necessarily

imply that memorization is devoid of understanding. Kesen and Ozkan (2008) also emphasize the importance of the role of memory in second language learning. They claim that our ability to produce any form of language is dependent on our ability to organize and retrieve the information stored in our memory.

According to Behaviorists, learning is a result of three elements: a ‘stimulus’, a ‘response’, and ‘reinforcement’. A stimulus triggers a certain action from the learner, the response yields a behavior that has been stimulated, and through reinforcement the learner learns to either repeat (positive reinforcement) or inhibit (negative reinforcement) the action (Skinner, 1957). Therefore, the learner is a tool being manipulated by an external factor, mainly the teacher, in order to produce the desired behavior. In this case, practice, rehearsal, imitation, and memorization are very good tools that can be used to achieve the desired learning behavior (Sankary, 2013).

It is important when talking about memory learning to discover what happens in the brain and how memory learning takes place inside the brain. Therefore, this section of the chapter is dedicated to the role of the brain in processing the information it receives from a stimulus, and how it stores and retrieves this information when needed.

2.1 The Brain and Memory Learning

Understanding the function of the brain in processing the information fed to it is crucial in the study of memory learning. The brain is made up of a bundle of neural networks that receive stimuli from the environment through our senses and processes it in order to execute an order. The stimuli and responses received and generated by the brain are transmitted throughout the body through neurons. The messages transmitted by the brain move from one neuron to another through junctures called synapses. The

neuron integrates the messages it receives from different synapses and carries out the order. At birth, the human brain has only a portion of the synapses that a person develops after birth. “The nervous system sets up a large number of connections; experience then plays on this network, selecting the appropriate connections and removing the inappropriate ones. What remains is a refined final form that constitutes the sensory and perhaps the cognitive bases for the later phases of development” (Committee on Developments in the Science of Learning with additional material from the Committee on Learning Research and Educational Practice, National Research Council, 2000). That is why is it quite important to know what and how to teach young children because it is this experience with knowledge and learning that shapes their brain structure and paves the way for future development, or not.

Images or pictures have stronger connections to the brain than does verbal information. Therefore, when verbal information is associated to imagery, such as when memorizing vocabulary words, the connection in the memory becomes more effective and the ability to retain this information or word becomes stronger (Committee on Developments in the Science of Learning with additional material from the Committee on Learning Research and Educational Practice, National Research Council, 2000). Accordingly, the brain doesn’t just regurgitate the information fed to it as is. Instead, the brain reorders this information and groups it into relevant categories based on how it understands and processes it. To a certain extent then, this could imply that nothing really goes into the brain and emerges unprocessed. Even with rote memorization the brain will function to categorize the information and reorder it in a way that makes sense.

Further research on memorization and the brain has shown that “a prolonged period of repetitive rote memorization may lead to improvements in verbal/episodic memory, which persists in the weeks following the cessation of exercise of rote learning” (Ahmad & Iqbal, 2015, p. 510). Chemical and structural changes in the brain were detected in the left posterior of the hippocampus as a result of repetitive rote memorization, which gives evidence that rote memorization does enhance cognitive abilities. Ahmad and Iqbal (2015) continue to explain that the human memory is made up of two parts: one is called the taxon memory which is responsible for the facts that are learned through rehearsal and rote memory without attaching any imagery to it. This type of memory demands from the student a lot of practice and rehearsal, which requires external motivation to carry it out. This is why students might not find the task of memorization very pleasant or easy because it entails a lot of effort on behalf of the student. The second type of memory, however, is that which requires learning to be stored as a result of a meaningful experience. In this case, motivation is internal and lasts longer. Memorization, then, seems to have a positive effect on the brain for it activates certain areas in it, such as the hippocampus which plays an important role in the consolidation of information from the short-term to the long-term memory, and it “develops the brain in a way nothing else can” (Nasrollahi-Mouziraji & Nasrollahi-Mouziraji, 2015, p. 871). The importance of learning, experience, and memorization resides in the fact that it strengthens the neural connections in the brain. Nasrollahi-Mouziraji and Nasrollahi-Mouziraji (2015) compare the brain to the computer’s CPU, stating that strong neural connections in the brain, aggravated by memorization, lead to the formation of more RAM in our brain’s CPU; that is, more storage room and enhanced capacity. This makes memorization a good tool for managing storage.

In a study conducted by Roche et al. (2009) on twenty-four normal participants aged 55-70, the effects of extended memory engagement on the brain structures were tested. These participants were asked to learn 500 words per week, using rote learning, and were then tested through a variety of memory tests administered to them on three occasions six weeks apart. The most important result of this study revealed that extended and consistent periods of rote learning led to “enhanced future learning accompanied by changes in the markers of cell health in a key memory structure of the brain” (Roche et al., 2009, p.15). This finding supports the belief that rote memory learning can indeed enhance brain structures and capacity, and retain those neural connections that are necessary for the development of the brain and the delay of ageing.

The part of the brain which is responsible for the processing and storage of information is the working memory. The working memory plays an important role in helping us understand how the information is processed and stored for later retrieval. This way, we are able to understand the importance of memorization and whether it enhances the functioning and capacity of the working memory.

2.2 The Working Memory

By definition, the working memory “refers to the mental processes responsible for the temporary storage and manipulation of information in the course of on-going processing” (Juffs & Harrington, 2011, p. 138). In other words, the working memory is not simply a compartment for the storage of information, but it is a regulatory system for the information that is received from the environment, processed, and finally stored in the long-term memory. All learning is processed through the working memory which coordinates information, stores it temporarily, and then sends it to the long-term memory

for a long-term storage. However, for the information to be sent to the long-term memory, one encounter with it is not enough. Repetition, rehearsal, and constant exposure to the information or experience are what allow its transfer and storage in the long-term memory. Otherwise, the information would only be temporarily stored in the short-term or working memory, and will be lost shortly afterwards. According to Randall (2007), Baddeley's model of WM and the phonological loop offers a good explanation of how information is transferred to the long-term memory. For this reason, it is important to examine Baddeley's model of the working memory's mechanism and capacity in order to study the effects of repetition and memorization on the working and long-term memory, thus, learning. In addition to that, it is quite important to understand the mechanism of the working memory and how it functions because of its importance in language learning and the development of linguistic and cognitive abilities.

Baddeley and Hitch's Working Memory model proposed in 1974 can be summarized as follows: The working memory has two main functions, one responsible for storage of information, and another responsible for control and execution of information. The storage compartment is mainly made up of the Phonological Loop, which is responsible for the processing and temporary storage of verbal and phonological information, and the Visuo-spatial Sketchpad, responsible for visual and spatial information. Information from the two sources can be bound and integrated at a zone called the Episodic Buffer zone (Mitchell, Myles, & Marsden, 2013). The Central Executive compartment, however, is in charge of controlling all of the above storage components. Its function is to "bind information from a number of sources into a coherent episode by coordinating the working of the various stores" (Baddeley, 1986, p.

140); that is the phonological loop, visuo-spatial sketchpad, and episodic buffer. See figures 1 and 2.

Figure 1 The components of Working Memory adapted from Baddeley and Hitch (1974)

Figure 2 The multi-component model of Working Memory from Baddeley, 2000

Our interest in particular is the phonological loop because it is this component that is in charge of processing and storing linguistic elements and verbal material. However, being part of the short-term or working memory, this phonological loop is of limited capacity. That is, it can only store information for a very short period of time, normally for about a few seconds, before it is gone. For this reason, repetition and

rehearsal is a must if the information is to be stored in the long-term memory and is to be retrieved later. Rehearsal keeps refreshing the information encoded in the phonological loop, thus preventing it from decaying or fading (Wen, 2012).

A major concern, when it comes to the role of working memory in second language learning and acquisition, is whether the working memory capacity is fixed or trainable. That is, can the working memory capacity be increased or expanded, or is it an inherent stable characteristic? Research on working memory capacity still cannot provide a definite answer to that question. Some suggest that the working memory capacity, different for each individual, is malleable and can be changed with experience and proficiency. This view considers the working memory to be a unique individual characteristic, which continues to mature and develop until early adulthood (Mitchell, Myles, & Marsden, 2013). If this is the case, then the working memory should be considered an integral part of language learning and acquisition. Training the working memory through repetition, rehearsal, reading, writing, memorizing etc... should then be considered by all educators and teachers for it helps the working memory evolve and expand in terms of capacity and efficiency. However, evidence, though scarce, exists that language aptitude of the working memory somehow becomes stable over time, “evidence for the stability of aptitude over time is relatively scarce, and while evidence does exist that aptitude is affected by experience, there is also a recognition that language aptitude, at least in the way it is traditionally measured, is a relatively stable construct over time” (Juffs & Harrington, 2011, p. 157). Therefore, it is best to sum this up by saying that the working memory is both, fixed and variable. It functions based on stable patterns of performance, however, these patterns can be altered or at least are affected by experience and training (Juffs & Harrington, 2011). This implies that

training the working memory will, at some point if the task is specific, yield better performance results for the individual. This is where the role of memorization comes in as it can be helpful in expanding the capacity of the working memory, not in terms of storage but in terms of developing the executive component which is in charge of controlling attention and execution of knowledge in the working memory.

What aids the transfer of knowledge from the working memory to the long-term memory is repetition and depth of processing of the information. According to Randall (2007), on the simplest levels of learning the target material should be rehearsed and repeated more than once by the phonological loop component of the working memory. From there, connections and bonds between words and images or objects or pictures are established; mental associations are formed in order to enhance the process of encoding by the working memory. After the material is rehearsed well, it is encoded and transferred to the long-term memory (Randall, 2007).

Not all repetition, just like memorization, produces effective learning. That is why teachers and learners should pay considerable attention to how and what to memorize. One way that would help make repetition and memorization easier is “Chunking” of information. Just like when you need to memorize a telephone number you divide it into shorter parts or chunks in order to make it easier to repeat and memorize. By definition these chunks are more like “combinations of items and relationships among items” (Stevick, 1996, p. 31). The importance of repetition and chunking resides in the fact that the more the information is repeated, the more neural pathways are developed in the brain, so when the information is chunked a neural network of interconnections begins to emerge (Randall, 2007). This helps in the activation of different kinds of skills and knowledge in the brain. This method,

according to Randall (2007) can help second language learners, especially Chinese, who have trouble understanding the English syntax or some grammar rules because this way they wouldn't have to learn every single aspect and detail about the grammar rules. Instead, they can memorize chunks of language and build up on that later on, "through the memorization of pre-fabricated correct chunks of language, the learner will build up a corpus of language data which can be used then to 'set' their language parameter to the English article usage" (Randall, 2007, p. 171).

To sum this up, chunking helps develop neural networks in the brain and makes repetition of information easier. Repetition, in turn, is essential to the acquisition of information because without repetition the working memory will fail to encode this information into the long-term memory for storage and retention. That is why rehearsal and repetition, which are part of the memorization strategy, are necessary for learning and second language acquisition.

2.3 Vocabulary in Second Language Teaching

To learn a new word means to know its meaning and how it functions in different contexts and situations. However, what does it mean to know a word, and what does knowing a word entail? Schmitt (2000) and Nation (2001) tried to answer this question by discussing the types of knowledge that a learner must have in order to know a word. According to Schmitt (2000), knowing a word entails two degrees; receptive knowledge and productive knowledge. The receptive knowledge means being able to recognize the word and identify its written form, and it's normally connected with listening and reading skills. The productive knowledge, however, means being able to produce the word or use it when speaking or writing. Schmitt continues to say that normally people

acquire the receptive knowledge of the word first and then the productive one. However, this is not necessarily always the case. At many times a person can know how to produce a word and use it in context, but is incapable of associating its meaning with its written form or, in other words, is incapable of identifying the word's written form. Therefore, in order to 'know' a word, one should be able to have both, the receptive and productive knowledge of it. In order for memorization to be an effective strategy then, it should ensure that students are able to recognize the word and produce it in a meaningful context, or be able to link its form to its meaning. Otherwise, memorization would not help students "know" a word or learn it. Nation (2001), on the other hand, speaks of other types of knowledge. This knowledge includes the different meanings of the word, its written and spoken form, its grammatical behavior, collocations, register, and associations with other words and concepts. A person might not acquire all of this knowledge of a word at the same time. One might acquire these different levels of knowledge at different instances and levels. Therefore, it is quite important for teachers to be aware of these different levels of knowledge that one must have, more or less, in order to 'know' or learn a word. This can help them better teach their students how to approach a word and learn its meaning.

Schmitt (2000) also discusses what teachers can do in order to teach their students vocabulary words in a more effective way. He believes that providing a synonym and an antonym for a word is not enough for a person to know this word. In addition to knowing what this word means and what it doesn't mean, learners should also be provided with the context within which this word appears so that they understand it better. Schmitt (2000) believes that because the meaning of a word is flexible, learning

its synonym or antonym might not reflect the true meaning of the word. Therefore, one must be exposed to this word in different situations and contexts in order to know its meaning. This is where the teacher should play an important role in exposing students to the different shades of the word's meaning; its denotative and connotative meaning and the word's register. In addition to that, Schmitt (2000) mentions that it is unlikely that a person would grasp all of the meanings of a word at the first encounter only. So the role of the teacher is also to "recycle the important words and bring them to the students' attention" (p. 36). Repetition guarantees that the students encounter these words and meet them more than once. Nation (2001) agrees with Schmitt (2000) saying that one meeting with a new word is not sufficient to gain all the knowledge that is to be learned about this word. Repetition, he says, is essential for vocabulary learning because "vocabulary items must not only be known they must be known well so that they can be fluently accessed. Repetition thus adds to the quality of knowledge and also to the quantity or strength of this knowledge" (p. 114).

2.4 Repetition and Retention

Memorization of vocabulary words does not happen without repetition and rehearsal of the information. Remembering the knowledge is important for learners to develop their ideas and to carry out the task at hand. Without recall of information a person cannot build on and create something new. For example, in order to write a coherent essay in English, one must remember the spelling rules of the words and some good vocabulary words and grammar rules too. Without this kind of knowledge one cannot produce an essay. According to Mayer (2002), repetition can be part of meaningful learning only when it is used by the teacher as a means to establish

meaningful learning not as an ends itself. “When teachers focus on meaningful learning, however, remembering knowledge is integrated within the larger task of constructing new knowledge or solving new problems” (Mayer, 2002, p. 228). Cuddy and Jacoby (1982) state that repetition strengthens the memory. They believe that repetition should be variable in order to be effective, and that forgetting very often enhances remembering because this means that the lost information would have to be processed again. This is where the role of repetition and elaboration becomes most important. The more the information is processed, the more it sinks in and becomes easily retained later on from the long-term memory. Schmitt (2000) supports the idea of repetition in order to achieve retention. He says that loss of new information happens right after the end of a learning session. After that, the rate of forgetting decreases. This is illustrated in figure 3.

Figure 3 Typical pattern of forgetting

In order to avoid forgetting new information, Schmitt (2000) says that students need to have a review session soon after the learning session. “One explicit memory schedule proposes that a student reviews 5-10 minutes after the end of the study period, 24 hours later, 1 week later, 1 month later, and finally 6 months later” (Russell, 1979, p.

149). This means that students should review and rehearse the new information in very close intervals at the beginning, and then in gradually increasing intervals. See figure 4. In order to learn words better and guarantee retention, students should test themselves. “If they can remember them, they should increase the interval before the next review, but if they cannot, they should shorten the interval.” (Schmitt, 2000, p. 130).

Figure 4 Pattern of forgetting with expanded rehearsal

A study done on advanced L2 learners at the university level, by Schmitt (1998), investigated how well students knew the spelling, meaning, grammatical behavior, and collocations of eleven words in one academic year. The results revealed that the students were not able to know the words’ derivational forms even when they knew the meanings of these words. In other words, the students were able to know the meanings of the words but were not able to manipulate the words and use them in their adjective, verb, or noun forms. Schmitt’s findings were concurrent with Bahns and Eldaw (1993) who also found that their students were not able to know the collocational patterns of the words they knew their meanings. However, Schmitt says that this problem became less severe when students encountered the words more than once and were exposed to them repeatedly. Therefore, teachers should not expect that vocabulary learning happens

linearly. On the contrary, forgetting is a natural phenomenon that accompanies learning up until the word is mastered and becomes fixed in the memory after it has been repeated and practiced over time. Schmitt (1998) noticed, however, that what students forgot were the words that they have learned receptively whereas words learned productively were much less forgotten. This means that, when students use the words in context they are less likely to forget them, however, when they only learn their meaning and form they become more prone to forgetting. However, to what extent is Schmitt's argument, regarding constant repetition with varying intervals, applicable or feasible for students who, very often, study a few hours before the test? How much time can students afford to dedicate for this vocabulary task that involves repetition over different stages with increasing and decreasing intervals? In addition to that, if students have completely forgotten the words or the information they are to repeat, then repetition becomes useless because it would be as if the students are studying the information from scratch. Nation (2001), for example, indicates that time is an important factor when it comes to repetition because there must be some memory of the previous encounter with a word in order for repetition to be effective. He continues to say that, "Delayed post-tests of vocabulary learning indicate that memory for words can last several weeks" (p. 104). After this time interval, consecutive repetition of the words is required in order to achieve maximum retention, otherwise the information might be lost. This is concurrent with Schmitt (2000) who says that the best way for the information to be transferred from the short-term memory to the long-term memory is to link the new information to pre-existing ones. When it comes to vocabulary, students should link the new words they are learning to other words or ideas that are already part of their mental lexicon. This will help students remember the words better than when a word has no connection at all

to prior knowledge. Baddeley (1990) also advocates repetition in learning vocabulary. He believes that long-term learning depends on the function of the brain and its chemical changes, and increasing or decreasing the intervals of repetitions “allows time for the regeneration of neurochemical substances that make these changes” (p. 154-155). This means that, learning things in large quantities and at the same time without dividing them and repeating them over intervals, does not allow the neurochemical substances in the brain to regenerate, thus they cannot produce effective learning. However, Nation (2001) indicates that it is very difficult to estimate how long a word will remain in the memory because of the many factors that affect learning and retention such as one’s culture, first language, the amount of exposure, motivation, etc... Cultural factors then, can determine to a large extent the way students choose their learning strategies and how they decide to study vocabulary words.

2.5 Confucianism and the Far Eastern Cultures

Rote learning and memorization have had their origins mainly in Confucianism and the Far Eastern cultures such as China and Japan, whereby until today we still witness this type of learning in their education systems.

According to Confucian thought, memory learning is to be considered as a basis or pre-requisite for any kind of successful learning (Randall, 2007). Preceding any strategy that involves understanding, analysis, or critical thinking comes memory learning which forms a foundation for all the other methods of learning to be built upon. Prior to the twentieth century and in Confucian schools in China, children were admitted to school and given textbooks as early as three years old. Students were required to memorize textbooks after the teacher has explained the content of these texts and check

if the students have understood them. Students would reread the texts for a hundred times with the correct pronunciation and rhythm until they've memorized it well so that they can rehearse it to the teacher in front of the whole classroom (Yu, 2011). This memorization strategy was thought to guarantee learning of the content. However, the teacher made sure that the students comprehended the material before they started repeating it over and over until they finally rehearsed it out loud. This tells us that understanding and comprehension were part of the learning processes of the Confucian education regardless of all the claims that this method did not and does not yield meaningful learning. In fact, understanding was a must according to Confucius who encouraged the young people "to go beyond rote learning to reflect on the implications and application of the poems to their daily lives" (Tan, 2015, p. 432). However, understanding or comprehension on its own does not lead to learning. What really do are the repetition, rehearsal, practice, and memorization of this information; otherwise, it would be lost since "repetition is the principle route to storage in the Long-Term Memory" and "without repetition, understanding is 'precarious'" (Randall, 2007, p. 169).

Contrary to eastern philosophy, which relies heavily on memory learning strategies, western education regards memorization with much negativity and claims that it lacks understanding and does not lead to meaningful learning (Kyaw & Sinhaneti, 2012). The west believes in more pragmatic and progressive ways of learning that involve cooperation, teamwork, fieldwork and research because they believe that this is what the work field in real life requires of an individual. Their focus is mainly on building skills and individuals who are able to critically analyze situations and find solutions to the problems contrary to oriental and eastern learners. The westerners do

have a very strong point, in fact. We have to teach our children how to cope with the demands of everyday life and prepare them as much as possible to face the challenges of the real world; that is the purpose of education in essence. However, every method has to start with certain basics and very often the learning of these basics includes memorization. Math involves the memorization of the multiplication table for example. Physics involves the memorization of formulas that are essential to carry out calculations and reach findings later on. Biology, medicine, and even law involve quite a lot of memorization too. Basically, any subject or career will need some kind of memory learning at least at the beginning in order to establish a strong foundation. This leaves us with the question of whether the role of memory learning stops here, at the level of superficial or basic learning, or it extends to more critical and deeper areas of learning. According to Yang and Dai (2011), English vocabulary is taught in China using rote learning strategies and through memorizing lists of words that get bigger at each level. However, at the intermediate level, students are taught to make decisions and judgments on their own; that is, instead of receiving a list of vocabulary words to memorize and learn, they are required to make up their own lists. The student will learn how to look up for the meaning of the word using a dictionary, to decide on what meaning best fits the context, and to decide how to utilize and classify this word. This way students are not just bluntly memorizing word lists, but are acquiring skills related to autonomy, independence, observation, judgment, and organization. This shows us that memorization is not just a dry learning strategy, but a method that can be utilized in different ways to trigger thinking skills. To Chinese learners, memorization is an inevitable strategy that combines understanding and proper retention of knowledge. To them, memorization implies understanding, and understanding facilitates memorization

or “deep memorization”, as they call it, which is needed for learning (Entwistle & Entwistle, 2010). The culture, therefore, plays a major role in the type of learning strategies to be employed.

Regardless of all the accusations that memorization is an out-dated and passive strategy, “East Asian learners from Singapore, Japan, and Hong Kong outperformed many students in the United States in international tests such as the TTIMS—The Trends in International Math and Science Study” (Tan, 2011, p. 129). Therefore, learning strategies are culture-bound and flexible in within the culture of one’s learning environment. Memory learning, which is perceived in a negative light by many western cultures, is highly appreciated and used in East Asian cultures; “memorization perceived from the East Asian culture is more than just rote learning. Memorization can transcend to the level of understanding and meaningful learning, even in the context of adult learners” (Tan, 2011, p. 137).

Oriental learners, however, are more inclined towards the Eastern thought of memorization and rote learning. The Lebanese schools and curricula, in particular, have long emphasized memory learning and its important role in helping students get higher grades. According to Yang and Dai (2011), studies done by Politzer and McGroatry revealed that oriental learners are more prone to use memorization strategies rather than other communicative strategies. Asian students, for example, were resistant to using other strategies (O’Malley & Chamot, 1990). In addition, they have found that those students whose curriculum dictated the use of memorization strategies might have developed good memorization strategies. Therefore, it is about what strategies students are accustomed to, and not about unifying all education strategies to one vocabulary learning strategy.

2.6 Vocabulary Learning Strategies

Memorization is not the only strategy used in teaching and learning vocabulary. There are plenty of other strategies that can be employed in the learning of vocabulary. To begin with, Oxford (1990) defines language learning strategies as tools used by the learner in order to enhance the learning process. She also classifies these learning strategies into two main categories: direct strategies and indirect strategies. Direct strategies are those language learning strategies that directly involve the target language, and they are of three groups: memory, cognitive and compensation. Our main interest in this study are the memory related strategies. According to Oxford (1990), memory strategies are necessary and have a specific function which is to help students store and retrieve information, and they are of four subcategories: Creating mental linkages, Applying images and sounds, Reviewing well, and Employing action. These subcategories are further divided into other subcategories which involve imagery, grouping, associations etc... These language learning strategies are part of learning strategies in general, and according to Asgari and Mustapha (2011), vocabulary learning strategies form a sub class of language learning strategies. Therefore, the above mentioned learning strategies can be applied to all language skills in general and to vocabulary in particular. Our main focus, however, is how memory strategies can affect vocabulary learning and retention. By going back to Oxford (1990), she mentions that vocabulary learning is not an easy task when it comes to language learning for, whether it was a native language or second language learning, the vast repertoire of vocabulary words makes it very difficult for the learner to grasp all the meanings and store them in the memory. However, memory strategies can greatly help learners overcome this

difficult task. “Memory strategies help language learners to cope with this difficulty. They enable learners to store verbal material and then retrieve it when needed for communication” (Oxford, 1990, p. 39). This emphasizes the importance of memory strategies in vocabulary learning especially that the only way to use a vocabulary word is to retrieve it from the memory after it has been stored there.

2.7 Memorization Versus Other Vocabulary Learning Strategies

Memorization as a vocabulary learning strategy is seen from two different perspectives; one supports its usage believing that memorization helps learners store and retrieve words whenever necessary, and the other believes that memorization is a tedious task that rarely results in a full understanding and application of the vocabulary words. In order to sort this controversy, this section discusses the different learning strategies used when learning vocabulary words in comparison to memorization strategies in an attempt to find out which strategies are considered more effective.

Barimani and Lajooee (2013) carried out a study to investigate the effectiveness of learning vocabulary words through role play versus memorization among Iranian upper-intermediate EFL female learners. The seventy-five participants were divided into an experimental group, learning vocabulary words through role play, and a control group, which did not receive any treatment, meaning that they only learned their vocabulary words through memorization. A pre-test was administered to both groups and this same pre-test was given later, after intervention, as a post-test to both groups to check which technique was more effective in learning the vocabulary words. The results showed that the experimental group, which used role play to learn the vocabulary words, scored much higher than the control group, which used memorization as a learning

strategy. Not only that, but the researcher also believed that role play led to better understanding of the words and better retention than with memorization. This study showed that with the Iranian intermediate female learners, role play was a more effective strategy than memorization. Alabsi (2016) agrees with Barimani and Lajooee (2013), where she believes that role play is a better and more effective strategy compared to memorization in learning vocabulary. Her study conducted on Saudi students of English who are faced with many difficulties when learning vocabulary using the traditional memorization methods, revealed that when learning through role play, the students achieved significantly higher results. Again, this shows the importance and significance of using strategies beyond memorization in order to learn new vocabulary words more effectively, and perhaps retain them for later usage. Besides role play, there were other vocabulary learning strategies that researchers have compared to memorization to investigate their effectiveness in learning. Ge (2015), for example, used the storytelling approach in order to teach Chinese adult learners new vocabulary words. In within the Chinese context and culture, memory learning strategies are very popular and are most often used to learn different skills and tasks, especially in second language learning. Ge's study (2015) compared the usage of the storytelling approach and memorization approach between two groups, an experimental one that learned through storytelling, and a control group that learned through memorization. Two post-tests were administered to the two groups, one immediately after the experiment to check for short-term retention, and the other three weeks later to check for long-term retention. The results revealed that the storytelling approach yielded better results than memorization in both short-term and long-term retention. Ge's findings concur with Nation (2001) who suggests that the best way to ensure retention is to have students repeat the words and encounter them more

frequently through stories. He believes that with younger kids, this method works well because they enjoy listening to the same stories over and over again. However, this is a bit more problematic with older students who are not interested in repeating the same stories more than once. Therefore, teachers can carry out repeated readings of stories of the same topic including the target words. This way, students are able to remember the words better than hearing stories about completely different topics. However, in his study, Ge (2015) notices that time exerted a really negative impact on vocabulary retention in both strategies used. Regardless of using the story-telling approach, with time, the retention rates of vocabulary words diminished but less severely than in the case of memorization. Another important limitation to the storytelling approach discussed by the researcher is the fact that such a strategy is most likely to involve only a limited number of vocabulary words because it is very difficult to embed too many vocabulary words into one story. Even if this was possible, maybe the story would then be too long or too difficult for students to learn and understand. Similarly, Kelly and Wang (2013) noticed that converting to strategies other than memorization was not an easy task to do. In their study they tried to aid a group of Chinese students in overcoming the challenges they face in learning vocabulary through rote learning and memorization, which they are accustomed to. The study offers students alternative strategies to memorization such as, mnemonic techniques, rehearsal through cards, story chains, the keyword method etc... All of these alternative techniques, and particularly word cards, proved to be more effective, enjoyable, and motivational than rote memorization. However, Wang and Kelly (2013) noticed that going beyond rote memorization needed some time and effort on behalf of the teachers. Teachers would need to work with smaller groups of students in order to achieve the desired results.

Therefore, it seems that every method or strategy that is alternative to memorization has its flaws too. Teachers and students need strategies that are practical and that can be used in the classroom in the most efficient and least time-consuming way possible. If teachers cannot take advantage of these alternative strategies, then they are not going to implement them and they will remain theories and suggestions in books.

Even Ge (2015) in his article refers to Nemati (2009) about the importance of memory strategies and the fact that she found that these strategies were mostly effective especially in long-term retention because memory strategies belonged to the highest level of mental and information processing. By looking at the study that Nemati (2009) has conducted on 310 Indian pre-university females learning vocabulary words through memory strategies, we notice that the results turned out to be in favor of memory strategies. Nemati (2009) concludes by saying that the effectiveness of using memory strategies was revealed in both the immediate test and the delayed test that were administered to the participants. In another study conducted by Wang, Thomas, and Ouellette (1992), the Keyword Mnemonic strategy used, in contrast to memorization, proved to have a short duration in terms of retention and recall. The keyword mnemonic strategy that was used involved associating the target word with a sound-alike keyword, then students would translate the word to their native language, and associate it with an interactive image. Memorization strategies used, however, involved rote rehearsal and repetition of the words. The findings revealed that keyword mnemonics strategy worked well for a short duration of time because “the episodic cues that are incorporated in the keyword image are still available during the immediate test of recall.” (Wang, Thomas,

and Ouellette, 1992, p. 527). However, contrary to memorization strategies, these images were soon forgotten when recall was tested after a long period of time.

Memorization strategies, therefore, have their supporters as well. Among some EFL and ESL teachers and educators in the field, memorization is essential and remains to be the most used and useful strategy when it comes to vocabulary learning. In Kesen and Ozkan's study (2008), EFL students' beliefs about memorization as a language learning strategy were elicited. Questionnaires and interviews were administered to 50 seniors and 50 freshmen students at Cukurova University. Both, the questionnaires and the interviews, revealed that more than half of the students preferred using memorization especially in learning new words. The reasons behind this is that freshmen students and seniors associate memorization with quick learning especially with new vocabulary words. Not only so, but they also feel like they can use it to improve their grammar, to fulfill a requirement, and to keep the learnt item in the long-term memory. The results also revealed that freshmen students used memorization strategies more than the senior students, and this, according to Kesen and Ozkan (2008), may be attributed to the freshmen students' anxiety in learning a new language. This shows us that memorization could be a great strategy for those who need to learn the basics of the language or for those who need to gain more confidence in a faster way when learning any aspect of a second language. In this regard, Cook (1994) believes that, memorization and learning by heart can help students gain confidence about the language they are learning because for some, learning through memorization is less burdensome than having to analyze and dissect every single aspect of the language in order to learn it. Language should be a source of pleasure not only a means of communication, therefore, should be less burdensome to the learners. Against all the criticism and accusations of memorization

being an ineffective strategy or a strategy that yields very little understanding and learning, Cook (1994) wishes to argue the opposite by saying that, “repetition and learning by heart, though condemned by pedagogic and acquisition theorists, are two of the most pleasurable, valuable, and efficient of language learning activities, and that they can bring with them sensations of those indefinable, overused yet still valuable goals for the language learner: being involved in the authentic and communicative use of language” (p. 133). This means that memorization allows a direct interaction with the language as it authentically is, which is a very rewarding and pleasurable task to do. Osburne (1993) and Ur (1996) also agree with Cook (1994). Osburne (1993), for example, highlighted a few advantages of memorization in language learning. First, memorization can give students a sense of accomplishment because it is something they can perform well in if they rehearse and prepare well. Second, many students find pleasure in memorizing songs and poems. Third, in some cultures such as the Chinese and Taiwanese some students still prefer to use memorization. In addition, memorization has not yet been completely absent from western education because in many classes memorization is still used as a means of providing students with the fundamentals of understanding. Ur (1996) adds to that by saying that memorization helps learners gain more confidence about the second language they are learning, and can help beginners or low-achievers increase their vocabulary of read-made combinations of words and phrases.

Another study conducted by Wu (2014) reveals the effectiveness of memory strategies in learning vocabulary in a Chinese context. Wu (2014) devised a word list of vocabulary words that were unfamiliar to the learners and tried to teach them to 50

Chinese ESL college students using the Cyclical Repetition Technique, which involves the memorization of the vocabulary words through sheer repetition. A pre-test and two post-tests, two months apart, were administered to students to check for retention rates. The results, once again, prove the effectiveness of memorization techniques because all the student who followed the CRT method remembered a great amount of English vocabulary words in a short period of time with long lasting memorization.

Semantic mapping is another strategy that can be used when learning vocabulary words. It involves creating mental maps of lexicon and grouping words according to their common semantic fields. “Semantic mapping is a visual strategy for vocabulary expansion and extension of knowledge by displaying in categories words related to one another” (Khoii & Sharififar, 2013, p. 207). Khoii and Sharififar (2013) compared, in their study, the effects of the two learning strategies, rote memorization and semantic mapping on vocabulary acquisition in second language learning. What was expected was that the group who adopted semantic mapping as a learning strategy would achieve better results in the later assessments because it was said to be more “thought-oriented” instead of out-dated. However, the results indicated that semantic mapping did not produce any significant difference compared to rote memorization regardless of the effort and time put into creating semantic maps and contextualizing the target vocabulary words (Khoii & Sharififar, 2013). Alba and Saggarra (2006) also support this finding because their study compared the use of memorization to two other strategies: Semantic Mapping and the Keyword Method. The results revealed that the Keyword method yielded the best retention rates. However, memorization proved to be more effective than the semantic mapping technique.

This section has presented a review of the literature of some of the most common vocabulary learning strategies. Some of these strategies are using role play to learn the words interactively, incorporating the target words in short stories, using mnemonic techniques, rehearsal through cards, employing keywords, and creating semantic maps for the words. All of these strategies tried to shun away from the traditional memorization techniques, that involve repetition of words only, in an attempt to study which strategies prove to be more effective to learners such as the case of Barimani and Lajooee (2013), Alabasi (2016) and Ge (2015). In some studies, vocabulary learning strategies other than memorization proved to be more engaging and effective. However, other studies proved that memorization is inevitable to the learning of vocabulary (Nemati, 2009; Wang, Thomas, & Ouellette, 1992; Kesen & Ozkan, 2008; Cook, 1994; Osburne, 1993; Ur, 1996; & Wu, 2014).

The next chapter will discuss the methods and instruments used in order to investigate whether memorization strategies are superior or more effective or not.

Chapter Three

Methodology

This chapter introduces the research methods and procedures used to conduct my study. It includes a section on the research design, sampling, data collection, the instruments used, credibility and trustworthiness, and a final section on the ethical considerations.

Because memorization is recently regarded as an outdated learning strategy where the learner passively records information in the memory without understanding this information or retaining it later, the aim of this study is to investigate the effectiveness of memorization as a learning strategy in studying vocabulary words for grade 9 students in an ESL classroom. Therefore, the research question addressed in this study is "How effective is memorization in helping grade 9 students learn new vocabulary words in an ESL classroom?"

3.1 Design of the Study

This case study is exploratory in nature and follows a qualitative research approach. According to Merriam (2009), qualitative studies investigate a certain phenomenon or examine the relationship between things in order to understand how people view their surroundings and how they interact within their societies. Qualitative studies are conducted in natural settings with the researcher being the primary instrument of data collection. Because there is no previously stated hypothesis that is to be tested but merely an investigation of a certain phenomenon as it occurs in its natural setting, the qualitative research design is the best approach to follow in this study. Data

is analyzed inductively; that is, the researcher does not start with any preconceived ideas or hypotheses, but is merely examining the surrounding in order to investigate a certain issue. Data is collected in terms of words or pictures rather than numbers, and therefore, we are more interested in the process that the study undergoes, and not only in the final product of the whole study (Fraenkel & Wallen, 1993).

This study is a case study in particular because it is an in-depth investigation of a “bounded system”, where only one unit or case is studied (Merriam, 2009). A bounded system refers to a specific framework in which everything outside this framework is disregarded and only the unit or case is studied. Yin (2009) defines case study as an investigation of a contemporary phenomenon in its natural setting without any intervention, and this is the case in my study.

In this study only grade 9 students are examined within the framework of an ESL classroom in order to study the effectiveness of memorization as a strategy used to learn vocabulary words. The case study is embedded in context because the case is to be investigated during the English sessions with grade 9 students; therefore, the knowledge derived is more realistic and concrete.

3.2 Sampling

For the purpose of this study, convenience sampling is used for selecting the school and the students. Convenience sampling is defined by Cohen, Manion, and Morrison (2007) as a method of sampling that involves choosing available and accessible sites, individuals or groups of people to participate in the study.

Sixty-one grade 9 students that I teach at the school I work at were asked to participate in this study. The students are divided over three sections and all three of them receive the same number of teaching sessions and are taught by the same teacher. The sample remained intact throughout the study: I did not manipulate any of the students' divisions across the sections nor the classroom setting. Therefore, the phenomenon was studied in its natural setting. In addition, 15 English language teachers of the intermediate and secondary cycles were asked to participate in this study to elicit their perception of memorization and vocabulary learning strategies employed by their students, and how they teach and assess vocabulary words.

3.3 Data Collection: Instruments

This section introduces the data collection methods that are used in order to address my research question. The study used a qualitative approach in the form of three instruments: vocabulary assessment, questionnaires, and teacher interviews. The vocabulary assessment and the questionnaires were administered to the students, and the interviews were conducted with 15 English teachers of the intermediate and secondary cycles.

Students, being the participants of the study, were required to study a list of 40 vocabulary words that they haven't been taught before. In order to test the effect of using memorization strategies to learn vocabulary words, I did not want the students' prior knowledge of the words or any experiences with them to interfere with the process. For this reason, completely new and foreign vocabulary words were chosen for the students to study. The number of words was adequate for their level because they are used to studying such a number of words for an assessment or a big test. Plus, I wanted to test

the extent of their memory skills, so giving them only a few words when they are used to memorizing more, was not feasible. The words were chosen from a list of SAT words that are suitable for a grade 9 level. I made sure to choose the most common and most used words so that the students are able to make sense of them and utilize them in a relevant context. The students studied the words over three stages. First, they were asked to study the first 20 words, then the next week they were asked to study the other 20 words, and the final week before the assessment they were asked to study the whole list. The purpose was to divide the load of the words so that it's not too difficult for students to study them all at once taking into consideration that they have other tasks to take care of. Also, this helped them encounter the words and repeat them more than once before the assessment. After that, the students sat for an assessment to test their retention and understanding of the vocabulary words that they have studied. In addition, a questionnaire was administered to these students, who took the vocabulary assessment, in order to find out in details the type of memorization strategies that they used to study the given list of words. The questionnaire includes strategies that facilitate memorization such as, linking the target words to other familiar words or using the words in a conversation or made-up situations in order to learn them. Another group of items in the questionnaire is related to how students study the words at home, and this involves having them repeat the words more than once or write them down or use word cards. Finally, the last group of strategies in the questionnaire was related to how students remember the words, and it involved them grouping the words according to synonyms or antonyms, doing exercises or listening to English songs and watching movies. The choice of the questionnaire items was based on the relevant literature that emphasized the importance of memorization, repetition, and using the words in context. Following

Oxford's theory (1990) memory strategies involve having to create mental linkages, applying images and sounds, reviewing well, and employing action to the word. All of these were included as items in the questionnaire in order to determine how students study vocabulary words and remember them later on. In addition to that Schmitt (2000), mentioned in the literature section, emphasized the importance of memorization and repetition in learning vocabulary words. Schmitt (2000) believes that constant rehearsal of the words ensures that the word will not be forgotten so fast. Also, these strategies were based on Baddeley' model of the working memory, which shows that repetition and rehearsal are necessary for the information to be transferred from the short-term to the long-term memory because of the phonological loop which has a very limited capacity. Therefore, I decided to include strategies related to repetition, creating links, and utilizing the words in different contexts in the questionnaire. The aim of this questionnaire is to check the process that students follow to study a word and learn it. A comparison was carried out between the types of strategies used by students to learn or memorize the list of vocabulary words, and their scores on the vocabulary assessment. The interviews with English teachers investigated their perceptions regarding memorization and the types of strategies that their students use in order to learn vocabulary words.

3.3.1 Vocabulary Test

A list of 40 vocabulary words was selected according to the students' age and grade level. The 40 vocabulary words were new and students have not seen them before. After the students studied this list, they were asked to sit for a vocabulary test. The test was divided in to two parts. The first part required students to provide synonyms or

definitions of the words given at random. This demonstrated the students' ability to remember the meanings of the words. The choice of such an exercise was also based on Schmitt's theory of repetition (2000) and Baddeley's model of the working memory (2000). Both of them indicate that constant repetition will lead to successful memorization and retention of the words. For this reason, the first part of the test checked how well the students retained the words they have studied knowing that the strategies they have reported to have used were also based on the same theories of Schmitt and Baddeley. The second part of the test, however, revealed whether students were able to use these vocabulary words in context, or whether they were simply memorizing without understanding. The second part required the students to use the same words that they defined, to create meaningful sentences or examples. Schmitt (2000) believes that in addition to constant rehearsal, the learner must use the words in different contexts. According to him, learning the words' synonym and antonym only does not reflect the true meaning of the word. Learners must be able to use it in context in order to make sure that they have truly learned it.

3.3.2 Questionnaire

The questionnaire that was administered to the students was a structured questionnaire of a five-point Likert scale comprising the different memorization and vocabulary learning strategies that students might use in order to study the assigned vocabulary words.

3.3.3 Interviews

One-to-one interviews were conducted with 15 English teachers of the intermediate and secondary cycles in order to study their perceptions of memorization

and other vocabulary learning strategies. According to Merriam (2009), interviews are the most common type of data collection methods in qualitative research in which the researcher asks the participant a number of questions related to the research study in order to gain information from that participant. There are three types of interviews: structured, semi-structured, and unstructured (Merriam, 2009). For the purpose of this study, semi-structured interviews were used. The interviews were comprised of 11 more-or-less structured questions, whereby the interviewer had the flexibility to add or change or modify the questions on the spot. The interviews were recorded and transcribed for analysis.

3.4 Credibility and Trustworthiness

Credibility is achieved when a certain instrument measures what it's supposed to measure (Fraenkel & Wallen, 1993). In other words, we are measuring how congruent the findings are with reality (Merriam, 2009). Trustworthiness, on the other hand, refers to how much the findings are replicable in different contexts. According to Cohen, Manion, and Morrison (2007), for a study to be reliable it has to yield similar results if it were carried out more than once.

To ensure the credibility and trustworthiness of this study, the instrument items of the questionnaire were directly taken from the research questions and from the literature. The questionnaire items were piloted before they were administered. Therefore, the proper jargon was used and the content was clear. Members were not forced to do the study, but were asked to participate willingly and were aware of the study's purpose and procedure. In addition to that, triangulation was used as a strategy to ensure credibility and trustworthiness. Triangulation is the use of multiple, two or

three, instruments of data collection in order to validate a certain finding (Merriam, 2009). In this study, three instruments were implemented; vocabulary test, questionnaires, and teacher interviews. All of these instruments aim to investigate the effectiveness of memorization as a strategy used to learn vocabulary words in grade 9 English as a Second Language classroom.

3.5 Ethical Considerations

In order to ensure the safety and security of my participants, a consent form was signed by all the participants who willingly decided to take part in the study and who were granted the freedom to leave the study whenever they felt uncomfortable. Also, a consent form was signed by the students' parents and by the school's administration to guarantee their approval for conducting the study. The teacher participants of the interviews were asked to sign a consent form too. In addition to that, the participants were introduced to the study's purpose and procedure before they took part in it.

The next chapter reports the findings of the study yielded by the three instruments.

Chapter Four

Results

The following chapter represents the results of the vocabulary test, the students' questionnaires, and the teacher interviews. First, the chapter discusses the results of the vocabulary tests that 61 grade 9 students completed. The 61 students were divided over 3 sections of grade 9: section A, B and C. The results of each section are discussed separately.

4.1 Results of the Vocabulary Test

Section A of grade 9 is comprised of 21 participating students. Only 6 students out of these 21 passed the vocabulary test, which means that 15 students failed the test. The passing grade of this test was a 20 out of 40, so all those who failed received a grade less than 20 on the test.

The 6 students that passed the test ranged between low, average, and high achievers. Only one of the high achievers who passed the test was able to equally define and write sentences on most of the words that were given. The student was able to score 12 out of 20 in the first part of the vocabulary test which required the students to define or provide synonyms and meanings to the words, and another 12 out of 20 on the second part of the vocabulary test which required that they put these same words in sentences. The average student and the other three high achievers scored better on the first part of the vocabulary test which required synonyms and definitions than the second part which required sentences. What was significant though was that the low achiever was able to not only pass the test, but do significantly better in providing synonyms and definitions

for the words (15 correct answers) than using them in sentences (6 correct answers only).

Three students out of the 15 who failed the test scored better on the second part of the vocabulary test, providing sentences, than the first part, providing definitions and synonyms. This indicated that these students were not able to recall all of the meanings of the words they were tested on, but they still managed to put a few of them in meaningful sentences. All of the remaining 12 students, however, did better in providing definitions and synonyms for the words than providing sentences. One student out of the 21 received a zero on the test.

In general, in this section, 17 students did better on the first part of the vocabulary test than the second part. Three students did better on the second part of the vocabulary test than the first part. Only one student, who passed the test and is a high achiever, was able to master both parts equally, and one student scored a zero on the test.

By looking at each of the two parts of the vocabulary test in details, further results can be elicited. In the first part of the vocabulary test, which required students to define vocabulary words or write synonyms of them, it was noticed that 7 students out of the 21 gave only half definitions or wrote only a few incomprehensible words instead of a coherent definition. For example, a definition for the word “Abase” would be “to cause to feel shame”; however, one student wrote it as “cause to lower self-confidence”. Other students defined “Beset” as “to annoy chronologically” whereas its given definition was “to annoy chronically”. This indicates that the student was not able to remember the definition of the word as it is so decided to replace it by a word that sounded the same or looked the same.

In the second part of the vocabulary test, which required students to make their own sentences using the vocabulary words given to them, it was noticed that 16 students had a lot of errors in using the words in their correct parts of speech within a sentence. These students were able to define the words or provide a synonym for them, but they were not able to use them correctly in a meaningful sentence. It was obvious that they could not put the word in its correct form and part of speech within the sentence; therefore, their sentences did not make any sense. In other cases, these students wrote sentences that did not reflect the meaning of the words or showed whether they have understood them, for example, “He was very meticulous”. Only four students did not have trouble using the words they defined in their proper form and part of speech in a meaningful sentence, and these students were the ones who scored better in the second part of the vocabulary test and the student who scored equally on both parts of the test. These findings and results are going to be mimicked for the other two sections as well.

Section B of grade 9, on the other hand, is comprised of 23 participating students. Only 4 students out of these 23 passed the vocabulary test, and 19 students failed the test.

The 4 students that passed the test were average and high achievers; none of the low achievers were able to reach a passing grade. Only one of the high achievers who passed the test was able to equally define and write sentences on most of the words that were given. The student was able to score 11 out of 20 in the first part of the vocabulary test which required students to define or provide synonyms and meanings to the words, and an 11 out of 20 as well on the second part of the vocab test which required the students to put these same words in sentence. This means that the student was able to

construct sentences on the words she defined and not only restate their meanings. The average student and the other two high achievers scored better on the first part of the vocabulary test which required synonyms and definitions than the second part which asked for sentences. However, the average student, who is in fact a low to average achiever, scored significantly higher on the first part of the test than the second part. This student scored 18 out of 20 in the first part of the test and only 7 out of 20 in the second half of the test. This shows that this student was able to recall the definitions of the words but was not really able to utilize them in meaningful sentences.

Twelve out of the 19 failing students on this test scored higher on the first part rather than the second part of the vocabulary test. In contrast to section A, none of the students who failed the test scored better on the second part, providing sentences, than the first part, providing definitions and synonyms. Five out of the 19 failing students, however, scored equally on both parts one and two of the test, which means that they were able to define and construct sentences on some of the given words. However, their performance was inadequate so they ended up failing the test as a whole. Two students received a zero.

In general, in this section, 15 students out of 23 did better on the first part of the vocabulary test than the second part. Six students were able to master both parts of the test equally, but only one of them was able to pass the test. Two students scored a zero on the test, and none did better in the second part of the test.

Similar to section A, in this section the two parts of the vocabulary test were examined in details in order to look for further findings. In the first part of the vocabulary test, which required the students to define vocabulary words or write

synonyms of them, 11 students out of the 23 gave only half definitions or wrote only a few incomprehensible words instead of a coherent definition. It was either that they forgot part of the word's meaning and ended up writing half of it; for example, one student defined "Bamboozle" as "hide or conceal" whereas its exact definition is "to hide one's true motives", or for other students it was clear that they did not understand the meaning of the word or have memorized it incorrectly, so they ended up defining "Dearth" as "an unspecific number" instead of "an insufficient number". Others confused two words together. For example, one student confused the meaning of the word "Lucid" with the word "Patriarch" although they have no similarities in meaning or form.

In the second part of the vocabulary test, which tested the students' ability to construct their own sentences using the vocabulary words given to them, 17 students had a lot of errors in using the words in their correct parts of speech within a sentence. These students had no trouble defining the words or providing a synonym for them, but they were not able to use them correctly in a meaningful sentence. Even the students who passed the test had a lot of errors in the word usage and form when it came to putting them in sentences. Only four students did not have trouble using the words they defined in their proper form and part of speech in a meaningful sentence, and that is because these students completely missed the meaning of the word, thus could not use them in sentences.

Finally, in section C of grade 9, made up of 17 students, only 3 students passed the vocabulary test, and 14 students failed the test.

Two high achievers and one average student were able to pass the test. None of the low achievers in this class was able to make it. Only one of the high achievers who passed the test was able to equally define and write sentences on most of the words that were given. This student was able to score 10 out of 20 in the first part of the vocabulary test which required students to define or provide synonyms and meanings to the words, and a 10 out of 20 as well on the second part of the vocabulary test which required the students to put these same words in sentences. The other two students, however, scored better on the first part of the vocabulary test than the second part.

Eleven out of the 14 failing students on this test scored higher on the first part rather than the second part of the vocabulary test. One student out of the 14 scored higher on the second part of the test instead of the first. None of the students, except the one who passed the test, had equal scores on both parts of the test. Two students scored a zero.

In general, in this section, 13 students out of 17 did better on the first part of the vocabulary test than the second part. One student was able to master both parts of the test equally, and pass the test as well. Two students scored a zero on the test, and one student scored better on the second part of the test but with a failing grade.

In the first part of the vocabulary test, which required students to define vocabulary words or write synonyms of them, 6 students out of the 17 gave a partly correct answer for the definitions of the words in part one of the test. Some examples show that they have not fully understood the meaning of the word. For example, one student defined the word “Eclectic” as “to choose between two groups” instead of “selecting what seems best of various styles or ideas”.

In the second part of the vocabulary test, 15 students were not able to use the words in their correct part of speech or form when putting them in sentences. All of the students in this class, the passing and failing ones, had errors in the word formations, thus were not able to write meaningful sentences in order to demonstrate their understanding of the word.

The total number of students who participated in this study was 61. In total, 13 students out of the 61 passed the test, and 48 failed. Ten students did better in providing definitions for the words than provide sentences, and they passed the test at the same time. Three out of the 13 passing students had equal scores on both parts of the vocabulary test, which means that they were able to define the words and use them in sentences. However, none of these 13 students scored better in the second part of the test, which means that none of these students was able to use the words in sentences when they haven't defined them or stated their meaning. As for the 48 failing students, 35 of them did better in providing synonyms and definitions for the words than in using these words in meaningful sentences. Only four students were able to use words in sentences but not define them properly or explain their meanings. Five students were able to define and use the words in sentences, but they still failed the test. Finally, five students scored a zero on the whole test.

Table 1 Summary of the overall results of the Vocabulary Test

Students Parts of the test Students did better on	Passing	Failing	Scored a Zero
Part 1 of the Test	16.4 %	55.8 %	8.2 %
Part 2 of the Test	0 %	6.5 %	
Both Parts of the Test	5 %	8.2 %	
Total	21.4 %	70.5 %	8.2 %

4.2 Results of the Questionnaires

For each section of grade 9, the questionnaires were classified according to the students' performance in the vocabulary test. In each section, there were students who passed, students who failed, students who performed well in the first part of the test and students who performed better in the second part, students who did equally well in both parts, and students who received a zero on the test. For each of the above categories of students, the questionnaires were classified and analyzed according to the strategies most used and the strategies least used by these students to study vocabulary words. The common strategies used among these students were selected and added in the following table for each class section separately.

4.2.1 Results of the Questionnaires for Section A

Table 2 The strategies used by the students who passed the test

Vocabulary Learning Strategies Categories of Students		Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Passing Students	Students who Scored Higher on the 1 st Part of the Test	<ul style="list-style-type: none"> • I link the word to my experience. • I say the word with its meaning repeatedly in order to learn it. • I go through the vocabulary word list more than once. • I make up my own sentences using the newly learned word. • Watching an English-speaking film with subtitles. • listening to English songs 	<ul style="list-style-type: none"> • I link the word to an Arabic word/ a word in another language with a similar sound. • I link the word to an Arabic word/ a word in another language with a similar meaning • I link the word to another English word with a similar sound in order to learn it. • I link the word to another English word with similar spelling in order to learn it. • I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them. • grouping words according to the synonyms and antonyms. • I use word cards to learn new words • doing English exercises at home

	Students who Scored Equally on the 1 st and 2 nd Part	<ul style="list-style-type: none"> • I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word. • I visualize the word in terms of images to learn it better. • I make up my own sentences using the newly learned word. • I link the word to my experience. • watching an English-speaking film with subtitles • listening to English songs 	<ul style="list-style-type: none"> • doing dictations • grouping words according to the synonyms and antonyms. • I write the newly learned words with their meaning on a paper to learn them better. • I use word cards to learn new words
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Table 3 The strategies used by the students who failed the test

Vocabulary Learning Strategies Categories of Students		Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Failing Students	Students who Scored Higher on the 1 st part	<ul style="list-style-type: none"> • I link the word to an Arabic word/ a word in another language with a similar sound. • I say the word with its meaning repeatedly in order to learn it. • I go through the vocabulary word list more than once. 	<ul style="list-style-type: none"> • I link the word to another English word with a similar sound in order to learn it. • I try to use newly learned words in conversation with my friends and teachers. • I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word. • I make up my own sentences using the newly learned word.

			<ul style="list-style-type: none"> • I link the word to my experience. • I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them. • I use word cards to learn new words • doing English exercises at home. • grouping words according to the synonyms and antonyms. • watching an English-speaking film with subtitles • trying to use the newly learned words as much as possible in speech and writing
	Students who Scored Higher on the 2 nd Part	<ul style="list-style-type: none"> • I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word. • I visualize the word in terms of images to learn it better. • I make up my own sentences using the newly learned word. • I link the word to my experience. • I go through the vocabulary word list more than once. • watching an English-speaking film with subtitles • listening to English songs • trying to use the newly learned words as much as possible in speech and writing 	<ul style="list-style-type: none"> • I link the word to an Arabic word/ a word in another language with a similar sound. • I link the word to an Arabic word/ a word in another language with a similar meaning. • I write the newly learned words with their meaning on a paper to learn them better. • I use word cards to learn new words

Table 4 The strategies used by the students who scored a zero on the test

Vocabulary Learning Strategies Categories of Students	Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Student(s) who Scored a Zero	<ul style="list-style-type: none"> • I link the word to another English word with similar spelling in order to learn it. • I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word. • I translate the word to Arabic/ my native language to learn it better. • I visualize the word in terms of images to learn it better. • I make up my own sentences using the newly learned word. • I link the word to my experience. • I go through the vocabulary word list more than once. • listening to English songs • watching an English-speaking film with subtitles 	<ul style="list-style-type: none"> • I link the word to another English word with a similar sound in order to learn it • I link the word to an Arabic word/ a word in another language with a similar sound. • I write the newly learned words with their meaning on a paper to learn them better. • I use word cards to learn new words • I make a vocabulary list with meanings and examples in a notebook of my own. • I write the newly learned words with their meaning on a paper to learn them better.

In addition to the above strategies some students, who passed the test, added that they would link the words with images from movie scenes or songs, they would read them more than once, understand them and memorize them in order to learn them. Other students, who did not manage to pass the test, added that they would review the words

before the test or early in the morning, others mentioned that they would study them in the morning, and some said that they would read the words several times until they memorize them.

The same procedure was carried out for the sections B and C of grade 9. The results of section B are placed in the table below.

4.2.2 Results of the Questionnaires for Section B

Table 5 The strategies used by the students who passed the test

Vocabulary Learning Strategies Categories of Students		Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Passing Students	Students who Scored Higher on the 1 st Part	<ul style="list-style-type: none"> • I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word. • I say the word with its meaning repeatedly in order to learn it. • I go through the vocabulary word list more than once. • I associate the newly learned word with a previously learned word. • Watching an English-speaking film with subtitles. • listening to English songs 	<ul style="list-style-type: none"> • I link the word to an Arabic word/ a word in another language with a similar sound. • I use word cards to learn new words • I translate the word to Arabic/ my native language to learn it better. • I write the newly learned words with their meaning on a paper to learn them better. • I link the word to my experience.
	Students who Scored Equally on the 1 st and 2 nd Part	<ul style="list-style-type: none"> • I try to use newly learned words in conversation with my friends and teachers 	<ul style="list-style-type: none"> • I write the newly learned words with their meaning on a paper to learn them better.

		<ul style="list-style-type: none"> • I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word • I associate the newly learned word with a previously learned word • I make up my own sentences using the newly learned word • I link the word to my experience • I say the word with its meaning repeatedly in order to learn it • I go through the vocabulary word list more than once • watching an English-speaking film with subtitles 	<ul style="list-style-type: none"> • I use word cards to learn new words • I link the word to another English word with a similar sound in order to learn it. • I link the word to another English word with similar spelling in order to learn it. • I link the word to an Arabic word/ a word in another language with a similar sound.
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Table 6 The strategies used by the students who failed the test

Vocabulary Learning Strategies		Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Categories of Students			
Failing Students	Students who Scored Higher on the 1 st part	<ul style="list-style-type: none"> • I write the newly learned words with their meaning on a paper to learn them better. • I make a vocabulary list with meanings and examples in a notebook of my own. • listening to English songs • I say the word with its meaning 	<ul style="list-style-type: none"> • I link the word to another English word with a similar sound in order to learn it. • I link the word to another English word with similar spelling in order to learn it. • I try to use newly learned words in conversation with my friends and teachers.

		<p>repeatedly in order to learn it.</p> <ul style="list-style-type: none"> • I go through the vocabulary word list more than once. 	<ul style="list-style-type: none"> • I make up my own sentences using the newly learned word. • I link the word to my experience. • I use word cards to learn new words • doing English exercises at home. • grouping words according to the synonyms and antonyms. • Similarity of punctuation and spelling • trying to use the newly learned words as much as possible in speech and writing
	Students who Scored Equally on the 1 st and 2 nd Part	<ul style="list-style-type: none"> • listening to English songs • I say the word with its meaning repeatedly in order to learn it. • I go through the vocabulary word list more than once. 	<ul style="list-style-type: none"> • I link the word to an Arabic word/ a word in another language with a similar sound. • I link the word to another English word with similar spelling in order to learn it. • I translate the word to Arabic/ my native language to learn it better. • I associate the newly learned word with a previously learned word • I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them. • I use word cards to learn new words • doing English exercises at home.

Table 7 The strategies used by the students who scored a zero on the test

<div>Vocabulary Learning Strategies</div> <div>Categories of Students</div>	Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Student(s) who Scored a Zero	<ul style="list-style-type: none"> • I write the newly learned words with their meaning on a paper to learn them better. • listening to English songs • watching an English-speaking film with subtitles 	<ul style="list-style-type: none"> • I use word cards to learn new words • I make a vocabulary list with meanings and examples in a notebook of my own. • I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word.

In addition to the above mentioned strategies, the passing students added that they would reread the words many times and make sure that they understood them. One student mentioned that she cannot remember any word if she did not understand it. The others said that they would put them in examples, link them to a synonym they know, or ask someone to recite the words for them. As for the students who failed the test, most of them said that they would repeat the words more than once and ask a member of their parents to recite the words for them. Very few said that they would look up the meanings of the words themselves to help them understand the words.

4.2.3 Results of the Questionnaires for Section C

Table 8 The strategies used by the students who passed the test

<div>Vocabulary Learning Strategies</div> <div>Categories of Students</div>		Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Passing Students	Students who Scored Higher on the 1 st Part	<ul style="list-style-type: none"> • I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them. • I say the word with its meaning repeatedly in order to learn it. • I go through the vocabulary word list more than once. • Watching an English-speaking film with subtitles. • listening to English songs • I make a vocabulary list with meanings and examples in a notebook of my own. • I write the newly learned words with their meaning on a paper to learn them better. 	<ul style="list-style-type: none"> • doing English exercises at home. • doing dictations • I link the word to another English word with a similar sound in order to learn it. • I link the word to another English word with similar spelling in order to learn it. • I link the word to my experience. • I make up my own sentences using the newly learned word.
	Students who Scored Equally on the 1 st and 2 nd Part	<ul style="list-style-type: none"> • I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them • I go through the vocabulary word list more than once • grouping words according to the synonyms and antonyms 	<ul style="list-style-type: none"> • I link the word to another English word with a similar sound in order to learn it. • I link the word to another English word with similar spelling in order to learn it • I try to use newly learned words in imaginary situations in my mind to help

		<ul style="list-style-type: none"> • listening to English songs 	<p>myself learn/ understand the word</p> <ul style="list-style-type: none"> • I write the newly learned words with their meaning on a paper to learn them better • I use word cards to learn new words • I make a vocabulary list with meanings and examples in a notebook of my own
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Table 9 The strategies used by the students who failed the test

Vocabulary Learning Strategies		Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Categories of Students			
Failing Students	Students who Scored Higher on the 1 st part	<ul style="list-style-type: none"> • I say the word with its meaning repeatedly in order to learn it. • I go through the vocabulary word list more than once. • I write the newly learned words with their meaning on a paper to learn them better. • I make a vocabulary list with meanings and examples in a notebook of my own. • watching an English-speaking film with subtitles • listening to English songs • remembering the sentence in which the word is used 	<ul style="list-style-type: none"> • I link the word to an Arabic word/ a word in another language with a similar meaning. • I link the word to another English word with a similar sound in order to learn it. • I try to use newly learned words in conversation with my friends and teachers. • I associate the newly learned word with a previously learned word. • I make up my own sentences using the newly learned word. • I analyze vocabulary words in terms of prefixes, roots, and

			<p>suffixes in order to learn them.</p> <ul style="list-style-type: none"> • I use word cards to learn new words • doing English exercises at home.
	Students who Scored Higher on the 2 nd Part	<ul style="list-style-type: none"> • I visualize the word in terms of images to learn it better. • I go through the vocabulary word list more than once. • watching an English-speaking film with subtitles • listening to English songs • trying to use the newly learned words as much as possible in speech and writing 	<ul style="list-style-type: none"> • I link the word to an Arabic word/ a word in another language with a similar sound. • I link the word to another English word with similar spelling in order to learn it. • I translate the word to Arabic/ my native language to learn it better. • I try to use newly learned words in conversation with my friends and teachers. • I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word. • I use word cards to learn new words

Table 10 The strategies used by the students who scored a zero on the test

<div>Vocabulary Learning Strategies</div> <div>Categories of Students</div>	Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Student(s) who Scored a Zero	<ul style="list-style-type: none"> • I visualize the word in terms of images to learn it better. • listening to English songs 	<ul style="list-style-type: none"> • grouping words according to the synonyms and antonyms. • I use word cards to learn new words • I make a vocabulary list with meanings and examples in a notebook of my own. • I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them. • I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word.

In this section, the students added the following strategies: students who passed said that they would look up the words themselves sometime and compare them to their native language, and others mentioned that they learn new words through interacting with foreigners online. Students who failed the test, however, added that they would repeat the words more than once, try to visualize their place on the paper after they have studied them, and provide their own examples.

In order to summarize the results of the questionnaires over all of the three sections, the following table has been constructed. The mostly and least commonly used

strategies to learn vocabulary words, were combined in this table in order to narrow down our findings and facilitate the process of data analysis.

Table 11 A Summary of the commonly used strategies by all the students in sections A B C

Vocabulary Learning Strategies Categories of Students		Most Used Strategies (as stated in the questionnaire)	Least Used Strategies (as stated in the questionnaire)
Passing students	Students who Scored Higher on the 1 st part	<ul style="list-style-type: none"> • I go through the vocabulary list more than once. • I say the word with its meaning repeatedly in order to learn it. • watching an English-speaking film with subtitles • listening to English songs 	<ul style="list-style-type: none"> • I use word cards to learn new words.
	Students who Scored Equally on the 1 st and 2 nd Part	<ul style="list-style-type: none"> • I go through the vocabulary list more than once. • watching an English-speaking film with subtitles • listening to English songs • I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them • I make up my own sentences using the newly learned word • I link the word to my experience 	<ul style="list-style-type: none"> • I write the newly learned words with their meaning on a paper to learn them better • I make a vocabulary list with meanings and examples in a notebook of my own • I use word cards to learn new words
Failing Students	Students who Scored Higher on the 1 st part	<ul style="list-style-type: none"> • I go through the vocabulary list more than once. 	<ul style="list-style-type: none"> • I use word cards to learn new words.

		<ul style="list-style-type: none"> • I say the word with its meaning repeatedly in order to learn it. 	
	Students who Scored Higher on the 2 nd Part	<ul style="list-style-type: none"> • I go through the vocabulary list more than once. • watching an English-speaking film with subtitles • listening to English songs 	<ul style="list-style-type: none"> • I use word cards to learn new words.
	Students who scored equally on the 1 st and 2 nd Part	<ul style="list-style-type: none"> • I go through the vocabulary list more than once. • I say the word with its meaning repeatedly in order to learn it. • listening to English songs 	<ul style="list-style-type: none"> • I use word cards to learn new words.
Students who Scored a Zero		<ul style="list-style-type: none"> • I go through the vocabulary list more than once. • listening to English songs 	<ul style="list-style-type: none"> • I use word cards to learn new words.

This table shows that all of the students, passing, failing, and those who scored a zero, used the same strategies to learn vocabulary words. These strategies mainly were, “I go through the vocabulary list more than once”, “I say the word with its meaning repeatedly in order to learn it”, and “Listening to English songs” or “Watching an English-speaking film with subtitles”. However, the students who passed the test and were able to achieve equal scores on providing definitions and using words in sentences, used additional strategies such as, “I link the word to my experience”, “I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them”, and “I make up my own sentences using the newly learned words.” These findings are to be analyzed thoroughly in the upcoming chapter.

4.3 Results of the Teachers' Interviews

The following section of this chapter summarizes the teachers' responses to each of the interview questions.

The first question of the interview asked teachers how their students study vocabulary words at home. Fifty-three percent of the teachers said that their students memorize the vocabulary words mostly through repetition and going over the words that have been explained in class more than once. One of these teachers, however, differentiated between the secondary students and the middle-school students' strategies in studying vocabulary, saying that the latter memorize less because their teachers have more time to work with them on these vocabulary words in class. However, for the secondary students, less time is dedicated to studying vocabulary in class because they have less English sessions during the week, so it's more their effort in memorizing the words and studying them. Thirteen percent of the interviewed teachers said that their students would wait until the last minute to study before a test or quiz. They stated that "there's a lot of cramming involved whenever you assess vocabulary directly, and they often end up memorizing the words without really mastering them." Another 13% of the teachers mentioned that they do not know how their students study vocabulary words on their own or how they prepare for the test; however, these teachers mentioned that they never ask their students to recite the words or provide their synonyms and definitions. Instead, they ask them to use these words in sentences or context. Another 13 % said that they do not ask their students to study vocabulary words at home or to prepare them for the test. They rely on what they teach the students in class. Almost 7% of the interviewed teachers said that their students practice vocabulary exercises from the

book, so they don't think that they memorize. Another 7% mentioned that their students try to put the words in different contexts after they have been explained in class in order to try to remember them and use them. However, these teachers mentioned that, "The students who have difficulties with the command of the language definitely do memorize, but these students are very small in number because of the discussion that happens in class about identifying meaning and analyzing it."

In the second question, which asked teachers what they expect their students to do after they have learnt the vocabulary words, 100% of the teachers said that they expect their students to recognize the words if they encounter them again, to use them in the proper context, orally and written, and to use these words to improve their ability to articulate themselves and express themselves.

Question three was divided into two parts. Part (a) asked the teachers about how they assess their students' knowledge of vocabulary words. Almost 67 % said that they assess their students' knowledge of vocabulary words through fill in the blanks exercises, matching, using the words to make meaningful sentences, or circling the correct answer. Thirty-four percent of the teachers said that they assess their students' usage of vocabulary words through essay writing and paragraphs. They would provide the students with a list of vocabulary words that they have already studied and encountered, and they would ask them to choose some of these words to use them in their essays. Thirty-three percent of the teachers said that they assess vocabulary knowledge through asking the students to find the meanings of words from context clues. This includes words they have not prepared at home, but are able to find their meanings using the context clues in the given text or paragraph. Only 20% said that they

ask their students to provide synonyms or antonyms of the words they have studied at home, and only 6% said that they ask the students to provide the different forms and parts of speech of the words in order to learn how to use them in different contexts.

Part (b) of the question asked the teachers if they believe that the way they assess their students influences the way their students study vocabulary words. Sixty percent of the interviewed teachers said that assessment does influence the way students study the vocabulary words because students know what the teacher expects of them and they are going to do what's going to make them pass the assessment. Most of the teachers precisely said that "when students know that they are going to be asked for synonyms or definitions then they would definitely resort to memorizing the words without fully understanding their usage or experimenting with the word." Almost fourteen percent of the teachers said that they noticed how assessment affects students when they changed the way they assess their students: "Previously, when we used to ask students to use words in sentences or provide synonyms or antonyms, the students would cram the vocabulary words last minute and end up memorizing them without proper mastery. However now, when we ask them to choose words and use them in their essays, it's forcing them to come up with different ways to study, which at the very least is helping them take one step further from just staring at the page and trying to get all those words to stick in their heads." Another 14% of the teachers said that they were not sure about whether assessment has an influence on their students, but one of them mentioned that her strategies direct her students to how to study and learn the words. Almost 7% said that the reason they do not assess vocabulary words in separate exercises on the test is

because this will encourage students to memorize the words like “parrots” and not actually learn them.

In the fourth question the teachers were asked if vocabulary exercises on the test usually boost their students’ grades or lower them. Thirty-three percent said that vocabulary exercises on a test boost their students’ grades when these exercises are something like fill in the blanks, matching, or using the words in a short paragraph. Twenty-seven percent, however, answered that vocabulary exercises in the test boost their students’ grades when the words are something they have seen and prepared before. Therefore, they tend to do well in exercises such as fill in the blanks, writing sentences and paragraphs, and matching synonyms and antonyms. However, they don’t do as well when they have to use context clues to figure out the meanings of the words. Thirteen percent of the teachers who test their students’ vocabulary knowledge through the usage of these words in their essays explained that, “when I was testing the students through fill in the blanks exercises or asking them to provide synonyms and antonyms, I felt like it was artificially boosting their grades and I think it’s because they are unfortunately prone to memorization and because they are quite good at cheating. I think if it’s something where they are not having to express themselves they’re just recognizing the answer and filling it out, then they do well. Now, when they have to use the words in their essays, it doesn’t hurt their grade, it still boosts it but not as dramatically as before and way more students do very poorly on it. However, this new way shows to what extent students have understood these words.” Almost seven percent said that it depends on the level of the students and the difficulty of the test. Short

quizzes are usually easier than long tests that contain around 50 vocabulary words, and another 7% of the teachers said that it depends on the student and his/her level.

In question five the teachers were asked about how they feel about asking their students to learn vocabulary words through memorization. Twenty-seven percent of the teachers said that they don't like it because they get a negative response from the students and they'd rather not do it. Twenty percent, however, said that memorization is important and they don't mind it as long as it is accompanied by understanding. Thirteen percent said that it's useless because it's just like studying history and forgetting it the next day, and that "It's not an efficient and productive thing to ask students to do." Another thirteen percent said that they don't like memorization, but it is needed so it depends on how the student decides to memorize and learn the words whereas another 13% said that memorization is absolutely necessary but it should be a means to the end of usage rather than a means unto memorization for more information. If students memorize the words over and over again and not use it, then they wouldn't have accomplished the goal of the process. Seven percent said that if students indirectly memorize the words through repetition and usage then that it okay. However, taking the vocabulary list as it is and memorizing it out of context is not preferable. Finally, another seven percent said that they dislike it and would rather teach it in context and have students learn to pick the words they want to use. However, "the problem is we don't have enough English sessions per week to teach all that at the secondary level, so in the end of the day it's the students' own work, it's memory, and I'm not sure how much retention there is using this method."

Question six was “Do you think when students memorize words they are able to use them later on?” Thirty-three percent of the teachers said that students are able to use the words after they have memorized and understood them, 20% said that students are able to use the words after they have memorized them but only if they have encountered the words and practiced them more than once, and 20% said that students most often study only for the quiz and use these words on their tests but not as part of their daily communication or when they are not being graded for their usage of the words. Out of the remaining teachers, however, 20 % said that students are not able to use the words once they have memorized them, and 7% said that students are not able to use the words they have memorized unless they have good analytical skills and venture to contextualize the words on their own.

The 7th question was: “Do you believe that memorization strategies work better than any other strategy when learning vocabulary?” Twenty-six percent answered that memorization strategies are not the best because the only way students can acquire vocabulary words is through seeing the word in different contexts and using it later on. Twenty percent of the interviewed teachers said that it is not enough that students memorize in a rote way. “They should be able to work with the word, use it, visualize it in a creative absurd way which will help them not forget it instead of just looking at the words over and over again and stopping there.” Thirteen percent said that there is no superior method, meaning that no strategy works better than the other because each student has a different learning style and teachers should vary their teaching strategies to match all learning styles. Thirteen percent said that “sometimes it does work better than other strategies because sometimes we can’t afford to do it in class, but it is not the most

effective strategy and students don't need to be doing it all the time nor should it be a pillar of our educational system like it used to be.” Another 13% said that no matter what strategy students use, memorization is inevitable, and finally, only 6% said that that memory strategies aren't the best because some of the students have very short-term memories and are not able to memorize a big number of vocabulary words.

In question 8 the teachers were first asked about how they teach vocabulary in the class, and second about whether their teaching practices in class influence the way students study the words on their own. To answer the first question, 40% of the teachers said that they explain the meanings of the words and they provide sentences or examples on them and then practice a few exercises. Thirteen percent said that they try to explain the words in context and add contextual meaning to the word, see them in different contexts and analyze the word parts, another thirteen percent said they use skits, activities, and weaves stories using the vocabulary words, and another thirteen percent said that they let the students sit in groups and discuss and explain the meaning of the word to each other and then discuss them with the class along with examples. Six percent said that they explain the vocabulary words in Arabic and then translate them to English, another 6% said that they explain the parts of speech and the different forms of the vocabulary words related to the topics and themes being explained in class, and the other 6% said that the students would choose the unfamiliar words from the texts they are reading in class and try to guess their meaning contextually. Then they look at the word's etymology, the origin of the word, and its prefixes and suffixes. To answer the second question, 93% of the teachers said that their teaching strategies do influence the way students study vocabulary words at home, and the remaining 7% said that for some

students it does but for others it doesn't because no matter what the teacher does in class they are going to go home and just memorize the words and come to the test.

The ninth question asked the teachers to define memorization. Thirty-three percent of the teachers said that memorization is learning a definition by heart word by word taking into consideration that it could involve understanding. Another thirty-three percent said that memorization is learning words by heart without even understanding. Twenty-six percent consider that memorization is not a passive process; however, another twenty-six percent believe that memorization is a passive strategy. Thirteen percent said that memorization is relating or linking words to images or objects or things in order to be able to remember the words. Six percent differentiated between short-term and long-term memorization stating that the goal is long-term memorization which includes recognition and usage versus short-term memorization which is the ability to pass up a very targeted quiz. Another 6% said that in their belief, "memorization is the ability not just to recall, but to synthesize and utilize information that you have exposed yourself to. I think that the goal of memorization should be to make concepts fluid in the mind, meaning that they can be manipulated or changed or directed a certain way." Six percent said that memorization is not the most interesting strategy but it saves time, and also six percent of the teachers said that memorization is about internalizing the information, retaining them, and retrieving them when needed.

Question ten asked teachers of how they think students can retain or remember vocabulary words if not through memorization. Forty percent said that retention can be ensured through practice and usage, be it oral or written. Twenty-six percent of the teachers said that their students are able to retain the words knowing that few of them

memorize. Twenty percent said that retention happens through seeing the word in different contexts and using it later on. Thirteen percent said that their students don't remember to use the vocabulary words later throughout the year unless they have encountered the word on a daily basis, and another thirteen percent said that students cannot retain vocabulary words if they don't memorize them with understanding. Six percent said that their students are able to use and retain the words later without having to study them through memorization. Six percent believed that students would retain vocabulary words if they encounter the words and see them regularly. Six percent said that when students rely on repetition and memorization, they will not be able to retain it or use it after the test, and finally another six percent said that their students are able to retain the words after having memorized them.

In the final question the teachers were asked if they would like to add any final comments regarding vocabulary and memorization. Fifty-three percent said that they wouldn't like to add anything, and thirteen percent said that they dislike memorization. Six percent reported that, "the problem with our students is that they are not self-motivated and they only study vocabulary to do well on the test", another six percent said that memorization would be better fostered with other strategies, also six percent said that memorization would work better at the lower grades, but later on they need to use it more than just memorize it, and the final six percent said that memorization doesn't work. What works better according to them is making these students familiar with these words through using and seeing them in different contexts.

The three instruments that were used in order to attempt to answer the research question revealed that the strategies employed by students in order to learn vocabulary

helped them do well in certain parts of the vocabulary test but not others. In addition, the teachers' responses in the interviews validated the findings of the two other instruments. The questionnaires and the student vocabulary test revealed that strategies most used by students such as, "I go through the vocabulary list more than once", and "I say the word with its meaning repeatedly in order to learn it" helped students score better on finding definitions and synonyms, but not on using them in sentences regardless of whether they passed or not. Students who reported to have used strategies such as, "Watching an English-speaking film" and "Listening to English songs" in addition to the ones mentioned earlier, were able to score better on writing their own sentences for each of the given words, but this was not enough for them to pass the test, so they failed. However, the questionnaires revealed that students who employed strategies such as, "I link the word to my experience", "I make up my own sentences using the newly learned words", and "I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them" were able to master both skills of the vocabulary test: retain the vocabulary words and use them in proper sentences. These students were the only 5% out of the three sections who scored equally on both parts of the vocabulary test and passed the test at the same time. This indicates that the strategies they used, which were additional to the ones all of the other students commonly used, were effective in helping them retain and understand the new vocabulary words. The responses of the interviewed English teachers concur and add to these findings. As most of the students reported to have used strategies that involve repeating the words and going over the list more than once in order to learn the words, 53% of the teachers similarly said that their students memorize vocabulary words by repeating them and going over the word lists at home before the test. Another 13% also said that their students tend to cram the words and

memorize them before the test. They wait until the last minute in order to study them. Twenty-three percent of the teachers said that their students tend to do well in the vocabulary exercises on a test, but only when these exercises are something like fill in the blanks or matching synonyms and antonyms. Another 13% continued to say that these kind of vocabulary exercises on a test tend to “artificially” boost their students’ grades because students do not demonstrate real understanding of these words. They believe that students are good at recognizing the words, and that’s why they do well in filling in the blanks and matching, but are not as good expressing themselves using these words. These findings were evident through the vocabulary test because 78% of the students failed the whole test, and 80% of the students were not able to use the words in meaningful sentences, which shows that students were not able to express themselves using the given vocabulary words. However, in the questionnaires, students reported that they tend to learn new vocabulary words through listening to English songs and watching English-speaking movies, which was something the teachers were not aware of and did not mention in their interviews. The findings, then, were validated throughout the three instruments that complemented each other and provided tangible results for further analysis.

This chapter presented the results yielded by the three instruments that were used for the purpose of this study: vocabulary test, students’ questionnaires, and teachers’ interviews. The next chapter will discuss these results and analyze them in order to attempt to answer the research question proposed at the beginning of this study.

Chapter Five

Discussion

The aim of this exploratory study is to answer the research question proposed at the beginning: How effective is memorization in helping grade 9 students learn new vocabulary words in ESL context? This chapter compares the results yielded by the three instruments that were used: the students' vocabulary tests, the students' questionnaires, and the teachers' interviews in an attempt to answer the above research question.

The results of the vocabulary tests revealed that around 78% of the students failed the test, including 8% who received a complete zero on their tests. Only 21% of the participating students were able to pass the test knowing that the vocabulary list was at the students' class level, which shows that the strategies they used were not very effective in helping them learn the vocabulary words. Seventy-seven percent of the passing students did better in providing synonyms and definitions to the given words than using these words in meaningful sentences. However, only 23% of the passing students, who happen to be the high achievers of this group, were able to successfully define and use the words in proper sentences. This indicates two things. First, only the high achievers were able to retain the vocabulary words through providing definitions for them, and understand their meaning and function because they were able to use them in meaningful sentences. Second, all of the remaining passing students, which are average and low achievers, were only able to retain the words and write their meaning, but were incapable of acquiring these words or understanding them enough to use them in sentences. What is significant, however, is that the low achievers, who constitute only

15% of the passing students, did much better in providing synonyms for the words, but much worse in using these words in sentences. This indicates that they were able to retain the words well enough, but failed drastically in comprehending their meaning and using them in proper sentences. For example, one of these low achievers scored 18 out of 20 on providing definitions, but only a 7 out of 20 for using the words in sentences. By looking at the questionnaires, we notice that these students, as well as the other passing ones, mostly used strategies such as “I go through the vocabulary word list more than once”, and “I say the word with its meaning repeatedly” in order to study the vocabulary words. Apparently, using these types of memorization strategies helped some of the low achievers pass the test; however, it did not really help them learn the words. This finding is concurrent with Kesen and Ozkan’s (2008) findings that memorization could be a great strategy for beginners in the language. Similarly, Osburne (1993) and Ur (1996) stated that memorization can help low achievers increase their vocabulary knowledge and gain more confidence about the language. However, as apparent in this study, these students did not gain full knowledge of the vocabulary words, but only a superficial one that would get them a good grade. This finding is also validated by the teachers’ responses as 13% of them said that memorization “artificially” boosts students’ grades because it doesn’t give a clear idea about whether students have understood the words or simply regurgitated their meaning.

Seventy-nine percent of the failing students did better on the first part of the test, which required definitions and synonyms. This indicates that the majority of the failing students were only able to define the words, but not put them in meaningful sentences. They were able to retain the meaning of these words to a certain extent, but their lack of understanding of these words is what failed them. The majority of the errors that these

students and the ones who passed had were in the derivational forms of the words when forming sentences. Not only did these students have errors in sentence structure and word meaning, but they also were not able to use the word in its correct form or part of speech. Even some students who passed the test still had this type of error. By going back to Schmitt's (2000) study on university students, he found that students had many errors in the words' derivational forms even when they knew the meanings of these words. This coincides with the findings of this study and further supports the fact that students have not really grasped the meaning of the words they are trying to use.

The most common learning strategies that the failing students reported to have used in order to learn vocabulary words were, "I say the word repeatedly with its meaning in order to learn it", and "I go through the vocabulary list more than once". Again, this indicates that these memorization strategies did not help the students pass the test or fully comprehend the words, but they produced good retention rates regardless of whether the students failed or passed the tests because they scored well on the first part of the test. The 9% of the failing students who did not do well in providing synonyms and definitions for the words, but were actually able to use the words in sentences, used learning strategies other than simply repeating the words or going through the vocabulary list more than once. They used strategies such as, "I visualize the word in terms of images to learn it better" and "I try to use the newly learned words as much as possible in speech and writing". This indicates that students who used strategies besides repetition and rehearsal, were able to understand the words more than just remember what they mean without comprehending them.

According to Schmitt (2000) repetition is essential in order to achieve retention of vocabulary words. This was evident in the findings of the study for the students who

scored better on the first part of the vocabulary test because, whether the students passed or failed, they still had high retention rates. However, Schmitt (2000) spoke of repetition over many intervals and a longer period of time, which was not something tested in this study. He also indicates that students have to keep reviewing constantly and right after the teaching sessions in order to guarantee good retention. However, as reported by 13% of the interviewed teachers, almost all of the students wait until the last minute to cram the vocabulary words before the test, which dramatically influences the learning process of vocabulary words.

By looking at the most used strategies among the passing and failing students, I noticed that all of these students used the same learning strategies to study vocabulary. Whether they passed or failed, these students said that they mostly go through the vocabulary list more than once in order to learn the words, and they would say the meanings of the words repeatedly until they memorize them or learn them. However, only those who used additional memorization strategies that involved linking the words to personal experience, analyzing the word forms, or making up their own sentences using these words, were able to master both skills; retention and comprehension. These were the only few students, 5% of the whole sample, who were able to understand the words they studied. The strategies that these students used were not used by any of the other students, which indicates that, contrary to the other strategies, these were more effective. They granted the students a passing grade but not without an adequate understanding of the words they have studied. This shows that incorporating strategies that involve a little bit more than repetition and rehearsal ensures better comprehension and command of the words being studied. Along with repetition and rehearsal, these 5% of the students used strategies that involved analysis and creating mental linkages along

with employing action to the words, and this is what has made the difference in the results of these students. According to Schmitt (2000) and Oxford (1990), these above mentioned strategies are the most effective memorization strategies that could facilitate the learning process of new vocabulary words. As for the other passing students who constitute about 16.4% of the total sample, and all of the failing students who constitute about 78% of the students, the results of their tests and questionnaires showed that they used the same strategies, but ended up with different results: some failed, some passed. By looking closely at the type of students who passed and failed, one can make a distinction. The students who passed the test were all average to high achievers except for two average to low achievers, who managed to do really well on the first part of the test but not the second. The students who failed, then, are average to low achievers. This means that memorization strategies such as repetition and rehearsal are helpful to the high achievers more than the low achievers, unless the teacher is assessing retention and is not really concerned about comprehension and word usage. It is the high achievers' richer linguistic background and better linguistic skills that would help them learn the words using the above mentioned strategies.

As suggested by Schmitt's (2000) findings, the best way for the information to be transferred from the short-term memory to the long-term memory is to link the new information to pre-existing ones. However, in the questionnaires students indicated that among the least used strategies were ones such as, "I associate the newly learned word with a previously learned word", "I link the word to an Arabic word/ a word in another language with a similar sound", "I link the word to another English word with a similar sound in order to learn it", or "I link the word to another English word with similar spelling in order to learn it". Even the teachers did not use these association techniques

when teaching their students vocabulary words. Around 40% of the teachers said that they would explain vocabulary words by providing definitions, sentences, examples, and doing exercises. None, however, mentioned that they try to use mnemonics or keyword approaches or any other ways that would help students associate new learning with previous ones.

As for the teachers' interviews, many of the findings in this study were also validated by the teachers' responses to their teaching approaches and their students' study habits. The vocabulary test and the student questionnaire revealed that students do memorize words by merely repeating them and going over the list more than once. More than half of the teachers (53%) said that their students do memorize words on their own by repeating the word lists given to them through the book or in class. Also, 33% of the teachers, for example, said that vocabulary exercises do boost their students' grades when the exercises are something like fill in the blanks, matching, or using the words of their choice in their essays, but not when providing synonyms and antonyms. This was also apparent through the vocabulary test as more than 70% of the students failed the test because they had to provide synonyms and use these words in their own sentences. Therefore, students were only able to recognize the words and remember them but could not reproduce their meaning through examples or sentences. According to Schmitt (2000), in order for learners to "know" a word, they have to be able to possess a receptive and productive knowledge of this word. This means that the learners should be able to identify the different forms of a word, and produce it in speech and writing. In order for memorization to be effective, then, it should grant students receptive and productive knowledge of the word. However, this was not the case in this vocabulary

test as many of the students were only able to recognize the word but not produce it, or the opposite, in very rare cases.

What was interesting was that teachers were divided between those who believed that when students memorize they are able to use the words later on (50%), and teachers who said that they can't (46%). This indicates that teachers are also not so sure about the effectiveness of memorization, thus the purpose of this study. In addition, 53% of them said that memorization is not superior to other strategies nor is it the best, whereas the other 50% were either advocates of memorization or undecided about its effectiveness compared to other strategies. This also reveals that it is not quite clear to all teachers whether encouraging memorization is a good thing or not.

In terms of retention, 40% of the teachers said that their students do retain the vocabulary words they have learned but only if these words have been practiced and repeated, orally or written. This is exactly what Schmitt (2000), Russell (1979), and Baddeley (1990) advocated regarding the importance of repetition on the long run. However, 30% of these teachers said that their students are able to retain the words without having to memorize them, and another 30% said that their students are able to retain the words after having memorized them. Unfortunately, only short-term retention is tested in this study, so we can't really know whether after the test or after a longer period of time the participating students would still remember the meanings of these words.

In terms of teaching and assessment, 40% of the teachers said that they explain the vocabulary words in class through giving definitions, examples, and sentences. Ninety-three percent of these teachers said that the way they teach their students the vocabulary words in class influences the way they study them at home. In addition to

that, 66% of the teachers said that they assess their students' knowledge of vocabulary words through fill in the blanks exercises, matching, and circling the correct answer. Also, 60% of them said that the way they assess their students influences the way their students study at home. Therefore, maybe teachers should change their approach to teaching vocabulary and assessing it. Very few teachers, if any, reported to have taught vocabulary using role play, story-telling, skits, drama, mental associations etc... or have assessed them using these ways. Since the majority of these teachers acknowledge the fact that their teaching and assessment approaches can alter the way students study, then maybe they should change their ways, otherwise students are going to stick to repetition and rehearsal of word lists. The question is, however, how much time can teachers afford in the class to do all that, and how much can we control the students' preferences to one strategy over the others? In similar studies conducted by Barimani and Lajooee (2013) and Alabsi (2016) to investigate the effectiveness of role play versus memorization in learning new vocabulary words, role play proved to work better but with upper-intermediate and university students. Ge (2015) used the story-telling approach instead of memorization but with younger students, and found that it yielded better results than memorization. However, Ge (2015) was faced with a problem which was short-term retention and the difficulty of incorporating many vocabulary words in one story. Wang, Thomas, and Ouellette (1992) were also faced with the same problem of short-term retention when they tried substituting memorization with the Keyword Mnemonic strategy. Therefore, very few of those who have experimented with memorization and other vocabulary learning strategies found a definite substitute for memorization. It seems that going beyond memorization strategies is not as easy as it sounds and it has its limitations as well. Wang and Kelly (2013) state that shifting to

other vocabulary learning strategies requires more time and effort on behalf of the teacher, and most often they work only with smaller groups.

To answer the research question “How effective is memorization in helping grade 9 students learn new vocabulary words in ESL context?” the results of the study revealed that memorization alone is not enough to be used as a strategy to learn new vocabulary words in ESL contexts. Memorization, when it involves mainly repetition and rehearsal, can be helpful to retain the words that are to be assessed on the test, but not to fully comprehend the meanings and functions of these words. This means that memorization works on a short-term level, as far as the test reveals. However, whether the students have thoroughly understood the words, this depends on many other factors. It depends on the students’ level, whether high or low achievers, and whether they have good analytical skills to employ this method in their learning, not to mention that the target vocabulary words should be relevant to the students’ cognitive and developmental levels. It also depends on whether the words have been explained well to them in class by the teacher, and whether they have studied them with understanding rather than rote repetition. In addition, the test revealed that when students use repetition and rehearsal in addition to other memorization strategies, they tend to understand and remember the words better. The group of students who employed strategies such as creating links and analyzing word forms in addition to repetition and rehearsal, were the most successful in terms of both retention and comprehension. Therefore, it is important that vocabulary learning starts from the class, with the teacher using different engaging strategies such as explaining the words in context, using examples, mnemonics, creating links to prior experience or learning etc... After that, students should make sure that they have understood the meanings of the words, receptively and productively, and then repeat and

rehearse the words more than once with varying intervals of time in order to ensure maximum retention and understanding (Schmitt, 2000).

Chapter Six

Conclusion

This exploratory study revealed that when memorization is solely dependent on repetition and rehearsal of words out of context, the result would be a lack of deep knowledge in the words' meanings, but a good retention of these words for the purpose of the assessment. However, memorization is inevitable to vocabulary and language learning in general, but if it is to be more effective, it should be supported with other learning strategies. These strategies may involve creating mental linkages and associations to previous knowledge, analyzing the word forms, employing action to the word or any other strategy in addition to repetition and rehearsal. Therefore, maybe teachers should make more effort in teaching students memorization strategies that would help them understand and remember the words better, and then assess them in ways that actually do reveal whether they have understood the meanings of the words or simply regurgitated their definitions. However, the question remains as to how much time are teachers willing to sacrifice from the other skills that are taught in class in order to teach memory skills? With teachers who teach the higher secondary levels, where they have only four teaching session according to the Lebanese curriculum, how much can teachers dedicate to teaching something that, according to them, students can do on their own? These two questions were the concerns of many of the interviewed teachers as most of them look for the most practical and convenient ways to teach the largest number of vocabulary words to their students. This study is the first of its kind to examine the effectiveness of memorization in the Lebanese ESL contexts. Therefore, more studies are required to investigate this phenomenon further and address the gaps in

the Lebanese curriculum that heavily relies on memorization and teaching for the sake of the assessment.

6.1 Limitations

Although the study fulfilled its purpose, it still had a few limitations that are to be taken into consideration for further research. First, the study only tested short-term retention of the vocabulary words through the vocabulary test. However, later long-term retention was not tested because the participating students were in grade 9, which means that they have to sit for their official governmental examinations and would leave school way before the termination of the academic year. Therefore, I was not able to wait for a few months to redo the test and check whether they have still retained the words or not. Plus, at this grade level, we have a very tight schedule and very little time to deviate from the planned curriculum. Another limitation would be the fact that the words were not very frequently repeated in class; the students were left to repeat them through studying them on their own. Again, the reason for this is the time limit that we had. A third limitation would be that there's a chance some students might have not prepared well for the vocabulary test because they were told that it is not graded and it would not affect their performance at school. Some students, therefore, might have not prepared for this test as seriously as they would have for a graded vocabulary quiz.

6.2 Suggestions for further research

Based on the limitations that I have discussed, I would propose one suggestion for future research which is to test long-term retention after a couple of months and maybe more than once throughout the year and check whether memorization is still effective on the long run. Another suggestion, based on the conclusion that I came up

with, would be to teach memorization strategies and skills inside the classroom and test for vocabulary knowledge after students have been trained to use these strategies to learn new words. What can be done also, along with that, is varying the ways of assessment and checking how the results of vocabulary knowledge and retention are affected by that.

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Appendices

Appendix A Vocabulary Test

Part I- Provide synonyms or explain the meaning of the following words:

1. bamboozle:
2. decorum:
3. deign:
4. eclectic
5. Tranquility:
6. Dearth:
7. Recede:
8. Abhor:
9. Abase:
10. Din:
11. Extravagant:
12. Beset:
13. Ardent:
14. Hoary:
15. Profane
16. Ostensible:
17. Travail:
18. Meticulous:
19. Concurrent:
20. Lucid:

Part II- Put each of the following words in meaningful sentences, or provide examples on each word instead:

1. bamboozle:
2. decorum:
3. deign:
4. eclectic
5. Tranquility:
6. Dearth:
7. Recede:
8. Abhor:
9. Abase:
10. Din:
11. Extravagant:
12. Beset:
13. Ardent:
14. Hoary:
15. Profane
16. Ostensible:
17. Travail:
18. Meticulous:
19. Concurrent:
20. Lucid:

Appendix B

Student Questionnaire

Grade Level: _____

Age: _____ years old

Nationality: _____

First Language: _____

Gender: ☐ Male ☐ Female

The purpose of this questionnaire is to find out more about the Vocabulary Learning Strategies and the study skills that you employ when learning new vocabulary words. The following items describe some of the strategies that you use in studying or learning vocabulary words.

Please take the time to complete this questionnaire to the best of your knowledge. For each item choose the number that best describes how much you use the strategy described.

	Not used at all	Rarely used	Used sometimes	Used frequently	Used almost all the time
In order to memorize new vocabulary words:					
1. I link the word to an Arabic word/ a word in another language with a similar sound. <u>Example:</u> فُتور - فُطور breakfast - lethargy	1	2	3	4	5
2. I link the word to an Arabic word/ a word in another language with a similar meaning. <u>Example:</u> Travail (English) - Travail (French)	1	2	3	4	5

3. I link the word to another English word with a similar sound in order to learn it. <u>Example:</u> Flower- Flour	1	2	3	4	5
4. I link the word to another English word with similar spelling in order to learn it.	1	2	3	4	5
5. I translate the word to Arabic/ my native language to learn it better.	1	2	3	4	5
6. I try to use newly learned words in conversation with my friends and teachers.	1	2	3	4	5
7. I try to use newly learned words in imaginary situations in my mind to help myself learn/ understand the word.	1	2	3	4	5
8. I associate the newly learned word with a previously learned word.	1	2	3	4	5
9. I visualize the word in terms of images to learn it better.	1	2	3	4	5
10. I make up my own sentences using the newly learned word.	1	2	3	4	5
11. I link the word to my experience.	1	2	3	4	5
While studying new vocabulary words:					
12. I analyze vocabulary words in terms of prefixes, roots, and suffixes in order to learn them.	1	2	3	4	5
13. I say the word with its meaning repeatedly in order to learn it.	1	2	3	4	5
14. I go through the vocabulary word list more than once.	1	2	3	4	5

15. I write the newly learned words with their meaning on a paper to learn them better.	1	2	3	4	5
16. I make a vocabulary list with meanings and examples in a notebook of my own.	1	2	3	4	5
17. I use word cards to learn new words	1	2	3	4	5
I remember words by:					
18. doing English exercises at home.	1	2	3	4	5
19. grouping words according to the synonyms and antonyms.	1	2	3	4	5
20. similarity of punctuation and spelling	1	2	3	4	5
21. doing dictations	1	2	3	4	5
22. watching an English-speaking film with subtitles	1	2	3	4	5
23. listening to English songs	1	2	3	4	5
24. remembering the sentence in which the word is used	1	2	3	4	5
25. trying to use the newly learned words as much as possible in speech and writing	1	2	3	4	5
Other ways:					

Please mention any other strategies or ways that you use in order to learn new vocabulary words:

Appendix C

Teacher Interviews

Questions to be asked:

1. How do your students learn vocabulary words?
2. What do you expect your students to do after they have learnt the vocabulary words?
3. How do you assess your students' knowledge of vocabulary words?
4. Do vocabulary exercises on a test usually boost your students' grade or lower them? Do your students do well in vocabulary exercises?
5. How do you feel about asking your students to learn vocabulary words through memorization?
6. Do you think when students memorize words they are able to use them later on?
7. Do you believe that memorization strategies work better than any other strategy when learning vocabulary?
8. How do you teach vocabulary in the class? Does that influence the way students study the words on their own?
9. How would you define memorization?
10. How can students retain/ remember vocabulary words if not through memorization?
11. Would you like to add anything regarding vocabulary and memorization?