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# DIFFERENTIAL EFFECTS OF SENTENCE WRITING AND CONTEXTUAL READING IN SECOND LANGUAGE VOCABULARY LEARNING 

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#### Abstract

This study investigates the effect(s) of two different methods of teaching and learning vocabulary, namely writing novel sentences with new words and reading new words in context. Seventy English words, 30 target and 40 distracter words, were selected from a vocabulary book to be taught and tested. Sixty university students majoring in English translation studies volunteered for the study. They were randomly assigned to two groups, one of them receiving sentence writing method (G1) and the other receiving contextual reading method (G2). To realize if the participants differed significantly in terms of their knowledge of the target words, both groups were required to provide the L1 equivalent of each of the words. While G1 viewed each of the selected words alongside its English definition one by one on an overhead projector screen and was given one minute to write an English sentence using each word, G2 read each word in four short contexts after viewing the English definition of each. Immediate and delayed post-tests on receptive vocabulary knowledge were administered. According to the results, G1 showed more improvement of knowledge of the target vocabulary than G2 on the immediate and post-test and more retention on the delayed post-test.


KEYWORDS: Context, Vocabulary, Sentence Writing

## INTRODUCTION

In the last 25 years, the field of second language acquisition has seen renewed interest in vocabulary learning and acquisition. There are many dimensions to vocabulary learning and acquisition, as reflected in the multitude of different areas of research being done on the topic. Learning words can be considered to be the most important aspect of second language (L2) learning (Knight, 1994). According to Candlin (1988), the study of vocabulary is indispensable to language teaching "... in terms of organization of syllabuses, the evaluation of learner performance, and the provision of learning resources ..." (p. vii). There is no doubt that words are the building blocks of language and the lack of words will surely become an obstacle to the acquisition of other aspects of language, including reading, writing, listening, and speaking.

Various categorizations of vocabulary knowledge have been proposed. One such categorization is that of receptive and productive vocabulary (Hatch \& Brown, 1995). According to Haycraft (1998, cited in Hatch \& Brown, 1995), receptive vocabulary refers to "words that the student recognizes and understands when they occur in a context, but which he cannot produce correctly (p. 44)." Productive vocabulary, on the other hand, refers to "words which the student understands can pronounce correctly and use constructively in speaking and writing (op. cit., p. 44)." Many instructional strategies were devised and utilized by L2 language teachers to develop the general and academic vocabulary of students. Woodard (1998), for example, proposed a number of vocabulary teaching strategies including teaching word origins and structural analysis, application of semantic mapping/webbing, analysis of analogies, reading aloud, dramatizing, teaching how to use the dictionary, using cloze sentences, and using computer programs. Moreover, different forms of technology are being integrated into the teaching and learning of L2 vocabulary.

Although the quantity of empirical data on incidental and direct L2 vocabulary acquisition has increased substantially within the past two decades, more cognitively oriented research is needed to address key issues in this area.

A number of studies have investigated the effect of various techniques in vocabulary teaching and learning including memorization of new words (Laufer \& Shmueli, 1997), key-word technique (Shapiro \& Waters, 2005), instruction of lexical set and semantically-unrelated vocabulary (Hashemi \& Gowdasiaei, 2005; Erten \& Tekin, 2008), production of sentences with new words (Barcroft, 2006), and teaching of vocabulary in content area (Cunningham, 1979).

For example, Barcroft (2006) used sentence writing for vocabulary learning. He found that the sentence writing technique of vocabulary learning had negative effects on the learning of vocabulary by students of low proficiency. His findings were so important that it provided certain pedagogical implications for sentence writing practice in learning English in EFL settings.

The purpose of this study, accordingly, was to determine whether writing new words in sentences would surpass vocabulary learning in context (i.e. vocabulary learning through reading passages) in improving L2 learners' vocabulary and their ability to retain them. Considering the objective of the study, the following research question was posed:

Is sentence writing method of teaching vocabulary more conducive to the development of receptive vocabulary knowledge than contextual reading method one day and one week after the instruction?

## METHOD

## Participants

Sixty university students, 40 female and 20 male, volunteered for the study. Their age range was between 18 and 25 years old. All of the participants were university students of English translation studies. They were all Iranians with Persian as their first language and had never been in an English speaking country.

## MATERIALS AND INSTRUMENTS

## Vocabulary Source

The book 504 Absolutely Essential Words was used to select the target and distracter words. Seventy words, 30 target and 40 distracter words, were selected from this book. Vocabulary selection was on the basis of three criteria: (1) there was a strong likelihood that the participants would not know the words, (2) the words were not easily recognizable cognates with Persian, and (3) the selected vocabulary were of varying syllable length.

## Reading Contexts

For each of the selected words, four contexts of one- or two-sentence length were designed by the researchers. Each word occurred only once and was highlighted in its respective contexts.

## Questionnaire

In an attempt to identify the participants' language background, a questionnaire was used. It was aimed at eliciting information about the participants' age, native language background, and residence in any English-speaking country. The questionnaires were distributed among all of the participants.

## Language Proficiency Test

In order to check the homogeneity of the participants in terms of language proficiency, Oxford Placement Test was administered to all of the participants.

## Pre-Test

Since the participants might not have the same background knowledge of the target words, a pre-test was administered to check the participants' prior knowledge. On this test, they were required to provide the Persian equivalents of the words.

## Immediate Post-Test

To measure vocabulary recognition, a post-test was used. This test measured the participants' receptive knowledge of the target words after the instruction. On this test, the definitions of all of the words were given, and the students were required to write the words matching them.

## Delayed Post-Test

After one week, the second post-test was administered. The delayed post-test was exactly the same as the immediate post-test.

## Procedure

Prior to the pre-testing phase, the participants were randomly assigned to two groups, G1 and G2. The whole study was conducted within six sessions spread over two weeks (the first five sessions occurred with one-day intervals). In the first session, all of the participants filled in the language background questionnaire. Following that, they took Oxford Placement Test for checking participant homogeneity. In the second session the participants completed the pretest.

The treatment was conducted within 2 sessions, sessions 3 and 4 . In the third session, half of the 30 target words and half of the distracter words were randomly selected for presentation. For G1, the words were shown on an overhead projector screen one by one alongside their definitions for half a minute. After watching each word, the students were given one minute to write an English sentence using the word shown. Then they moved to the next word. However, for G2 the words were embedded and highlighted in four short contexts. All they were required to do was to read each of the contexts within half a minute. In session 4 , the same treatment was conducted with the other half of the words. In session 5, the participants took the immediate post-test and in session 6 , one week after session 5, they took the delayed post-test.

## Data Analysis

For statistical analysis, SPSS 17 was used. Since the study was conducted on two independent groups, independent t -test was used for inferential analysis of the data.

## RESULTS

## Proficiency Homogeneity

Comparison of the mean scores of G1 (28.26) and G2 (27.91) on Oxford Placement Test indicated that there was not any significant difference between the groups' mean scores ( $\mathrm{t}=.292, \mathrm{p}=.771$ ). That is to say, the two groups were homogenous in terms of their general language proficiency knowledge prior to the main study.

## Pre-Test Performance

Comparison of the mean scores of G1 (10.04) and G2 (11.39) on the pre-test showed that in terms of initial knowledge of the target words the groups were not significantly different $(t=-1.188, \mathrm{p}=.240)$.

## Immediate Post-Test Performance

To examine whether the two groups differed on the immediate post-test, a comparison of G1 mean score (13.59)
and G2 mean score (10.24) was conducted. The results indicated that G1 significantly outperformed G2 on this test. The results are presented in Table 1.

Accordingly, the null hypothesis that there is no difference between sentence writing group (G1) and contextual reading group (G2) in terms of short-term receptive knowledge of the target words can be rejected.

Table 1: Comparison of Performance on the Immediate Post-Test

|  |  | Levene's Test for Equality of Variances |  | t-Test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | t | df | Sig. (2-Tailed) | Mean Difference | Std. Error Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
|  | Equal variances assumed |  | 2.357 | . 130 | 2.330 | 58 | . 023 | 3.350 | 1.438 | . 472 | 6.228 |
|  | Equal variances not assumed |  |  | 2.380 | 57.997 | . 021 | 3.350 | 1.408 | . 532 | 6.168 |

## Delayed Post-Test Performance

To probe the participants' retention of the target words over a week, G1's and G2's mean scores on the delayed post-test, 5.74 and 1.24 , respectively, were juxtaposed. According to the results, as given in Table 2, G1 performed highly better that G2 after a week. In fact, the difference was statistically significant. Thus, the null hypothesis that there is no difference between sentence writing group (G1) and contextual reading group (G2) in terms of the retention of the receptive knowledge of the target words can be rejected.

Table 2: Comparison of Performance on the Delayed Post-Test

|  |  | Levene's Test for Equality of Variances |  | t-Test for Equality of Means |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F | Sig. | T | Df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | $\mathbf{9 5 \%}$ Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| Delayed | Equal variances assumed |  | 2.603 | . 112 | 7.210 | 58 | . 000 | 4.498 | . 624 | 3.249 | 5.747 |
| Posttest | Equal variances not assumed |  |  | 7.003 | 47.086 | . 000 | 4.498 | . 642 | 3.206 | 5.790 |

To more clearly demonstrate the two groups' movement patterns across the testing sessions, the schematic representation of the data is given below (Figure 1):


Figure 1: Performance across the Testing Sessions

As Figure 1 shows, G1 outperformed G2 across all of the three testing sessions. Whereas G1 showed some progress form pre-test to post-test 1, G2 showed some decline. However, from post-test 1 to post-test 2, both G1 and G2 showed dramatic deterioration.

## DISCUSSIONS AND CONCLUSIONS

The purpose of this study was to examine the effect of sentence writing method and contextual reading method on second language vocabulary learning. As indicated by the results, sentence writing group outperformed contextual reading group one day and one week after the treatment. The findings, partly, run counter to those of Barcroft (2006) where he found that the sentence writing method had negatively affected second language vocabulary learning. However, the proficiency of the participants in these to studies can be considered as a variable differentially influencing the results. In fact, in Barcroft's (2006) the students were of low proficiency whereas in the current study the students were of higher level of proficiency.

However, the long-term findings of this study (i.e. those obtained one week after the treatment) must be dealt with cautiously as both groups showed a decline from the immediate to the delayed post-test. It is, in fact, evidence of both methods' insufficiency for long-term retention of the targeted materials.

Besides, the internal and external validity of this study are at risk. For one thing, the participants were not randomly selected; hence, the study is limited in terms of generalizability. Secondly, the inclusion of a control group was necessary to control maturity effect. This was not done owing to the limited number of the volunteers. Therefore, follow-up studies with more representative samples and more comparison groups in different contexts are highly warranted.

To put it in a nutshell, the present study provides clues for teachers in the hope that they will draw useful conclusions with respect to vocabulary teaching and learning in English as foreign language (EFL) contexts. This study encourages the use of sentence writing in order to learn and partially to recall new vocabularies though not to the exclusion of contextual reading. However, it can only be considered a preliminary comparison between two methods of teaching vocabulary. Considering its methodological shortcomings, in fact, it would be ambitious to claim that this study is complete. More studies of this kind are needed to draw significant conclusions about the advantages or drawbacks of using the sentence writing method in EFL classes.

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