

# Vocabulary-centered Strategy: Its Effect on Reading Comprehension and Teachers' Opinions Concerning Its Utility

Mamoon M. Alaraj

Academic Language Support Unit, Faculty of Engineering, King Abdul-Aziz University, Jeddah, KSA

**Abstract**—This study was divided into two parts: quantitative and qualitative. The quantitative part aimed at investigating the effect of Vocabulary Centered Strategy (VCS), which was developed by the researcher himself, on the reading comprehension of the Saudi intermediate students. The qualitative part attempted to discover how teachers felt and thought this strategy affected their students' vocabulary acquisition. The sample of the study consisted of four ten male students' sections. The first two sections were assigned for the experimental group and were taught the vocabulary following VCS. The second two sections were assigned for the control group and were taught the same vocabulary following the Saudi teacher's book instructions. The experiment under investigation continued for 12 weeks. Ten male volunteer teachers were asked to adopt VCS in their classes and then were interviewed. Data for this study was obtained from two sources: pretest-posttest and interviews. The results of the t-test showed a significant difference between the mean scores of the two groups on students' reading comprehension in favor of the experimental group. The results of the interview showed that teachers liked VCS. These results were summarized into a set of three main categories: (1) motivation, (2) memorization and (3) self-confidence and autonomy. A comparison between the results of the two parts of the study was made in order to strengthen the results of this study.

**Index Terms**—vocabulary acquisition, teaching strategies, opinions, reading comprehension, TEFL, intermediate students

## I. INTRODUCTION

### A. Importance of Vocabulary

Vocabulary is mostly considered to be the main factor for language learning success, essential and central to language acquisition and the most important component for second/foreign language learners (Csomay & Petrovic, 2012; Fazeli, 2012; Gass & Selinker, 1994; Mehta, 2009; O'Loughlin, 2012). Vocabulary competence is considered the most momentous factor of language proficiency, (Putri, 2010) however; it is also recognized by most students to be one of the major difficulties of language acquisition (Dalton & Grisham, 2011).

Lewis (1993 & 1997) introduced the Lexical Approach, which put acquisition of new words on the front position of language learning in two books, *The Lexical Approach* and *Implementing the Lexical Approach*. Lewis (2000) states that vocabulary acquisition plays a major role in language acquisition. Harmon, Wood and Hedrick (2005) emphasize that middle stage teachers understand that vocabulary acquisition is the most important for general language improvement and is, therefore, a significant feature of curriculum in all fields of study at the middle school stage.

The review and recycling of new vocabulary are considered acute to help learners store new words in their long-term memories and make them willingly accessible to support students' language learning (Flanigan, Templeton, & Hayes, 2012; Johnson & Heffernan, 2006; Koprowski, 2006). Folse (2004) emphasizes the significance of several exposures to new vocabulary, so that new words will be stored in the long-term memory. And as a result learners will be able to remember and use these new words easily.

Vocabulary awareness is a major key to reading comprehension because readers cannot comprehend a text without knowing what most of the words mean (Chanier & Selva, 1998; National Reading Panel, 2000). For students in the intermediate grades, the need for vocabulary goes faster as they meet more challenging reading texts in print and on the Internet (Dalton & Grisham, 2011). Vocabulary knowledge, which is a key to reading comprehension, must be a focus for every teacher in today's increasingly diverse schools, including those in the mainstream classroom (Wessels, 2011).

The extensive research on vocabulary learning and teaching provides us with important guidelines that contribute to the field of language acquisition in general and reading comprehension in particular. Such guidelines: considering vocabulary as the most significant factor to language acquisition, identifying vocabulary to be one of the biggest challenges of language learning, demonstrating that recycling of new words can help learners store these words in their long-term memories and considering vocabulary knowledge as a key to reading comprehension helped the researcher develop a new strategy for teaching/learning vocabulary in this study. This strategy is a three-phase one: pre-class, in-class and post-class. It is called "Vocabulary-Centered Strategy (VCS)". VCS, in this case, is used to mean the sensible, measurable and intentional sets of actions, steps or activities done by learners in order to learn, store, recall and retrieve

the second/foreign language vocabulary. It considers vocabulary recycling as the central key strand to second/foreign language vocabulary acquisition. This attempt tries to help students and teachers overcome new vocabulary acquisition difficulties and consequently enhance students' reading comprehension abilities.

In an attempt to examine the practical application of this vocabulary learning/teaching strategy, the researcher investigates its effect on EFL students' reading comprehension as one of the most important academic language skills to students in the intermediate grades (middle school level students) and tries to discover how teachers feel and think this strategy affects their students' vocabulary acquisition. This new strategy is compared to the teacher's book instructions which are criticized by some Saudi school teachers, supervisors and educators in the field.

### *B. Importance and Aim of the Study*

The introduction above and the literature review below shows that studying vocabulary-learning strategies seems to be a neglected area in Saudi Arabia. There is little research evidence demonstrating the effect of vocabulary-learning strategies on EFL acquisition in general and on reading comprehension in particular. A more in depth study to help us explore the effect of vocabulary learning/teaching strategies on reading comprehension and discover how teachers feel and think a new strategy affects their students' vocabulary acquisition would be needed in this context. Thus, the present study might be one of the first empirical and qualitative studies in this field in Saudi Arabia according to the knowledge of the researcher.

Researchers and educationalists these days concur that learners do the majority of their vocabulary forgetting shortly after the lesson. Some suggest that students should be exposed to new words 5 to 16 times so that they can master these new words (Koprowski, 2006). So it is the teacher's responsibility to create such a learning atmosphere to help his/her students keep new vocabulary in their long-term memory. Both recurrence and recovery exercises of new vocabulary are keys to enhance vocabulary acquisition. To offer a solution to vocabulary loss and create an opportunity to store new words in students' long-term memory, this study suggests a new strategy.

Since lexical learning has always been one of the main language learning problems that learners pointed out (Chen, 2004), this study introduces this strategy to facilitate students' second/foreign language vocabulary learning and to help them master using a new strategy of vocabulary acquisition. This attempt tries to help Saudi students and teachers overcome new vocabulary acquisition difficulties and consequently enhance students' reading comprehension abilities.

The main aim of this study is to investigate and come to an insightful understanding of how this strategy affects students' reading comprehension. The world wide literature associated with the topic of vocabulary learning shows the important influence of the subject in second/foreign language acquisition in general and reading comprehension in particular. However, the research field of vocabulary learning strategies has had little about innovative ideas of introducing new vocabulary to students. This is the motivation behind suggesting this vocabulary learning/teaching strategy.

### *C. Research Questions*

To achieve the aims of the study, the following two questions were addressed.

1. Is there any statistically significant difference between the mean scores of the experimental group who study vocabulary using VCS and the mean scores of the control group who study the same collection of vocabulary following the Saudi teacher's book instructions on reading comprehension at ( $\alpha=0.05$ )?
2. What are teachers' opinions concerning the utility of VCS?

## II. REVIEW OF RELATED LITERATURE

### *Vocabulary and Reading Comprehension*

The following is a short review of related literature that focuses on and explains the relationship between vocabulary teaching/learning and reading comprehension.

The connection between EFL vocabulary and reading comprehension has been discussed since 1950s. The previous researches indicates that more studies should be done in this part of foreign language acquisition. One areas of interest that should be taken into account is the vocabulary acquisition strategies that can help students develop their reading comprehension. Several specialists agree that vocabulary acquisition is really a particular case of reading comprehension (Blachowicz & Ogle, 2001; Cunningham & Stanovich, 1998; Nagy & Anderson, 1984). Moreover, implementing an organized strategy to teaching/learning vocabulary is considered a very important aspect in reading comprehension (Beck, McKeown, & Kucan, 2002; Davis, 1968). As Tozcu and Coady (2004) point out, learning vocabulary is an essential feature of second/foreign language acquisition and educational attainment and is fundamental to reading comprehension and language proficiency.

Several researchers have argued that vocabulary plays a major part in reading proficiency. Thus, Constantinescu (2007) concludes that there is a reciprocal, well-documented relationship between vocabulary acquisition and reading comprehension. He also points out that reading and vocabulary are interrelated. The better the students' vocabulary knowledge is, the better they perform with reading comprehension tasks and vice versa. The link between vocabulary acquisition and improvement in reading comprehension has been revealed in many studies, such as Bossers (1992) and

Grabe and Stoller (1997). The more vocabulary familiarity with the text is, the more learners' ability to grasp the reading task is.

On the other hand, researchers have stated that vocabulary deficiencies are a primary cause of academic failure (Becker, 1977; Stanovich, 1986). Vocabulary researchers recognize that word learning does not occur easily or quickly (White, Graves & Slater, 1990). Developing sophisticated words needs early, constant and strong vocabulary teaching (Beck & McKeown, 2007). These researchers admit that straight and clear instruction of a number of vocabulary words can help students prevail over comprehension failure. Stahl and Fairbanks (1986) suggest that acquiring 350 words each year may help students improve their learning by as much as 10 to 30%. Examining the acquisition of second/foreign language learners, confronted with unfamiliar words, researchers have noted the central responsibility of vocabulary as a main factor of reading capability (Grabe, 1991; Nation, 1990). In fact, second/foreign language readers often cite "lack of adequate vocabulary is one of the obstacles to text comprehension" (Levine & Reves, 1998, p. 302). As many experts of foreign language acquisition confirm, when their students are faced with an unknown passage, the first challenge appears to be its vocabulary (Grabe & Stoller, 1997). Koren (1999) confirms that when the text has many new words, students quickly despair and are discouraged to continue reading.

Many variables play significant roles in second/foreign language reading comprehension. Among the most important is vocabulary knowledge (Egbert, 2005). None is more imperative than the involvement of vocabulary awareness to reading comprehension to provide students with strategies to build vocabulary. One of the prominent areas of reading comprehension research is relationship between vocabulary knowledge and reading comprehension (Anderson & Freebody, 1981; Baumann, Kame'enui, & Ash, 2003; Becker, 1977). The National Reading Panel (2000) concludes that comprehension progress cannot be understood without a significant assessment of the role played by vocabulary understanding that equips students with the skills and strategies necessary for lifelong vocabulary development.

Learning activities are needed to support vocabulary progress in order to advocate reading comprehension. Vocabulary involvement needs to start in the beginning and go on repeatedly (Beck & McKeown, 2007; Biemiller, 2003; Foorman, Seals, Anthony & Pollard-Durodola, 2003). Depending on academic and experimental study, there are three elements of vocabulary learning that are needed to improve vocabulary development and develop reading comprehension: (1) both meaning and language information, (2) at least two exposures to new words, and (3) involvement of students in deep understanding of word use (Baumann, Kame'enui & Ash, 2003; Beck, McKeown & Kucan, 2002; Blachowicz & Fisher, 2000; Mezynski, 1983; Nagy & Scott, 2000; Rupley & Nichols, 2005; Stahl & Fairbanks, 1986). "Elements of Reading: Vocabulary" (Beck & McKeown, 2004) is a learning participation that can integrate these three elements and introduce them to teachers to improve reading comprehension. The research addresses this need by examining the effects of a full, one- and two-year performance of "Elements of Reading: Vocabulary" on both vocabulary and reading comprehension. The aim of the suggested presentation is to report evaluations of the proximate effects of "Elements of Reading: Vocabulary" on vocabulary and reading comprehension as estimated at the end of the first year of the two-year intervention. Finally, the intervention looked successful enough to support major differences in attainment in both the comprehension of the target words and the understanding using the target words at both primary and intermediate grade stages. Results verify recommendations for vocabulary learning that offers various contexts and connects learners' understanding of meaning to attain the goals of increased vocabulary awareness and understanding. The results reveal that such recommendations are appropriate to primary and intermediate grades learners.

The above review of related literature shows a positive relationship between vocabulary teaching/learning and reading comprehension. Based on the review of related literature concerning vocabulary learning/teaching, the researcher designed a teaching/learning strategy to teach vocabulary to the Saudi intermediate students to be adopted in this study. Suggesting a new strategy that may actively involve students in learning new vocabulary is a new and practical research idea to be examined regarding reading comprehension.

### III. METHODOLOGY

#### A. *Third Intermediate Saudi Teacher's Book Introduction of New Vocabulary*

Almost very little is explained about how to teach vocabulary in the teacher's book of this grade. These explanations and instructions are not introduced under one title. They are scattered here and there throughout the teacher's book introductions. The researcher believes that this way of introducing this key factor (vocabulary) does not help teachers adopt an obvious and clear strategy to follow. He also notices that the number of times students are exposed to the target vocabulary is not enough to help students add the new words to their long-term memories.

The vocabulary in the teacher's book is introduced as one of six interlinked strands: the four basic skills, functions, grammar, vocabulary, phonics and revision. Revision strand is used as the central key strand to teach the course as stated in the teacher's book. The target lexicon, structures and functions are reviewed and recycled throughout the book in different contexts (Ministry of Education, KSA, 2006).

The topic of the unit is introduced using the target vocabulary and structure. Students are encouraged to guess the meaning of new vocabulary from the context. At the end of the unit, unit vocabulary listed at the back of the student's book is reviewed by giving dictation on target vocabulary. Words are introduced by pointing at them one by one or using pictures in the book, real objects or previously prepared flashcards. The teacher is asked to read the words and

have students repeat chorally. In the phonics part, students are asked to listen and repeat chorally after each word (Ministry of Education, KSA, 2006). Teachers are not directed to make sure that students can individually say and spell the words correctly. Throughout the teacher's book, some suggestions to introduce some words are explained for teachers to follow.

### *B. The Strategy Suggested for Introducing New Vocabulary in the Study*

Since vocabulary can be a key factor for success, essential and central to a language and the most important component for learners (Fazeli, 2012; O'Loughlin, 2012), the key strategy to successful language learning is constant recycling of new vocabulary (as proved in the introduction and review of related literature of this study). VCS is used as the central key strand in this study. The other five strands are introduced to both the experimental group and the control group as stated in the teacher's book. The researcher added something new to vocabulary learning/teaching. He suggested a new strategy that may actively involve students in learning new vocabulary by introducing vocabulary in three phases: pre-class, in-class and post-class. The newest elements in this strategy are the pre-class phase, the post-class phase and the number of times students are exposed to the target vocabulary.

The new vocabulary items are introduced to students in the experimental group according to the following **objective**: At the end of each lesson and unit, the teacher should make sure that students are able to correctly pronounce, spell and use the new vocabulary meaningfully. To achieve this objective, the researcher directed the teacher who teaches the experimental group to adopt the steps of VCS. These specific steps are grouped and divided into three phases: pre-class, in-class and post-class.

The **rationale** behind VCS is that in non-native communities where English is used as a second or foreign language, students should be intentionally exposed to language as much as possible in order to give them ample chances to acquire and use that language. Moreover, it is supposed that this strategy can help students improve their abilities to explore, store and use the new vocabulary items.

\*In **pre-class** phase students should

- 1- scan each lesson at home and highlight the new words they want to learn.
- 2- practice the spelling of these words in their vocabulary notebook by writing each word three times.
- 3- listen to the British pronunciation of these words on the internet. (Their textbook is based on British English.)

It is supposed that implementing the above steps can help students in the experimental group have an idea about these words and as a result can make their minds ready and eager to learn them. It is also assumed that this kind of preparation can assist them not to lose concentration while their teacher is introducing these words in class (the second phase).

\*In **in-class** phase (The new words should be written on the board.) students should

- 1- guess the meaning of the new words from the context.
- 2- use the pictures in the book, real objects or flashcards to recognize the meaning of these words.
- 3- chorally repeat these words three times after their teacher.
- 4- chorally read out these words three times.
- 5- read out these words individually.
- 6- write down these words and their meanings in their vocabulary notebooks.

It is supposed that the above activities can help students try their best to participate in the class discussion and ask about the meanings they do not understand. It is also assumed that their participation helps them emphasize their understanding and be ready to proceed to the next step (post-class phase).

\*In **post-class** phase students should

- 1- take three minutes to get ready for a dictation and meaning use quiz.
- 2- take the quiz. (See the assessment part below.)
- 3- deliberately use some of the new vocabulary in real life situations, i.e. at home, with friends, in the supermarket, etc.

For **Assessment**, a quiz was done after each lesson. Students were dictated five words and were asked to use two of them in meaningful sentences. Students' answers were corrected by the teacher and he listened to some of their sentences in the beginning of the next period. The teacher gave corrections where necessary. A similar but longer quiz of 15 words and five sentences was given after each unit.

### *C. Participants of the Study*

The sample of the study was randomly chosen from the third graders in the intermediate schools in Al-Naseem District in Jeddah, Saudi Arabia. Those students had a strong desire to improve their English language and registered to study a free tutorial course. Those students are between fourteen and fifteen years old. The sample consisted of four sections. Each section consisted of 10 male students, a total of 40 students. The four sections were taught the third year intermediate Saudi textbook which consisted of 12 units by two teachers. The first two sections were assigned for the experimental group and were taught the vocabulary in this book following the VCS as explained below. The second two sections were assigned for the control group and were taught the same vocabulary following the Saudi teacher's book instructions as explained below. One of the two teachers was randomly assigned for the experimental group and the

other for the control group. The experiment under investigation continued for 12 weeks. During these 12 weeks, 500 words were taught to each group, approximately 40 words a week, 8 words a day.

The researcher randomly asked 10 male volunteer teachers in the same district to adopt the new strategy in the second semester of the scholastic year 2013/2014. At the end of the semester, those 10 teachers were interviewed to try to understand how they feel and think this strategy affected their opinions concerning its utility to teach vocabulary and develop their students' reading comprehension.

#### *D. Research Design and Data Collection*

In an attempt to achieve broader and often better results, the researcher used a multi method approach. Data for this study was obtained from two sources: pretest-posttest and interviews. The subjects of the first source were the students, whereas the informants of the second one were teachers. Investigating and comparing both students and teachers results can strengthen the results of this study.

#### *E. The Pretest-posttest Design, Validity and Reliability*

The variables of the study were the following: the independent variable was the VCS and the dependent variable was the students' reading comprehension measured by the reading comprehension test designed by the researcher.

To answer the first question of the study, the quasi-experimental design was used. This design had two groups: the experimental group and the control group with a pretest and a posttest. It is worth mentioning that the pretest and the posttest for the two groups were the same and it included 50 multiple-choice items with a total grade of 50.

To establish the validity of the test, the researcher used the method of content validity. He prepared a table of specifications and the test items and gave them to a jury of 7 specialists who were asked to write down their recommendations and comments concerning the feasibility of the reading comprehension components, the reading comprehension objectives, the types of reading comprehension questions, the number of items and the weight each objective had. After taking into account their recommendations and comments, a section of 25 intermediate students were given the test. After correcting their papers and using an item analysis, the researcher deleted the most difficult and the easiest items which were probably above or under the students' level.

To establish the reliability of the test, another section of 25 intermediate students were given the test. After 2 weeks they were given the same test again. After correcting their papers, the reliability of the test was established by finding its internal consistency using Kuder Richardson 20 formula. The overall reliability of the test was (0.91).

After establishing the validity and reliability of the test, it was used as pretest at the beginning of the experiment to control the differences between the two groups.

#### *F. The Interviews*

The interview is one of the most common and most powerful techniques researchers use to try to understand the opinions of human beings. The interview questions must be asked person-to-person to be answered completely (Fontana & Frey, 1994). The interview is a special case in interpersonal communication. It can provide a great deal of freedom of inquiry (Al-Karasneh, 2004). There are many types of interviews; they can take the form of structured, semi-structured or unstructured (Fontana & Frey, 1994).

To answer the second question of the study, a semi-structured interview was developed to try to understand how teachers feel and think VCS affects their students' vocabulary acquisition. The 10 male teachers who were asked to adopt this strategy were interviewed. Two interviewers were appointed for this task. The first interviewer tried to investigate why teachers liked VCS. The other interviewer tried to investigate why teachers disliked VCS. The interview included these questions:

- What makes VCS liked? Why?
- What makes VCS disliked? Why?

#### *G. Data Analysis*

The pretest-posttest data were analyzed using a t-test. The researcher used the means, percentages, standard deviations and coefficient correlations to analyze the results of the pretest-posttest, which could be quantified. To analyze the interview data, the researcher started with the identification of the themes emerging from the raw data -open coding (Corbin & Strauss, 2008). As in many other studies, the analysis in this study followed a system of coding and identifying categories based upon patterns and ideas that emerged from the data and collected in the field (Patton, 1990; Miles & Huberman, 1994).

## IV. RESULTS

### *A. Results of the Pretest-posttest*

Table 1 represents the results of the two groups on the pretest.

TABLE I:  
T-TEST RESULTS OF THE TWO GROUPS ON THE PRETEST

Group	N	Means	Standard Deviations	T	df	Sig.(2-tailed)
Experimental	20	25.60	3.733	-1.612	38	.115
Control	20	27.50	3.720			

As it can be easily seen, no statistically significant difference between the two groups in their reading comprehension proficiency on the pretest was found. Therefore, it could be concluded that the two groups were equivalent.

To answer the first question of the study, the results of t-test for the experimental group who were exposed to VCS and the control group who were taught the same vocabulary following the third intermediate Saudi teacher's book instructions are presented in Table 2 below.

TABLE II:  
T-TEST RESULTS OF THE TWO GROUPS ON THE POSTTEST

Group	N	Means	Standard Deviations	T	df	Sig.(2-tailed)
Experimental	20	33.60	4.160	3.389	38	.002
Control	20	29.40	3.662			

It is evident that the experimental group performed much better than the control group as reflected in their mean scores above. Whereas the analysis of the results of the two groups on the pretest revealed that they were equivalent, the results of the posttest showed a significant difference at  $\alpha=0.05$  between the mean scores of the two groups on students' reading comprehension in favor of the experimental group.

Table 1 and table 2 above also show the amount of growth each group attained. The experimental group obtained a progress of (8) marks in their mean scores on the posttest compared with their mean scores on the pretest. However, the control group got an increase of (1.90) marks only. On the one hand, it is evident that the experimental group performed better on the posttest than on the pretest as reflected in the mean scores above. On the other hand, the control group performed much less than the experimental group as revealed in their mean scores above.

#### B. Results of the Interview

Regarding the number of teachers who liked and disliked VCS, of the 10 teachers interviewed, 8 teachers liked it. The rest of the teachers (two teachers) liked it, for specific reasons, and disliked it, for another reasons.

Concerning why teachers liked it, the results of the interviews were summarized into a set of main categories (reasons). The three main categories were: (1) motivation, (2) memorization and (3) self-confidence and autonomy. Of these categories, the first one was considered completely different by two teachers, namely lack of motivation. This category could be subcategorized into positive and negative opinions. The other two categories were considered positive.

The first main category referred to **motivation**. This category could be subcategorized into positive and negative opinions.

**Development of positive opinions:** Of the 10 teachers interviewed, 8 teachers stated that they and their students were highly motivated. The reason behind their motivation, as most of them said, was the practicability of VCS. They liked this new way of teaching vocabulary because it motivated their students to learn more and more words and consequently improve their English language. One teacher said,

*"I felt motivated because my students felt so. Most of them used to thank me for concentrating on the new vocabulary and told me that this was the first time they built a solid base for acquiring English language. It was obvious that the students in this class participated much better than their counterparts in the other classes I taught."*

Another teacher made this comment,

*"I liked this new way of teaching vocabulary because most of my students liked it. I noticed that my students were eager to learn the words they prepared at home. I felt happy when I saw my students got higher grades in the spelling quizzes and used new words in meaningful sentences."*

A third teacher said,

*"I wish I would have taught vocabulary following this way since I started teaching English. It is a practical way of teaching/learning vocabulary. Now I felt highly motivated to teach more and more words because some of my students told me that this was the first time they succeeded to use English outside the classroom."*

**Development of negative opinions:** For specific reasons, 2 teachers thought that VCS lacks motivation. They felt discouraged and frustrated because they spend a lot of time on teaching one language aspect (vocabulary). Another reason was individualism. Good students already know the highlighted words and weak students complain about not including the words they highlighted in the list the teacher taught. One more reason stated was that the time was not enough to study the flow of words weak students needed. One said,

*"Spending a lot of time on teaching vocabulary can be demotivating. Why vocabulary most of the time? We have other language features to concentrate on. I sometimes felt bored. Some of my students also felt so especially those who are excellent because they already know most of the target words."*

The other one said,

*"I don't like this way of teaching vocabulary because it doesn't take into account the individual differences between students. I think we need to double the time in order to teach all the words weak students used to highlight. And those students feel frustrated because I don't have enough time to accept all their participations."*

The second main category revealed by the interviews was **memorization**. Ten out of 10 teachers agreed that VCS helped their students memorized the new words they learned. They felt happy with this way of teaching because it gave their students ample and practical chances to deal with the new words, and as a result to memorize them easily. Most of them considered that the three phases of VCS gave enough chances to students to practice the new words and absorb their meanings. They believed that VCS helped students involved in the learning process and gave them an excellent chance to memorize the new words. One teacher said,

*"I think the number of times students are exposed to the new words can help them remember their meanings. They prepare these words at home, study them in class and try to use them outside classroom. I noticed the difference between the students who follow VCS and the other students. Of course, VCS has a clear effect on helping students memorize new words and their meanings."*

Another teacher commented,

*"Through this strategy students are exposed to new words about ten times: at home, in class and outside class. They practice saying these words, spelling them and also using them meaningfully. This of course can help students memorize these words."*

A third one added,

*"Our students actually need this kind of focus on learning new words simply because they easily forget meanings. I like VCS because it actively involved my students in learning the new vocabulary and consequently help them keep these words and their meanings in mind for a longer time"*.

The final main category is **self-confidence and autonomy**. The 10 teachers made positive comments about this category. They said they were certain of their students' abilities of learning new words because VCS positively affected their students' self-confidence. They trusted this way of teaching and they expressed their thanks for it because it helped their students improved their English. They liked it because it helped them introduced the new vocabulary in an organized way. One teacher said,

*"VCS is great. It helps my students depend upon themselves. They actually took part in the learning process. Some of them created a personal dictionary to record all new words. Some others liked the idea of using the new words outside the classroom. One of them told me he was full of confidence because he started talking to his father in English."*

Another teacher added,

*"This way of teaching vocabulary advocates self-confidence and independence because it requires students to participate in the learning process. It asks them to prepare at home, participate in class and follow their vocabulary progress later on. This of course can build a kind of autonomy which I clearly noticed."*

A third one commented,

*"One difficulty of teaching new words teachers face is pronunciation. Another one is spelling. VCS gives more concentration to these aspects and overcomes those difficulties. Being able to spell and pronounce the new words correctly, my students did not hesitate to use these words and they felt confident."*

## V. DISCUSSION AND CONCLUSION

Whereas the analysis of the results of the two groups on the pretest revealed that they were equivalent, the results of the posttest showed a significant difference at  $\alpha=0.05$  level between the mean scores of the two groups on students' reading comprehension ability in favor of the experimental group. Thus, it could be concluded that the students who studied vocabulary according to VCS outperformed the students who studied vocabulary according to the teacher's book instructions. The better results the students in the experimental group achieved could be related to considering vocabulary as the key factor for language acquisition (Fazeli, 2012; Gass & Selinker, 1994; Mehta, 2009; O'Loughlin, 2012) as used in VCS and to the constant recycling of vocabulary and the multiple exposures to new words (Flanigan, Templeton, & Hayes, 2012; Folse, 2004; Johnson & Heffernan, 2006; Koprowski, 2006) VCS depends upon. It could be also related to dealing with vocabulary as the major key to reading comprehension (Chanier & Selva, 1998; Wessels, 2011).

The clear objective of VCS which concentrates on the three dimensions of vocabulary acquisition (pronunciation, spelling and use) possibly played a positive role in the improvement the students achieved. And the three dimensions of the intentional exposure to new vocabulary (to explore, store and use the new vocabulary items) the rationale focuses on maybe played another positive role in the better achievement the students got. And the regular and immediate assessment done after each lesson and unit that focuses on spelling and meaningfully using new words might had a positive role in that improvement. One more factor that could positively affect the results of the students in the experimental group is the new elements of VCS (the pre-class phase, the post-class phase and the number of times students are exposed to the target vocabulary) that might actively involve students in learning the new vocabulary and assist them not to lose concentration while their teacher is introducing these words in class.

The interview showed that for most teachers this is the first time they had been experienced teaching vocabulary using such an effective strategy and asked how they think and feel about vocabulary acquisition. Some teachers

commented that this interview had made them think about what VCS meant to them; others expressed appreciation that their opinions had actually been considered. Information has been collected with regard to what makes teachers like or dislike VCS and the factors which most influence this way of learning.

The above results clearly indicate that this strategy contributed to the students' improvement in the reading comprehension abilities. This improvement according to the teachers' opinions was likely due to students' motivation (Laufer & Hulstijn, 2001; Williams, 1994), memorization (Kansas University, 2014) and self-confidence and autonomy (Wenden, 1998; Murray, 2011).

The findings of the interview help to interpret and explain the above results. The interview revealed that all teachers liked VCS and some of them (2 teachers) disliked it because of specific issues related to one reason -motivation. The negative opinions developed by these issues were not directly related to the strategy, but to other issues like individualism and time available. Namely, no teachers said they did not like VCS itself. However, to avoid some of the defects in EFL learning/teaching, teachers should concentrate on learning outcomes first not on time availability. They should make use of every minute to achieve their learning objectives. And they should always remember the importance of vocabulary learning which represents the cornerstone of language acquisition. Moreover, they shouldn't teach vocabulary separately, but should know how to introduce this language aspect in a communicative way to enhance the main language skills. Concerning individualism, teachers should have the ability to engage all students in the learning process taking into account the individual differences between them.

The interview revealed three reasons that explained why the teachers liked VCS and as a result why students in the experimental group achieved better results in their reading comprehension than the control group. These three important factors were: (1) motivation, (2) memorization, and (3) self-confidence and autonomy.

Motivation is the driving power by which students achieve their goals. It could be considered the key factor that positively influenced the students' acquisition of new vocabulary and as a result enhanced and improved their reading comprehension proficiency. It seems that motivation positively affected the other two factors: students' memorization and self-confidence and autonomy (Thanasoulas, 2000). Motivation can help students memorize new studied materials and raise their self-confidence and autonomy (Hutchinson & Waters, 1987; Lowman, 1990). This was clearly reflected by teachers' responses to the interview questions of this study. It is logical to assume that motivation facilitates vocabulary learning. Many studies provided both direct and indirect evidence of the motivation/vocabulary link. Teaching materials that raise learners' motivation lead to better word learning (e.g. Laufer & Hulstijn, 2001; Laufer & Roitblat, 2011).

The relationship between memorization and vocabulary recycling is very obvious. Students can easily memorize new vocabulary because they are exposed to those target words many times. It is simply because the best way to store new words in long term memory is by constant recycling (Fazeli, 2012; O'Loughlin, 2012; Gass and Selinker, 1994). In the present study, the students were actively involved in learning new vocabulary by introducing vocabulary in three phases: pre-class, in-class and post-class. The improvement in students' ability to memorize, understand and use new words was likely due to that active and long learning process they had. Constantinescu (2007) concluded that vocabulary is an essential factor for reading proficiency and extensive reading leads to rich vocabulary mastery. This mutual relationship between vocabulary and reading comprehension can provide a good chance of vocabulary recycling and as a result a good chance for vocabulary memorization.

Self-confidence and autonomy are two interrelated pillars of the learning/teaching process. They could be considered an essential cornerstone of language learning in general and vocabulary acquisition in particular (Thanasoulas, 2000; Wenden, 1998). The humanistic sight of learning recommends that pupils must take part in the teaching/learning process, right from the beginning to the end so that they can depend upon themselves and feel confident (Ali, 2000). The present study has strong evidence proving a positive relationship between self-confidence and autonomy and learning language and vocabulary acquisition. As shown in the teachers' responses to the interview, VCS reflected an important positive change in students' self-confidence and autonomy. The more students develop self-confidence and autonomy, the more they will be able to acquire new vocabulary and improve their reading comprehension (Benson, 2001; Rashtchi & Pourmand, 2014).

The above three factors -motivation, memorization and self-confidence and autonomy- are interrelated. They have mutual positive relationship as shown in the above discussion. For example, motivation, which could be considered the main factor, advocates and supports the other two factors -memorization, and self-confidence and autonomy (Thanasoulas, 2000). Another example is memorization which positively influences self-confidence and autonomy (Hussin, Maarof & D'Cruz 2001). In conclusion, these three reasons contributed directly and indirectly to the improvement and enhancement of students' ability to absorb the new vocabulary they learned, and as a result, to positively affect the students' reading comprehension ability.

#### ACKNOWLEDGEMENT

I would like to express my deepest gratitude to the students and teachers who actively participated in implementing the instructional program and interviews of this study.



## REFERENCES

- [1] Ali, S. Y. (2000). Learner-centered vocabulary building practice. *The Internet TESL Journal* 6.12. Retrieved December 30, 2000, from <http://iteslj.org/Techniques/Ali-Vocabulary.html>.
- [2] Al-Karasneh, S. (2004). Jordanian pupils' attitudes towards social studies learning. *Abhath Al-Yarmouk* 20.3, 145-161.
- [3] Anderson, R. C. & P. Freebody. (1981). Vocabulary knowledge. In J. Guthrie (ed.), *Comprehension and teaching: Research reviews*. Newark, DE: International Reading Association, 77-117
- [4] Baumann, J. F., E. J. Kame'enui & G. Ash. (2003). Research on vocabulary instruction: Voltaire. In J. Flood, D. Lapp, J. R. Squire & J. Jensen (eds.), *Handbook of research on teaching the English language arts*. Mahway, NJ: Lawrence Erlbaum, 752-785
- [5] Beck, I. L., M. G. McKeown & L. Kucan. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford.
- [6] Beck, I. L. & M. G. McKeown. (2004). *Elements of reading vocabulary*. Austin, TX: Steck-Vaughn.
- [7] Beck, I. L. & M. G. McKeown. (2007). Increasing young low-income children's oral vocabulary repertoires through rich and focused instruction. *The Elementary School Journal* 107.3, 251-271.
- [8] Becker, W. C. (1977). Teaching reading and language to the disadvantaged: What we have learned from research. *Harvard Educational Review* 47.4, 518-543.
- [9] Benson, P. (2001). *Teaching and researching autonomy in language learning*. London, England: Longman.
- [10] Blachowicz, C. L. & P. Fisher. (2000). Vocabulary instruction. In R. Barr, P. Mosenthal, P. S. Pearson & M. Kamil (eds.), *Handbook of Reading Research* (vol. 3). White Plains: Longman, 503-523.
- [11] Blachowicz, C. & D. Ogle. (2001). *Reading comprehension: Strategies for independent learners*. New York: Guilford.
- [12] Bossers, B. (1992). *Reading in two languages: A study of reading comprehension in Dutch as a second language and Turkish as a first language*. Rotterdam: Van Driel.
- [13] Chanier, T. & T. Selva. (1998). The ALEXIA system: The use of visual representations to enhance vocabulary learning. *Computer Assisted Language Learning* 11.5, 489-521.
- [14] Chen, Y. H. (2004). The use of corpora in the vocabulary classroom. *The Internet TESL Journal* 5.9. Retrieved December 18, 2013, from <http://iteslj.org/Techniques/Chen-Corpora.html>.
- [15] Constantinescu, A. I. (2007). Using technology to assist in vocabulary acquisition and reading comprehension. *The Internet TESL Journal* 8.2. Retrieved February 20, 2007, from <http://iteslj.org/Articles/Constantinescu-Vocabulary.html>.
- [16] Corbin, J. & A. Strauss (ed.) (2008). *Basics of qualitative research: Techniques to developing grounded theory*. Los Angeles, CA: Sage Publications.
- [17] Csomay, E. & M. Petrovic. (2012). "Yes, your honor!": A corpus-based study of technical vocabulary in discipline related movies and TV shows. *System: An International Journal of Educational Technology and Applied Linguistics* 40.2, 305-315.
- [18] Cunningham, A. E. & K. E. Stanovich. (1998). What reading does for the mind. *American Educator* 22.1&2, 8-15.
- [19] Dalton, B. & D. Grisham. (2011). e Vocabulary strategies: 10 ways to use technology to build vocabulary. *Reading Teacher* 64.5, 306-317.
- [20] Davis, F. B. (1968). Research in comprehension in reading. *Reading Research Quarterly* 3, 499-545.
- [21] Egber, J. (2005). *CALL essentials: Principles and practice in CALL classrooms*. Alexandria, VA: TESOL.
- [22] Fazeli, S. (2012). The exploring nature of vocabulary acquisition and common main gaps in the current studies of vocabulary acquisition. *Online Submission, Language in India* 12.3, 175-189.
- [23] Flanigan, K., S. Templeton & L. Hayes. (1012). What's in a word? Using content vocabulary to "generate" growth in general academic vocabulary knowledge. *Journal of Adolescent and Adult Literacy* 56.2, 132-140.
- [24] Folse, K. (2004). *Vocabulary myths: Applying second language research to classroom teaching*. Ann Arbor: The University of Michigan Press.
- [25] Fontana, A. & J. Frey (eds.) (1994). *Interviewing: The art of science*. Thousand Oaks, CA: Sage Publications.
- [26] Gass, S. & L. Selinker. (1994). Second language acquisition: an introductory course. *Journal of Linguistics* 30.2, 572-573.
- [27] Grabe, W. (1991). Current developments in second language reading research. *TESOL Quarterly* 25, 376-406.
- [28] Grabe, W. & F. L. Stoller. (1997). Reading and vocabulary development in a second language: A case study. In J. Coady & T. Huckin (eds.), *Second language vocabulary acquisition*. Cambridge: Cambridge University Press, 98-122.
- [29] Harmon, J., W. Hedrick & K. Wood (2005). Research on vocabulary instruction in the content areas: Implication for struggling readers. *Reading & Writing Quarterly* 21, 261-280.
- [30] Hussin, S., N. Maarof & J. D'Cruz. (2001). Sustaining an interest in learning English and increasing the motivation to learn English: An enrichment program. *The Internet TESL Journal* 7.5. Retrieved May 8, 2001, from <http://iteslj.org/Techniques/Hussin-Motivation/>.
- [31] Hutchinson, T. & A. Waters. (1987). *English for specific purposes: A learning centered approach*. Cambridge: CUP.
- [32] Johnson, A. & N. Heffernan. (2006). The short reading project: A CALL reading activity utilizing vocabulary recycling. *Computer Assisted Language Learning* 19.1, 63-77.
- [33] Kansas University, Center for Research on Learning. (2014). *Learning Strategies* 785, 864-4780.
- [34] KSA Ministry of Education. (2006). *Say it in English: Third year intermediate teacher's book, Term 1*. International ser. No. 009960-19-111-7. Riyadh: Ministry of Education.
- [35] Koprowski, M. (2006). Ten good games for recycling vocabulary. *The Internet TESL Journal* 7.7. Retrieved July 18, 2006, from <http://iteslj.org/Techniques/Koprowski-RecyclingVocabulary.html>.
- [36] Koren, S. (1999). Vocabulary instruction through hypertext: Are there advantages over conventional methods of teaching? *Teaching English as a Second or Foreign Language*, 4.1, 1-13.
- [37] Laufer, B. & J. Hulstijn. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. *Applied Linguistics* 22, 1-26.
- [38] Laufer, B. & B. Roitblat. (2011). Incidental vocabulary acquisition: The effects of task type, word occurrence and their combination. *Language Teaching Research* 15, 391-411.

- [39] Levine, A. & T. Reves. (1998). Interplay between reading tasks, reader variables and unknown word processing. In A. Mirhassani & A. Toosi, The impact of word-formation knowledge on reading comprehension. *IRAL Journal* 38, 301-311.
- [40] Lewis, M. (1993). The lexical approach: The state of ELT and the way forward. Language Teaching Publications: Hove, England.
- [41] Lewis, M. (1997). Implementing the lexical approach. Language Teaching Publications: Hove, England.
- [42] Lewis, M. (2000). Teaching collection: Further developments in the lexical approach. Language Teaching Publications: Hove, England.
- [43] Lowman, J. (1990). Promoting motivation and learning. *College Teaching* 38.4, 136-39.
- [44] Mehta, N. (2009). Vocabulary teaching: Effective methodologies. *The Internet TESL Journal* 15.3. Retrieved March 29, 2009, from <http://iteslj.org/Techniques/Mehta-Vocabulary.html>.
- [45] Mezynski, K. (1983). Issues concerning the acquisition of knowledge: Effects of vocabulary training on reading comprehension. *Review of educational research* 2, 253-279.
- [46] Miles, M. & A. Huberman (ed.) (1994). *Qualitative Data Analysis*. Thousand Oaks, CA: Sage Publications.
- [47] Murray, G. (2011). Metacognition and imagination in self-access language learning. In D. Gardner (ed.), *Fostering autonomy in language learning*. Gaziantep: Zirve University, 5-16.
- [48] Nagy, W. & R. Anderson. (1984). The number of words in printed school English. *Reading Research Quarterly* 19, 304-330.
- [49] Nagy, W. & J. Scott (2000). Vocabulary processes. In M. L. Kamil, P. Mosenthal, P.D. Pearson & R. Barr (eds.), *Handbook of reading research*. Mahwah, NJ: Erlbaum, 269-284.
- [50] Nation, I. S. (1990). Teaching and learning vocabulary. New York: Newbury House.
- [51] National Reading Panel. (2000). Report of the national reading panel: Teaching children to read. Washington, DC: National Institute of Child Health and Human Development (NIH publication No. 00-4769).
- [52] O'Loughlin, R. (2012). Tuning in to vocabulary frequency in course book. *RELC Journal: A Journal of Language Teaching and Research* 43.2, 255-269.
- [53] Patton, M. (1990). *Qualitative evaluation and research methods*. Beverly Hills, CA: Sage Publications.
- [54] Putri, H. (2010). The importance of vocabulary in English learning. Ibn Khaldun University, English Education Program.
- [55] Rashtchi, M. & S. Pourmand. (2014). Controlled extensive reading and vocabulary knowledge: Let's move towards autonomous learning in EFL contexts. *International Journal of English and Education* 3.2, 132-146.
- [56] Rupley, W. H. & W. D. Nichols. (2005). Vocabulary instruction for the struggling reader. *Reading and Writing Quarterly* 21.3, 239-260.
- [57] Stahl, S. & M. Fairbanks. (1986). The effects of vocabulary instruction: A model-based meta-analysis. *Review of Educational Research* 56, 72-110.
- [58] Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly* 21.4, 360-407.
- [59] Thanasoulas, D. (2000). What is learner autonomy and how it can be fostered? *The Internet TESL journal* 6. 11. Retrieved November 3, 2000, from <http://iteslj.org/Articles/Thanasoulas-Autonomy.html>.
- [60] Tozcu, A. & J. Coady (2004). Successful learning of frequent vocabulary through CALL also benefits reading comprehension and speed. *Computer Assisted Language Learning* 17.5, 473-495.
- [61] Wenden, A. (1998). *Learner strategies for learner autonomy*. Great Britain: Prentice Hall.
- [62] Wessels, S. (2011). Promoting vocabulary learning for English learners. *Reading Teacher* 65.1, 46-50.
- [63] White, T. G., M. F. Graves & W. H. Slater. (1990). Growth of reading vocabulary in diverse elementary schools: Decoding and word meaning. *Journal of Educational Psychology* 82.2, 281-290.
- [64] Williams, M. (1994). Motivation in foreign and second language learning: An interactive perspective. *Educational and Child Psychology* 11, 17-84.

**Mamoon M. Alaraj** was born in Irbid, Jordan, in 1966. He is a PhD holder in curricula and methods of instruction/English language, graduated from Amman Arab University for Graduate Studies, Amman, Jordan, in 2005. He got his master degree in the same field of study from Yarmouk University in Irbid, Jordan in 1997. And from the same university he got his BA in English Language and Literature in 1992. He has been teaching English as a Foreign Language for 20 years. Now he is an assistant professor at King Abdulaziz University where he teaches English for Specific Purposes to engineering students. In Jeddah, KAU, in 2012 he published his first research study titled "Vocabulary Acquisition: Connecting Learning to Real Life Situations" at the Journal of King Abdulaziz University: Arts and Humanities. His research interests are language learning strategies and vocabulary acquisition.