Reactivating EFL Learners' Word Knowledge by Means of Two Techniques: Flashcards versus Wordlists

Saeed Mohammadnejad
Department of English Language, Payame Noor University
PO BOX 19395-3697, Tehran, Iran
E-mail: tefl.1982@gmail.com

Hossein Nikdel
Department of Education, Payame Noor University
PO BOX 19395-3697, Tehran, Iran
E-mail: nikdel.edu@gmail.com

Nasser Oroujlou (Corresponding author)
Department of English Language, Payame Noor University
PO BOX 19395-3697, Tehran, Iran
E-mail: nasser.elt@gmail.com

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Abstract
This article best described learning vocabulary as an initial step to learn any foreign language. The authors showed an attempt to explore the effectiveness and nature of vocabulary acquisition through two techniques in English called picture flashcards and wordlists. The pedagogy discussed involved as a combination of two techniques concerned showing the efficacy of using these techniques i.e., picture flashcards versus wordlists in EFL classes on students’ English vocabulary learning with a quasi-experimental research design participating thirty six students studying in an English institute in north western of Iran. The subjects were
instructed to try to learn new words through two precise vocabulary techniques. Their gains in the knowledge of 60 potentially words were then measured. The authors presented a straightforward procedure to scrutinize the efficacy of teaching vocabulary throughout flashcards and wordlists. The results denoted that, using flashcard as a vocabulary learning tool was much more helpful than wordlist. Meanwhile, the results revealed that picture flashcards looked as if to be very supportive tools than wordlists in presenting forms of new words, since they draw learners’ awareness.

**Keywords:** English as a Foreign Language (EFL), Flashcards, Vocabulary learning, Vocabulary teaching, Wordlists
1. Introduction

Theoretically, vocabularies are recognized as the fundamental element of any language since they are used to label many things such as objects, actions, and even ideas without which people are unable to get across their intended meaning. Moreover, to express and convey a meaningful communication vocabularies seemed to be corner stone through both productive and receptive skills. It is believed that the major role of vocabulary knowledge in second or foreign language learning has been recently recognized by most of theorists dealing with educational improvement issues. Often, vocabulary teaching is a way which is considered as one of the most important mechanisms of any educational context. So far, according to some works done in this area vocabulary has lately gained acceptance in any field of English language teaching and learning and become a guest of honor (Coady & Huckin, 1997; Read, 2000; Richards & Renandya, 2002; Bogaards & Laufer, 2004) with a wide range of research and pedagogical interest. The most important reason lies in the fact that vocabulary is a vehicle, which carries meaning; learning to understand and express the meaning.

Focus on teaching vocabulary has recently been under a lot of attention, somewhat as a result of “the development of new approaches to language teaching, which are much more ‘word-centered’” (Thornbury, 2004). It also should be noted that teaching vocabulary is supposed to not only consists of teaching specific words but also aims at providing learners with strategies necessary to speed up their vocabulary knowledge (Hulstijn, 1993, cited in Morin & Goebel, 2001). To do so is important because, vocabulary is an inseparable element which is used to activate learners' both mind and ability to express the intended meaning in the field.

There have, however, been some tenets strongly supporting vocabulary teaching due to significant role it plays in language learning (Qian, 1999; Zareva, Schwanenflugel & Nikolova, 2005). However, these works aside, having a limited amount of vocabulary is also a barrier (Zhihong, 2000). Optimally, teachers make use of many techniques to teach and develop their learners’ knowledge of vocabulary by helping them in building a great deal of words to choose from as they prefer to convey their intended message in different contexts at anytime and anywhere. Much works have also addressed the strategies teachers use to facilitate learners develop their knowledge of vocabulary (e.g. Gairns & Redman, 1986; Schmitt & McCarthy, 1997). Implicitly, strategies commonly discussed are using objects, guessing from context, and illustrations as well as pictures. An example for presentation of any new vocabulary can be classified according to verbal and visual techniques. The latter best expresses the situation in which we can find pictures – flashcards, photographs, word pictures that teachers can point to and require learners to produce message intensively. By using flash card or wordlists teacher should create various teaching techniques to amplify the students’ vocabulary knowledge. Allen (1983) stated that in classes where no one language is known by the entire student, the teacher needs particular skill.

In order for both authors and learners, authors launched two dissimilar strategies of teaching vocabulary and consequently decided to supply the results of study to fill the theoretical and empirical gaps concerning the use of two vocabulary teaching strategies. There is an
argument which is still remained unsolved and that is the problem of learners' lack of ability to make a right selection of vocabulary learning strategy. Methodologically, in order to help learners to enhance their knowledge of L2 vocabulary learners are needed to be armed with appropriate of vocabulary learning strategies. Hence, because of this important attribution in the process of vocabulary learning and enhancement, the present paper aims at proposing a framework for vocabulary strategy instruction in English as a foreign language context. To sum up, the result of this research is useful for teachers of the EFL classes in to help them improve their performance in teaching vocabulary in an effective and profitable way.

Particularly, in view of the global interest in the methodological improvements in teaching vocabulary strategies for EFL learners the significant purpose of this study is looking for appropriate concepts that can be considered by teachers who want to teach English at lower level which will include:

1. To recognize a suitable and relevant technique that can support teaching or learning process in English classes.

2. To build up the model of teaching English vocabulary by means of the pictures in English classes.

It is hoped that the findings of present study that tend to find answers to the following questions will open a new horizon in teaching vocabulary.

1. Do students who use flashcards do better than those who use wordlists in learning new vocabularies?

2. Do students who use wordlists do better than those who use flashcards in learning new vocabularies?

3. Is there any difference between the scores of students who use flashcard and the students who use wordlists in learning new vocabularies?

2. Research Methodology

The study was done to investigate the effects of using two vocabulary teaching techniques on students' word knowledge through the quasi-experimental research alongside an alternating time series design. This model was selected since we did not have any access to a control group so that it enabled us to measure the effect of two methods on two experimental groups of learners. In this study, 36 students were presented with 60 new English words in two different sets of instructional methods. Further, all participants were administered four pretests and six delayed and immediate posttests respectively.

The methodology of present research lies on comparing two techniques of teaching vocabulary: flashcards and wordlists. Traditionally, most Iranian educational institutes strongly prefer to take up wordlists as a technique in national EFL textbooks. Besides, according to (Griffin & Harley, 1996) despite enormous efforts have been directed on vocabulary learning, a smaller amount of work has considered wordlist as a technique in learning vocabulary. In one word, the methodology of this study was employed to explain the
basic assumption of vocabulary teaching techniques with a hope that teachers should describe them in a plausible way to students.

2.1 Participants

For the purpose of current study two intact groups of participants were employed, all of whom were secondary school students and enrolled in English winter semester class. Initially, there were 40 participants of which 17 were female and 23 were male students with an average age ranging from 11 to 14 years old. However, we excluded four of the participants at the analysis stage since they could not attend all sessions. At the time of data collection, participants had a very limited formal language instruction indicating that their vocabulary size was rather small and their level of English proficiency was similar to each other. The study was done to be suitable for not only true beginners, but also for false beginners those who already know some English because they have had some formal and informal English instruction through various sources e.g., from television, songs, and movies. They were supposed to attend English class two times in the week. As it was mentioned above, they were distributed as in two groups of students; one group who received treatment as those who practiced new word through flashcards and the other group who received treatment as those who learned new words through word list. Both groups of participants were taught all words. This study attempted to discover if learners could gain greater efficacy over newly taught words after receiving two techniques of teaching vocabulary.

2.1.1 Materials and Instruments

We used flashcards and wordlists as our primary materials in the study. In order to identify students' reactions after teaching instruction was provided, the authors put together some instruments to assess participants' reactions which they projected when participants attempted to learn activities. These instruments had preference for selection since on one hand they could answer research questions of the study and on the other hand they could greatly meet learners' needs and demands. In practice to address our research question, the following materials were used: a text book, two different types of teaching vocabulary techniques, as well and a post-test, too. The vocabulary items used in the study were selected from the students' text book with an initial list of 60 words form, where students were asked to match vocabulary items to corresponding pictures. For the wordlists, learners were asked to write the words in one column and write their translations in another side, respectively. Flashcards were also assigned to be pictures with their translations in Farsi on the other side.

2.1.2 Text Book

As for the purpose of the present study, the authors administered an appropriate text book named Hip Hip Hooray level 5 by Pearson Education (2004). This text book essentially focused on teaching the preliminary steps of daily functions in which each unit included a reading section equipped with extra practice for vocabulary at the end. Generally, this book aimed to take beginner students with a lower level of English language proficiency. To meet the objectives of the current study, four units were selected based on the high frequency of function of vocabularies for the learners.
3. Techniques in Vocabulary Teaching

Learners acquire vocabulary in various ways. Students are exposed to a lot of new vocabulary during lessons: by the teacher, by texts or other materials they work with. A lot of this vocabulary is automatically absorbed (Harmer 1993). Various techniques and activities are aimed directly at learning vocabulary, which is usually put into sets of somehow related words, often by topic or meaning. A number of techniques can be adapted to present new vocabulary items. Some techniques are more popular and more often used than others. Also it is up to the teacher which techniques he or she decides to use but always the effectiveness of teaching should be considered.

Few studies have examined the effects of vocabulary activities. In one of these studies, Seal (1991) categorized the activities as planned and unplanned. In the latter type, as Seal (1991) put learners have a great tendency to ask for the meaning of words and subsequently teachers are supposed to clarify the meaning by using dissimilar strategies e.g., body language, antonyms, synonyms, pictures, etc. Furthermore, Allen (1983, p.28) adds that “Language teachers are responsible for creating conditions which encourage vocabulary expansion, and well-chosen game can help the students acquire English word”.

While In planned vocabulary teaching, specified vocabularies are selected beforehand and teachers consider how to teach them. In a relevant study by Oxford and Scarcella (1994), vocabulary learning activities are divided into three categories: 1) decontextualized, 2) partially contextualized, and 3) fully contextualized. Theoretically, in decontextualized activities vocabulary items are removed from the context and are presented in situations free from any communicative values (e.g., wordlists, flashcards). Partially contextualized activities on the other hand are often named as intentional or planned vocabulary learning (e.g., physical response).

Finally, fully contextualized activities play a significant role in vocabulary teaching because students use them to practice authentic communication and such as reading stories, plays, magazines, newspapers or any other thing with the purpose of communication in real-life situation. The two vocabulary teaching strategies of wordlists and flashcards are known as decontextualized activities. Both strategies are used in this research and will be discussed in the following sections, respectively.

3.1 Flashcards

Flashcards have a lot of functions and they seem to be at teachers’ service in vocabulary teaching activities. Specifically, they are used to assist learners with learning vocabularies. Theoretically, they are defined as cardboards consisting of a word or a simple picture on it. The letters on flashcards must be visible and large enough to make sure that everyone sitting in the front or back of classroom can see the letters on the card. In addition, it is better to write words with capital letters. Teachers are recommended to use both sides of flashcards in teaching vocabulary. On one side, the new word is written in L2 and possibly with a picture beside it and on the other side is the translation (see Appendix 1 for sample flashcards). Flashcards can be used a useful mean for both teachers and even students as a self-study
vehicle. It can be seen that flashcards have been used for teaching a variety of purposes during the history of language teaching. A number of studies have shown that flashcards have more efficacies and help learners more in acquiring vocabulary than wordlists (Mondria & Mondria-de Vries, 1994; Schmitt & Schmitt, 1995).

In one study concerning the use of flashcards, Ehri and Roberts (1979) studied first graders to see whether they learned printed words better in isolation or in context. Post-test scores revealed that those who were taught words in isolation were able to read the words faster than those who were taught in context and they also learned more about orthographic forms but those who were taught in context learned more about the semantic identities rather than orthographic forms. Being flexible in their way of use, flashcards offer teachers and their students a large amount of possibilities in applying them in a number of activities and games (Hill, 1990). Flashcard is better than wordlists, because students can break it up in any minutes and then group the words by their difficulties.

3.2 Wordlists

Other strategy for vocabulary learning which has a root in the past is wordlist learning. This strategy simply includes a sheet of paper where students write the L2 words along with their L1 definitions to one side of each word (see Appendix 2). As Oxford and Crookal (1990) mention, “The assumptions that undergird this technique appear to be that learners do not need much, if any, context to learn vocabulary, and that rote memorization is perfectly adequate” (p.10). Proponents of the wordlist technique believe that working with wordlists is one of the most effective ways of acquiring L2 vocabulary (Meara, 1995; Nation, 1995). In a study carried out by Shillaw (1995), the results revealed that the reason for success in a semester-long project was due to using wordlists.

On the other hand, others argue that to acquire the complex nature of words, learners need to encounter words in several meaningful contexts. According to Baumann and Kameeuni (1991), methods which provide learners with opportunities to process words by making connections between what they already know and what they have learned are effective strategies. Although a great deal of work has been done on vocabulary learning, Griffin and Harley (1996) contend that where the task of (L2) second language learning is concerned, little work has been done on list learning of new words despite the fact that it is one of the most widely-used techniques among learners.

Yongqi (2003) mentions some aspects of wordlist learning. First, he tries to answer the question of how many repetitions learners need in order to learn word pairs. He points out that a surprising number of word pairs can be learned within a short time. As an example, Lado, Baldwin, and Lobo (1967, as cited in Yongqi, 2003) found that intermediate college students of Spanish recalled 65% of 100 words after just one exposure. Secondly, Yongqi (2003) discusses the optimum number of words to be studied at one time. Although it is believed that list learning should be discarded as a behaviorist learning method (Hulstijn, 2001), there is some empirical investigation which recommends that list learning should be used as a strategy for teaching and learning L2 words.
4. Procedure

The current study administered in a natural classroom procedure, with regularly scheduled steps including eight sessions run by the authors. Prior to conducting each step, participants were provided with all the necessary instructions relevant to the procedure. Since most of them had been in the same English institute besides they had undergone instruction for more than four semesters together they were supposed to be homogeneous. Fortunately, both practice groups were analogous in a number of ways; the participants were somehow at the same age and all of them were learning English at the same institute. Since it was not sensible to choose the participants randomly and each participant had no equal chance of being included in the sample, we chose a non-random selection procedure. In the stage of selection, the authors non-randomly selected 36 students through purposive sampling and finally assigned them randomly into two equal treatment groups each consisting of 18 participants, i.e., one experimental group receiving flashcard instruction and another experimental group receiving wordlist instruction.

In the practice stage, the researchers administered the instruction in two separate ways in which new words were presented by means of flashcards for Group A and wordlists for Group B and it was reinforced via learning by heart and repetition of words for both groups. While the treatment was being administered, the participants made greatly use of the same vocabulary items but through different techniques. Each presentation initiated with a pre-test of the target words which was introduced on that day and finished with an immediate post-test to gauge the short term recall of vocabulary at the final session. There was no difference between the tests and the time for giving instructions for both the flash card and the wordlist groups. Practically, every other session a pretest alongside an immediate post-test were administered to both groups to see and observe any possible changes in learners' behavior in relation to two treatments i.e., flashcards versus wordlists. The instruction was given in thirty five minutes in each session.

Moreover, as it was motioned above, the study was completed within a period of eight consecutive sessions. The researchers conducted a delayed post-test at 6th and 8th session from the previously taught lessons to both groups to see which group had remembered more words. The activities used with both groups were the same and included repetition drills and matching words with flashcards and wordlists. All of the words were taken from the participants’ textbook Hip Hip Hooray level 5. After the data collection procedure, the students’ scores were collected and analyzed by the SPSS software through adding up the correct answers. The procedures of the study were administered according to the timeline as they are shown in Table 1.
Table 1. Procedures for Collecting Data

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Research Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>1st Lesson: (pre-test, presentation, and immediate post-test)</td>
</tr>
<tr>
<td>Session 2</td>
<td>Revision of the 1st lesson (flashcards and wordlists)</td>
</tr>
<tr>
<td>Session 3</td>
<td>2nd Lesson: (pre-test, presentation, and immediate post-test)</td>
</tr>
<tr>
<td>Session 4</td>
<td>Revision of the 2nd lesson (flashcards and wordlists)</td>
</tr>
<tr>
<td>Session 5</td>
<td>3rd Lesson: (pre-test, presentation, and immediate post-test)</td>
</tr>
<tr>
<td>Session 6</td>
<td>Revision of the 3rd lesson and delayed post-test of the 1st &amp; 2nd lessons (flashcards and wordlists)</td>
</tr>
<tr>
<td>Session 7</td>
<td>4th Lesson: (pre-test, presentation, and immediate post-test)</td>
</tr>
<tr>
<td>Session 8</td>
<td>Revision of the 4th lesson and delayed post-test of the 3rd and 4th lesson (flashcards and wordlists)</td>
</tr>
</tbody>
</table>

5. Results

In order to carry out statistical analysis on the data gathered for the present study, when the total scores were collected and the prearranged tests were administered, they were broke down into parts and studied closely. For the purpose of answering research questions, a descriptive qualitative analysis was executed to identify the efficacy of two English vocabulary learning techniques. The mean of each group was calculated and compared to show the probable differences, respectively. In order to guarantee and determine the statistical significance of the difference between means on two sets of scores, t-test was administered. According to these statistics, it could be inferred that the mean score of the flashcard group for the pre-test was 26.27 and the mean score of the wordlist group for the same situation was 24.81. It seemed that, we did not find a significant difference between the two groups when the pre-tests were administered. To confirm that this minor difference was not a significant one, we employed an independent samples t-test. The results revealed that difference between the two groups was not statistically significant.

The first research question investigated whether there was a difference between the vocabulary learning level of the students using flashcards before and after the study. The result of the paired-samples t-test has shown that post-test score of the first experimental group (M= 38.52) is statistically higher than the pre-test score of the same group (M=26.27). Students in the experimental group one used the flashcards for vocabulary learning in the classroom. This finding shows that the use of flashcards for vocabulary learning program
promotes students' vocabulary learning more than those who used wordlist technique to learn vocabulary.

The second research question investigated whether there was a difference between the vocabulary learning levels of the students using wordlists when study was administered. The result of the paired-samples t-test has shown that post-test score of the group B (M= 34.79) is statistically higher than the pre-test score of the same group (M=24.81). Basically, Students in the first experimental group achieved better scores on the vocabulary acquisition test at the end of the study in compared to their pre-test scores. The first group was given the vocabulary through flashcard and the second experimental group memorized them through self-study. The descriptive analysis of pre-test and post-test results of participants is presented in the Table 2.

Table 2. The Descriptive Analysis of Pre and Post-test Results of Participants

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test Group A</td>
<td>18</td>
<td>26.27</td>
<td>18.06</td>
<td>3.25</td>
</tr>
<tr>
<td>Pre-test Group B</td>
<td>18</td>
<td>24.81</td>
<td>16.35</td>
<td>3.07</td>
</tr>
<tr>
<td>Post-test Group A</td>
<td>18</td>
<td>38.52</td>
<td>22.07</td>
<td>4.08</td>
</tr>
<tr>
<td>Post-test Group B</td>
<td>18</td>
<td>34.79</td>
<td>21.06</td>
<td>3.93</td>
</tr>
</tbody>
</table>

The third research question investigated whether there was a difference between the gain scores of the students who used the flashcard to learn vocabulary and the gain scores of those who used the wordlists. The gain score was calculated for the first and the second experimental groups and compared. There is a statistically significant difference between the mean score of the first experimental group (M= 14.85) and the mean score of the second experimental group (M= 9.46) (t (36) = 3.121, p<0.05) (See Table 3). This finding indicates that using flashcards to learn new vocabulary improves students’ achievement more than the use of vocabulary wordlists to learn new words.

Table 3. The Comparison of the Mean Gain Scores

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>18</td>
<td>14.85</td>
<td>10.71</td>
<td>63</td>
<td>3.121</td>
</tr>
<tr>
<td>Group B</td>
<td>18</td>
<td>9.46</td>
<td>9.37</td>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>

p<0.05
Finally, the statistical analyses were carried out for the two experimental factors with a paired samples t-test. The two factors were using flashcards and wordlists. In order to state the frequency of mean scores between two groups before and after the study i.e., pre-test and post-test, the inferential statistical index called t-test was carried out. The result of the paired-samples t-test showed that post-test score of the first experimental group (M= 38.52) was statistically higher than the pre-test score of the same experimental group (M=26.27) (t (36) = -8.5; p<0.05). Students in flashcard group used the flashcards to learn vocabulary inside the class. This finding shows that the use of flashcards improves students’ vocabulary learning. Similarly, the result of the paired-samples t-test has revealed that post-test score of the second experimental group (M= 34.79) is statistically higher than the pre-test score of the same group (M=24.81) (t (28) = -6.7; p<0.05) (See Table 4). The second experimental group was given the vocabulary wordlists on paper and they memorized them through the study.

Table 4. Total Pre-Post Test Comparison of Two Groups

<table>
<thead>
<tr>
<th>Mean of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-12.25</td>
<td>-8.99</td>
<td>1.17</td>
<td>-16.51</td>
</tr>
<tr>
<td>-8.37</td>
<td>7.13</td>
<td>0.86</td>
<td>-10.37</td>
</tr>
</tbody>
</table>

5.1 Limitations of the Study and Further Recommendations

In teaching English vocabularies, the researchers faced a few problems. The first, due to the number of participants in each group and simultaneously because the condition of the class was very noisy it was somehow not easy to handle the class. Although we found some of the learners more active than others, most of them looked as if not so much sharp and eager in comprehending the materials. And the second, the flashcards which were used in this study had limitation on the numbers that were used to explain topics on the text-books. Moreover, the findings of this study would be applicable only to the particular lessons and lower-intermediate learners. More support for the conclusions here could have also been provided if the experiment could have been repeated with different additional lessons and sets of vocabulary.

Based on above mentioned problems, the researchers were required to apply methods which could help all English learners to engage energetically in joining the lesson and respectively they implemented an appropriate technique that could give all the students equal chances to use their vocabulary in practice. It is hoped that teachers who read this work will be motivated to explore the use of vocabulary learning techniques as much as possible in their
classrooms, not just to support vocabulary learning but to develop their learners’ ability in English more generally.

Acknowledgement

We should like to thank Mrs. Vahideh Oveysi for her endless contributions in carrying out this research study and her willingness to help us genuinely.

References


Appendix

Appendix 1. A Sample of the Flashcards

![Eiffel Tower](image1.png) ![Tiger](image2.png)

Eiffel Tower  
Tiger

Appendix 2. A Sample of the Wordlists

<table>
<thead>
<tr>
<th>Words</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoon</td>
<td>قاشق</td>
</tr>
<tr>
<td>Coin</td>
<td>سکه</td>
</tr>
<tr>
<td>Owl</td>
<td>جغد</td>
</tr>
<tr>
<td>Mouth</td>
<td>دهان</td>
</tr>
<tr>
<td>Bride</td>
<td>عروس</td>
</tr>
<tr>
<td>Pretty</td>
<td>زیبا</td>
</tr>
<tr>
<td>Volcano</td>
<td>انشقان</td>
</tr>
<tr>
<td>Island</td>
<td>جزیره</td>
</tr>
<tr>
<td>Feather</td>
<td>پر</td>
</tr>
<tr>
<td>Computer</td>
<td>کامپیوتر</td>
</tr>
</tbody>
</table>