

Using Word-Search-puzzle Games for Improving Vocabulary Knowledge of Iranian EFL Learners

Hossein Vossoughi

Islamic Azad University, North Tehran Branch

Marzieh Zargar

ABSTRACT: This study was an attempt to find out whether engaging in word-search-puzzle game affects vocabulary development of learners or not. The study was conducted on the intermediate female students at a language Institute in Semnan. To accomplish the purpose of the study, the researchers chose a sample of 100 subjects, which were reduced to 60 homogeneous students through the administration of a standardized Comprehensive English Language Test (CELT). Then, the subjects were bisected randomly into two thirty-student groups, one experimental and the other control. Then, subjects in both experimental and control groups were tested on a pre validated 45 multiple-choice items of vocabulary as a pretest in the first session. In the following 8 sessions, the subjects in the experimental group received word-search-puzzle game as treatment, while the subjects in the control group, received traditional vocabulary practice. At the end of the term, the same vocabulary test was administered to the subjects of both groups as the post test to check the effectiveness of the treatment. Then the means of the two groups were compared through a t- test. The result indicated that there was a statistically significant difference between the performances of the two groups. It was concluded that the subjects who received word-search-puzzle game on vocabulary, outperformed the control group.

Keywords: word-game, puzzle, vocabulary development

Words are the tools we use to think, to express ideas and feelings, and to learn about the world. Because words are the very foundation of learning, improving students' vocabulary knowledge has become an educational priority. Student word knowledge is strongly linked to academic accomplishment, because a rich vocabulary is essential to successful reading comprehension. Furthermore, the verbal sections of the high-stake standardized tests used in most states to gauge student performance are basically tests of vocabulary and reading comprehension. (Johnson & Johnson, 2004)

Thornbury (2002) states that lack of vocabulary knowledge impedes language comprehension and production. Michael (2006) similarly holds that knowledge of vocabulary is the most important factor in showing a learner's abilities in listening and speaking. Allen (1983) also states that in order to get native-like mastery over a language, learners must learn thousands of words. It can be concluded that that without words to express a wider range of meanings, communication in an L2 just cannot happen in any meaningful way (McCarthy, 1990).

Learning vocabulary has been considered a boring subject for a long time and the traditional way of learning vocabulary by mere copying and remembering has shown to be less than effective. Many experts of language teaching methodology also agree that playing games is a good way to learn vocabulary. Games are associated with a feeling of happiness. For this reason, most learners appreciate games and enjoy to participate in them even if they are not familiar with their rules.

Games can be found to give practice in all skills and components of language and can be used for different types of communication. To assess the effectiveness of learning vocabulary through games in the classroom, it is important to find out whether learners benefit from such experience. Moreover, it is crucial to see whether games can be effective in helping learners feel more comfortable and interested in the subject of vocabulary. (Huyen & Nga, 2003). Harmer (2001) explains that games give learners a feeling of competition to participate in the process of learning vocabulary and motivates them to repeat them with enthusiasm. He also maintains that games which depend on an information gap encourage learners to negotiate with a partner to solve a puzzle, draw a picture, and find similarities and differences between the pictures.

Word-search-puzzle game is one of many instructional games that reinforce word-level onto a grid and persuades the class to make suggestions for the puzzle clues. A simpler but still popular alternative word puzzle is the word-search. The object of word-search-puzzle is to find the listed hidden words. This game is good to review general vocabulary, without ever tiring the students. In most of the puzzles, there are at least 40 words. The words may be hidden in any direction: horizontally, vertically, diagonally, and forwards and backwards.

In learning a foreign language, vocabulary plays an important role. It is an element that links speaking, listening, reading, and writing all together. In order to communicate well in a foreign language, students should acquire an adequate number of words and should know how to use them accurately. Even though students realize the importance of vocabulary when learning language, most students encounter many difficulties and learn vocabulary passively due to several factors:

1. They consider the teacher's explanation for meaning or definition, pronunciation, spelling, and grammatical functions boring. In this case, language learners have nothing to do in a vocabulary learning section but to listen to their teacher.

2. Students only think of vocabulary learning as knowing the primary meaning of new words. Therefore, they ignore all other functions and usages of the words.

3. Students usually acquire new vocabulary only through their textbooks or when given by teachers during the classroom lessons. For example, learners find many new words in a text and then ask the teacher to explain their meaning and usage.

4. Many learners do not want to take risks in applying what they have learnt. Students may recognize a word in a written or spoken form and think that they already know the word, but they may not be able to use that word properly in different contexts or pronounce it correctly.

Although some valuable attempts have been made to improve the vocabulary development of EFL learners, the outcomes, have been unsatisfactory yet. It seems quite necessary to change the method of teaching vocabulary by using enjoyable games. Playing vocabulary games is one of the techniques which require students to dynamically participate in the classroom activities and thus communicate with their classmates using their own language.

Learning vocabulary through games is an effective and interesting way that can be applied in any EFL classroom and make the lessons more fascinating for the language learners. In order to check the effectiveness of games in teaching vocabulary the following research question seem pertinent to be addressed:

"Does the use of word-search-puzzle game have any significant effect on vocabulary development of intermediate EFL learners?"

Method

Participants

The participants of the study were initially 100 female Iranian EFL students. They were all native speakers of Farsi with the age range of 18 to 25 and were studying English in an English institute in Semnan.

Instrumentation

Two instruments were used in this study. The first instrument was a standard CELT which was used to assure the homogeneity of the subjects. The second test was a standardized teacher-made vocabulary test consisting of 45 multiple-choice items, administered to evaluate the dependent variable of vocabulary knowledge at the beginning and at the end of the study.

Procedure

The procedure of the study can be summarized into several steps. As a preliminary step, a standard proficiency test (CELT), was administered to 100 students who were studying at a language institute in Semnan and 60 students were chosen to participate in the main study. The researcher divided the subjects into two groups namely a control group and an experimental group.

The next step was to pilot a multiple-choice test of vocabulary. For this reason, the test was administered to a similar group of 20 students in the same language institute. Then, based on the scores obtained, item facility, item discrimination, and choice distribution were calculated and some of the items were revised or omitted. The final version with 45 items was subjected to the KR-21 formula and the reliability estimate ($r = 0.91$) came out to be more than satisfactory. This test was administered to the participants of the study both as the pre-test and the posttest.

The instruction in both groups lasted for 8 sessions. The textbook of this course was *New Interchange, Intermediate*. The students of the experimental group received word-search-puzzle game instruction to practice and review their vocabularies for 25 minutes at the end of each session. The object of the word-search-puzzle game was to find and circle all of the words hidden in the grid, the list of the hidden words was provided by the researcher in advance. The words had been placed horizontally, vertically, or diagonally and sometimes they had been written backwards. Furthermore, three secret synonyms of green words were hidden in each word search, the secret synonyms were created by the letters which had been placed horizontally and were not used in any word within the puzzle. In this game, any student who could find the hidden words sooner and correct secret synonyms would win.

In the control group, however, the students received the usual training based on the procedures suggested in the *Teachers' Book of New Interchange*, and worked with the vocabulary and grammar through contexts and exercises.

Finally after the treatment the same vocabulary test was administered as the posttest to the experimental and control groups. To examine whether there was a statistically significant difference between the two groups, a t-test was run.

Results

In order to verify the homogeneity of the two groups in terms of their language proficiency, a CELT test including structure, vocabulary, and reading sections was administered at the onset of the study. Those participants who scored within the range of one standard deviation above

and below the mean were selected for the main study. The results are illustrated in Table 1.

Table 1. Descriptive Statistics for the CELT Test

Test	N	Minimum	Maximum	Mean	SD
CELT	100	63	155	104.33	22.715

As the table indicates, the minimum of scores obtained was 63 and the maximum 155. Subjects whose scores were within the range of 82-127 were chosen as homogenous participants of the study and the others were excluded. After administering the pre-test, the mean score of the experimental and control groups were 26.30, and 27.70 and their standard deviations were 4.963 and 4.692 respectively (Table 2).

Table 2. Descriptive Statistics of the Vocabulary Pretests

Test	N	Mean	SD
Experimental Group	30	26.30	4.963
Control Group	30	27.70	4.692

Accordingly, a t-test was run to detect possible differences between the means of the two groups. The results of the t-test are presented below in Table 3.

Table 3. Comparing Means of the Vocabulary Pretests

t-test for Equality of Means							Levene's Test for Equality of Variances			
95% Confidence Interval of the Difference	Std. Error Difference	Mean Difference	Sig. (2-tailed)	df	t	Sig.	F	Equal variances assumed	Score in Pre-Test	
3.896	-1.096	1.247	.266	58	1.123	.728	.122	Equal variances assumed		
3.896	-1.096	1.247	.266	57.8	1.123			Equal variances not assumed		

Since the significance level of .728 is far greater than .05, it was concluded that the two groups were at the same level of vocabulary knowledge before the treatment. After the treatment the means of the two groups on the vocabulary posttest were compared through another t-test. As it is presented in Table 4, the significance level of 0.012 shows that the

mean difference of the two groups (2.967) is significant with about 99% confidence

Table 4. Comparing Means of the Vocabulary Posttests

t-test for Equality of Means						Levene's Test for Equality of Variances				
95% Confidence Interval of the Difference		Std. Error Difference	Mean Difference	Sig. (2-tailed)	df	t	Sig.	F		
-680	-5.253	1.142	-2.967	.012	58	-2.597	.000	38.750	Equal variances assumed	Score in Post-Test
-658	-5.276	1.142	-2.967	.013	39.739	-2.597			Equal variances not assumed	

Discussion

The main concern of this study was to test the assumption whether word-search-puzzle games can bring about any difference on the improvement of vocabulary knowledge of intermediate EFL learners. The current investigation has provided support for the value of games as effective teaching tools, and the use of word-search-puzzle game as evidenced by the significant differences found between the learners in the control and experimental groups. Better performance of the experimental group may have been due to the unique characteristics of games. It is fun to play games in classroom and at same time learn vocabulary. Games can change the atmosphere of the class, add excitement to the learning environment, and create a naturalistic setting for language learning. Learners in the process of playing games have the opportunity to use language in order to convey meaning and use their knowledge to do something. Games have the advantage of creating active participatory learning as well.

Conclusion

The finding of this study shows that games can afford a valuable technique in language classroom for students at intermediate level and hence can be used to facilitate the process of vocabulary learning. The exciting nature of playing games can facilitate the vocabulary learning process. Language games are suitable evaluation tools in the hands of teachers. They quickly reveal the depth of students understanding and reinforce their previous knowledge. The teacher needs to argue that, through games, learners are given opportunities to meet and explore new vocabulary without direct teacher assistance. In this case, the results are

especially of great value to teachers in Iran who despite devoting much time to vocabulary teaching encounter various problems in teaching vocabulary to the learners. The finding of this study may also help syllabus designers and textbook writers to embody sections related to pedagogical games in the materials they develop.

The Authors

Hossein Vossoughi is a full professor in general and applied linguistics who retired from the University for Teacher Education in 1386. Currently he is a full time member of the faculty staff at Islamic Azad University, North Tehran Branch.

Marzieh Zargar got her M.A. in teaching English as a foreign language in Feb. 2009 from Islamic Azad University, Garmsar branch, and she is teaching general English at Air Kish Institute in Semnan.

References

- Allen, V. F., (1983). *Techniques in teaching vocabulary*. New York: Oxford University Press.
- Diamond, L. & Gutlohn, L., (2006). *Vocabulary handbook*, Consortium on Reading excellence, Inc. Retrieved on December, 2008 from <http://www.ldonline.org/article/9943?theme=print>
- Harmer, J., (2001). *The practice of English language teaching*. UK: Longman Publications.
- Huyen, T. T. N. & Nga, T. T. K. (2003). The effectiveness of learning vocabulary through games. *Asian EFL Journal*. ?
- Johnson, C. & Johnson, D., (2004). *The importance of vocabulary development*. Educators Publishing Service. Retrieved on November, 2008 from <http://www.epsbooks.com>
- McCarthy, M., (1990). *Vocabulary*. Oxford: Oxford University Press.
- Graves, M. F., (2006). *The vocabulary book: Learning & instruction*. New York: Teachers College Press, pp. 2-3.
- Thornbury, S., (2002). *How to teach vocabulary*, UK: Longman.
- Ward S. M., (2004). *Vocabulary in Beginning Reading*, Retrieved on December, 2008 from http://reading.uoregon.edu/voc/voc_features.php