

The Effect of Using Keyword Method on EFL Learners' Learning and Retrieving English Verb Types

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Abstract

This study used keyword method during encoding information in transferring information from short term memory to make the retrieval easier. For this purpose, 50 adult female elementary students were chosen to participate in this study. This study required two groups of learners (control and experimental groups). The experimental group enjoyed some special flashcards which each of them involved an English verb, a keyword of a similar sound to the English word and a Persian sentence. Control group received a list of verbs on a sheet of paper which contained the English verbs and their equivalents in Persian. At the end of the treatment, an immediate-post-test was used to measure the participants' short-term memory recall of the lexical items. Two weeks after the treatment, a delayed-post-test of vocabulary was administered to compare vocabulary achievement among the two groups. Analysis of immediate post-test and delayed post-test confirmed the hypothesis that the participants who used the keyword method could store and retrieve verbs in their long-term memory better than those who didn't use the method. The findings can be used in both materials development and teaching vocabulary in English foreign language classes.

Keywords: Keyword method, Retrieving, English verbs

1. Introduction

When an English foreign language (EFL) learner wants to produce a particular English sentence through speech or writing, it is first necessary to retrieve the lexical items that correspond to the English sentence (Finkbeiner et al., 2006).

ESL/EFL teachers should agree to apply different strategies in teaching lexical items so that students could easily boost the repertoire of their lexical items. For example one such strategy could be the use of mnemonics. Mnemonics are basic kinds of associations or strategies used by learners to increase the retention and retrieval of lexical items (Hatch and Brown, 1995). Among the numerous mnemonics, the Keyword Method is an effective method for L2 learners to improve word retrieval (Pressley et al., 1982). Atkinson and Raugh (1975) describe keyword method as a two stage process: "The first stage requires the subject to associate the

spoken foreign word with an English word, the keyword, that sounds like some part of the foreign word; the second stage requires him to form a mental image of the keyword interacting with the English translation. Thus, the keyword method can be described as a chain of two links connecting a foreign word to its English translation through the mediation of a keyword: the foreign word is linked to a keyword by a similarity in sound (acoustic link), and a keyword is linked to the English translation by a mental image (imagery link)".

English has hundreds of thousands of lexical items such as verbs; Verb is usually an action word, but a verb or set of verbs can also explain an emotional/physiological response or action, (like "feel") or a mental action or state, (like "think") or a state of being, which may not typically be noticed or seen by others (Quick Study Academic: English Grammar & Punctuation, 2003).

Now that lexical retrieval has special significance in producing an English foreign language sentence and there is a need for expanding the body of experimental studies to address several key questions about the effectiveness of different strategies on learning and retrieving foreign language vocabulary especially verbs. The present study is aimed at giving learners and teachers some insights into the effectiveness of key-word method on L2 lexical learning and retrieving English verbs.

2. Literature Review of Keyword Method

The effectiveness of the keyword method confirms its significant role in L2 vocabulary learning and retrieving, for instance: McDaniel and Pressley (1989) compared the keyword technique, in which students learn words through the combination of an auditory and imagery link, with the context method and found KWM to be significantly more facilitative to learning than CT.

With the aim of exploring the cognitive processes underlying KWM for foreign vocabulary learning, Shapiro and Waters (2005) designed an experiment to investigate its effectiveness. Their findings revealed that the KWM was effective because it offered a meaningful visual image upon which to base memory for a new word's meaning.

Sagarra & Alba (2006) used different mnemonic methods. They indicated that vocabulary learning techniques requiring deeper processing through form and meaning associations, that is, the keyword method yield the best retrieving.

Baleghizadeh and Ashoori (2010) compared the effect of keyword and word list methods on immediate retention of English vocabulary in a natural classroom setting. Results showed that retrieving by using the keyword method was better than the word list method.

Tavakoli and Gerami (2013) examined the impact of two non-verbal methods of instructing vocabulary, the keyword method and pictorial method, on learning and retrieval of vocabulary items among adult elementary students of English as a foreign language. The results revealed that the participants who used the keyword method could store and retain vocabulary items in their long-term memory better than those who used the pictorial method.

In Taiwan, researchers also found positive effect of the keyword method on elementary school and senior high school students' vocabulary retention (Chen, 2006; Hsu, 2007; Lin, 2004)

3. Method

3.1. Participants

The participants for this study were 50 female students with an average age of 16 at Junior High School in Kerman, Iran. The sample participants voluntarily agreed to take part in this study. All the participants were at the elementary level of English language proficiency and had no prior knowledge of the keyword method.

3.2. Instrument

For the purpose of data collection, three instruments were prepared, which will be described in order:

1. *Pre-Test of target words*

To make sure of the students' unfamiliarity with the target words, a test of vocabulary was used prior to the experiment. This was a test with 40 items (English verb types); each item questioned the translation of one of the target vocabulary items in to Persian. The verbs were chosen from "Elementary Vocabulary" by Thomas (1990). To suit the purpose of the study, the verbs had to meet two criteria: first, they had to be appropriate for the students' level; second, words that can have a strong phonological similarity with an L1 (here Persian) or L2 word were selected. Sixteen verbs were discarded from the experiment, because they were not new for most of the students. Therefore, twenty four verbs with which no student was familiar were used in the study and together they formed the content of the pretest.

2. *Immediate post-tests*

6 multiple-choice vocabulary-in-short- context tests (quizzes) were constructed in order to test the participants' short-term memory regarding the instructed lexical items at the end of each session. These quizzes comprised items based on the words instructed on that particular day.

3. *Delayed Post-test*

A 24-item recognition vocabulary –in- short- context test was also constructed to measure the learners' lexical acquisition and recall. The posttest was administered two weeks after the treatment to test retention of the learned words in long-term memory.

3.3. Procedure

First, the students of the mentioned institute was asked to participate voluntarily in this research. Second, the pretest was administered to the participants. The students were asked to write the

Persian translation of each word in front of it or simply tick it if they knew it but they could not remember. After administering this test, it was determined which words were unfamiliar for

participants. Third, participants were assigned randomly to two groups, experimental group (EG) and control group (CG). The participants in CG received the list of words on a sheet of paper which contained the target words and their equivalents in Persian. They were given a total of 24 words (each session 6 words) to study using the rote method for two sessions. At the end of each session, 6 multiple- choice vocabulary-in-short- context tests (quizzes) with the English words that they had learned in that experimental session and were given 10 minutes to answer; this test was administered as the immediate posttests. The participants in the EG received the same words as the participants in the control group on the flash cards. Each flash card contains an English word, a keyword of a similar sound to the English word and a Persian sentence to form a mental image of the keyword interacting with the Persian translation. After the explanation of the keyword method, the participants in the treatment group were asked to practice the method, and then they were asked to learn the vocabulary list using the keywords provided. Like the participants in the control group, at the end of each session the participants in the experimental group were given the same examination sheet with the English words that they had learned in that session and were given 10 minutes to write the definition of the target words in Persian.

Fourth, two weeks after the treatment, the delayed posttest was administered to measure the subjects' long-term memory regarding the instructed words. The test comprised all the 24 verbs which were taught during the treatment. The time for this test was 20 minutes. The learners were supposed to select the verb that was the most appropriate among other choices to complete the meaning of the provided sentence.

4. Results

In order to investigate the research questions posed in this study, a number of analyses were run and the following findings and results were obtained:

Table 1 displays the mean scores obtained from both groups. The results show that the mean score of the experimental group is significantly higher than the mean score of the control group $t(42)= 4.97, p=.001$. This suggests that the experimental group, which received verb instruction through the keyword method, significantly outperformed the control group, which received verb instruction through the word list method. This indicates the superiority of the keyword method to simply memorizing word lists.

Table1 Mean Scores, Standard Deviations, and *t*-value for Both Groups

Groups	<i>n</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>	<i>sig</i>
EG	25	16.77	2.06	42	4.97	.001
CG	25	12.5	3.46			

p<.05

5. Discussion

This study examined the effects of the keyword method on learning and retrieval of English verbs among adult elementary students of English as a foreign language.

In line with previous similar studies (e.g., Levin, 1983, 1986; McDaniel & Pressley, 1987; Pressley, Levin & Delaney, 1982), this study confirms the powerful impact of the keyword method on the learners' memory in recalling verb definitions. On the recall test, the participants in the keyword group outperformed the participants in the control group on the total number of items answered correctly immediately after instruction. Moreover, in line with Levin et al.'s (1984) argument, the present study demonstrated that the keyword method should be one of the options when it comes to retention of definition. The conceptual peg hypothesis of Dual Coding Theory (DCT) (Paivio, 1963, 1971, 1986) can be a good source for interpreting the positive effects of the keyword method. Based on this hypothesis, it is claimed that the imagery value or concreteness of words is the reason for the learners' success in remembering them. It is also argued that if the words are concrete, they can easily be recalled later on. The keyword method is exactly based on DCT because it involves the use of verbal connections between the new word item and the stimulus word and also the use of imagery. In other words, the acoustic similarities make a link between the new word and its translation equivalent in L1

and finally learners are presented with an interactive image. These arguments are in line with those of Ellis and Beaton (1993) that the keyword method makes it possible for learners to make an association between the foreign word and the keyword through an interactive image. According to Pressley, Levin, Kuiper, Bryant, and Michener (1982), in the keyword method a phonetic link is made between the target item and the keyword and an interactive image makes the meaning connection between them and due to the imagery linkage, learners' retention of definitions is enhanced. In conclusion, the DCT can provide an adequate interpretation of the cued recall results.

However, CG who received translation of the target words based on rote repetition had the lowest means of immediate posttest and delayed posttest. This strongly conforms to Ausubel's meaningful learning. According to him, rote learning is the process of acquiring material as isolated entities which have no meaningful relationships. Therefore, it seems clear that their retention is much less than meaningfully learned words through the keyword method.

6. Conclusion

As a concluding remark, it can be stated that the mnemonic device used in this study, the keyword method, was shown to be more effective in L2 verb instruction than method of translation in elementary level among the subjects of the present study. Although any generalizations based on the results should be made cautiously and before any interpretation, the limitations imposed on the study must be taken into account. The above-mentioned experimental design procedure was carried out and certain significant findings were obtained as are presented here in brief:

- The subjects in the experimental group, which received instruction based on the keyword method, were able to more successfully develop the learned verbs compared with the control group that received ineffective instruction in the form of translation.
- All the subjects have more or less achievements regarding their verb repertoire (so translation was less effective rather than ineffective).

Therefore, this study seems to have almost been able to show that the use of the keyword method, which is an innovative method, can largely reduce learners' problems in the acquisition and retention of L2 verbs. The findings obtained in this study specify that the use of visual imagery is the cornerstone of how the keyword method works. This is somewhat similar to what Shapiro & Waters (2005) demonstrate in their study. Although the KWM has proved to be helpful, the

principle features of context for teaching L2 vocabulary should not be overlooked by teachers and learners.

The findings obtained in this study may lead to a number of implications which could possibly be beneficial for language practitioners, teachers and students in an EFL context. First, this research is probably a call for language teachers, practitioners and researchers in language teaching and learning to pay more attention to L2 vocabulary teaching techniques especially for L2 verbs.

The findings may encourage teachers who still use the traditional verbal method of translation in their teaching to change their viewpoint in favor of a nonverbal method of teaching vocabulary. The result may especially be of great value to high-school teachers in an EFL context who are usually faced with the students' request for information about effective techniques of verb learning.

Second, the findings of this study are also useful for teacher trainers to incorporate appropriate and practical techniques for instruction of vocabulary in their existing training courses. This way, teachers themselves would be informed of different vocabulary teaching techniques and will develop positive attitudes toward the incorporation of the best techniques into their conventional teaching programs. In the long run, syllabus designers and textbook writers will also benefit from the results of this study; different mnemonics can be introduced within the graded vocabulary books and other materials in accordance to the level of the students for whom the material is designed.

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