

The Effect of Using NetSupport School Software on Iranian Intermediate EFL learners' Vocabulary Retention and Reading Comprehension

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Abstract

The current study aims at examining the effect of employing NetSupport School program as Local Area Network software on Iranian intermediate EFL learners' vocabulary retention and reading comprehension. So, sixty female learners as students of high school after a proficiency test were selected as the participants of this study, and were divided into two groups of experimental and control. The experimental group received the treatment which included the use of NetSupport School on a Local Area Network platform, over four-month-period. The control group was taught the same syllabus on the printed texts as placebo. The data analysis of the pre-test and the post-test demonstrated that the students' retention of words in experimental group was enhanced by LAN-based teaching of vocabularies, while it was not so in the control group. A t-test analysis was done as the means of statistical analysis. Moreover, the results of the reading test exhibited that LAN-based teaching of vocabularies could change the passive vocabulary knowledge of the experimental group into an active one.

Keywords: Vocabulary Retention, Reading Comprehension, NetSupport School Software, Local Area Network, EFL learners

I. INTRODUCTION

According to Virginia French Allen (1983), most of the experienced teachers of English as a second or foreign language know very well how important vocabulary is. Nowadays researchers have used different technologies such as computers and smart devices to teach vocabulary. Lu (2010) stated that current development in information technologies has resulted in rapid advances in the application of instructional and educational technology. One pedagogical method involving technology that has gained interest and attention of many

researchers is introducing new words with computer vocabulary teaching programs or software.

In a guide to using computers in language teaching, Szendeffy (2005) argues that computers provide students and teachers with great access and integration of material than tape recorders or videocassettes. Although the notion of face-to-face classroom instruction is still very prevalent in many organizational and educational settings, with a steady increase rather than a decrease, there is a rush and enthusiasm for computer-based learning. The global popularity of the computer over the past decade has brought about innovative uses of the computer in education and in foreign language learning and teaching (Belz & Kinginger, 2003; Blattner & Fiori, 2009). Several researchers reported the positive effects of using technology on student motivation. In addition to other benefits of computers, affective sides of CALL like learning style, motivation, personality and other factors have been under question with the use of computers in language classes (Genç & Aydın, 2010). Learning autonomy in CALL is complex and certainly dependent on factors that reach far beyond the technology itself (Glenn, 2012). Although there were some innovative uses of software, which contain drills, practice and exercises. As the technology advanced, we began to see more interactive uses of CALL as well as an increase in the integration of various media into the computer system (Pusack & Otto, 1990).

Vocabulary teaching is generally restricted on presenting new items as they appear in any activity without preparing the learners through activation of prior knowledge or helping them regularly revise the previously learned vocabulary items until they are thoroughly learnt (Kilickaya & Krajka, 2010). To overcome this limitation and to provide better opportunities for learners and teachers, computer and internet have been put into use in the foreign language instruction. Current development in information technologies has resulted in rapid advances in the application of instructional and educational technology. One pedagogical method involving technology that has gained interest and attention of many researchers is introducing new words with computer vocabulary teaching programs or software (Lu, 2010).

Most of the time learners may learn the vocabulary but forget it easily. Tricia Hedge (2008) believes “despite the traditional neglect, recent years have seen a greater awareness of the questions which need to be addressed with regard to vocabulary learning by researchers, materials designers, and teachers. An agenda of issues might well contain the following: What strategies do learners use to acquire new words or to retain them?” Now the questions are: What are some good ways to find out how much vocabulary students actually have learned? How can we improve the retention of vocabulary? How can we encourage students to take more responsibility for their own?

Since gender may have some effects on the quality of vocabulary learning and retention, other questions that might arise include: Do male and female learners differ in improving their vocabulary learning and retention? Do male and female learners differ in taking more responsibility for their own vocabulary learning and retaining? This study had a main question: Does using NetuSupport School Software by intermediate EFL learners have

a significant effect on the learners' vocabulary retention and reading comprehension? According to the provided research question the following null-hypothesis was indicated: Using NetuSupport School Software by intermediate EFL learners does not have a significant effect on the learners' vocabulary retention and reading comprehension.

II. METHODOLOGY

A. Subjects

63 high school learners initially participated in this experiment but after selection, they became 60. The participants were Iranian female students in grade two, high school with the age range of 17 to 18. The participation was voluntary and they had already passed English book one. They had the same linguistic knowledge basically.

B. Instruments

For the purpose of the study and to investigate the hypothesis, several instruments were utilized. A Proficiency test was employed as one of the important instruments which are used in almost all investigations concerning to FL learning. By using a proficiency test, the result was based on the score 12 and above, so the two groups were homogeneous in terms of their FL proficiency.

The proficiency test comprised of 50 items to measure their knowledge in general English. It was objective test with 50 multiple choice questions. So students randomly divided for two experimental and control groups.

All the multiple-choice questions had the same format; one correct answer and three distracters. It was tried, order and form was not in the predictable way. The pre-test (proficiency test) was also used as the post-test to avoid any inequality between them. The allotted time for each test was 40 minutes. All the pre-test and post-test questions was standard vocabulary tests. The pre-test (proficiency test) and the post-test were the same.

C. Design

The selected design of this study was a pretest-posttest quasi-experimental in which the intact participants, according to the results of a test of homogeneity, were randomly assigned to two groups. In this design, the experimental group received the treatment or intervention while the control group treated similar to experimental group but in different platform. Therefore, the schematic presentation for the study design was as following:

Control Group (CG):	T1		T2
Experimental Group (EG):	T1	X	T2

Where: T1 is the pre-test, T2 is the post-test and X represents the treatment.

D. Procedure

A Cambridge ESOL Preliminary English Test (PET) was administered to the participants to determine homogeneity of them with 60 English learners in Khaf High school. By using proficiency test (Cambridge ESOL Preliminary English Test the result was base on 12 score and above, so the two groups it is certainly were homogeneous in term of their FL proficiency. After the result indicated no significance differences between two groups, so one of them assign as control group and the other as experimental group.

The study was carried out in Spring 2013 for 20 sessions (each group had 10 sessions). The students in the control group were taught new words from the printed pages during ten sessions in a formal classroom, while the other group (experimental) was taught new words by NetSupport School. The two groups followed the same aim and scope of the course and they were taught by the same teacher.

The experimental group received their software learned how to use it. This instruction session lasted an hour and the entire students answered the questions. This treatment lasted 4 months. In the last session both group had the post-test.

The researchers administered the pretest as the posttest to find the effects of the treatment during the study. Both groups were tested in papers.

The researcher applied SPSS version 21 (SPSS Inc., 2012) to analyze the data. To see whether using NetSupport School has any significant effect on Iranian intermediate EFL learners' vocabulary retention and reading comprehension, the quantitative data was analyzed. First, the researchers applied descriptive statistics of the data. Then, for determining the statistical significance of the difference between means of the pretest and the posttest scores of both groups, two t-tests were estimated.

E. Data Analysis

This study was an experimental one, so it was needed to use statistical tools to analyze the data. To analyze the data, the researcher used SPSS using t-test to compare the mean scores and test the null hypothesis of the study.

III. RESULTS

Two groups were selected randomly as experimental and control groups. For groups to be comparable and for an experiment like this to be meaningful, the experimental and control groups should show no significance difference in knowledge at the pre-test.

What this means for the present study experiment was that the two groups had to have same level of knowledge in English vocabulary at the beginning. This way, it was possible to compare the two groups at the end of experiment, see if different kinds of treatments had entailed different test result, and consequently different degrees of vocabulary retention and reading comprehension.

In order to make sure that the participants in both control and experimental groups were at the same proficiency level at the beginning of study concerning the vocabulary domination, a 20-item test in vocabulary was used. As shown in Table 1, the difference between the mean score on the pre-test and significance level 0.757 were not statistically significant. This suggests that students in the two groups were justly homogeneous in vocabulary knowledge at the beginning of the study.

Table 1: Independent T-test based on Pre-test for Experimental and Control Group

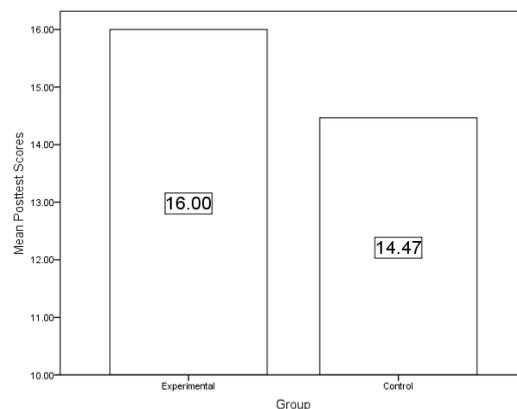
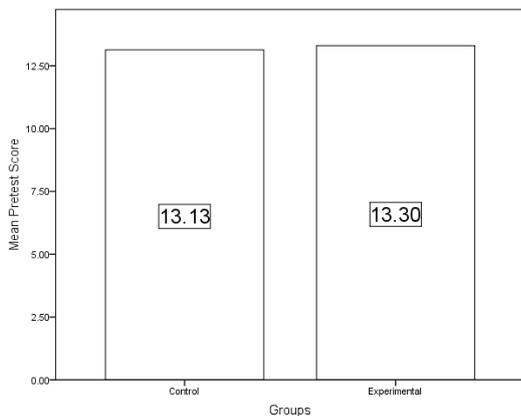
		Group Statistics									
		Groups	N	Mean	Std. Deviation	Std. Error Mean					
Pretest Score	Control		30	13.1333	1.96053	.35794					
	Experimental		30	13.3000	2.18380	.39870					
		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Pretest Score	Equal variances assumed	.358	.552	-.311	58	.757	-.16667	.53581	-1.23920	.90587	
	Equal variances not assumed			-.311	57.338	.757	-.16667	.53581	-1.23946	.90613	

As can be seen in Table 2, the mean improvement of post-test for the control group was 14.46 and that of the experimental group was 16.00 and significance level was .024. This means that NetSupport School had a positive effect on vocabulary retention and reading comprehension, so the null hypothesis was rejected.

Table 2: Independent t-test based on post-test for experimental and control group

	Group	N	Mean	Std. Deviation	Std. Error Mean
Posttest Score	Experimental	30	16.0000	1.92980	.35233
	Control	30	14.4667	3.05956	.55860

		Levene's Test for		t-test for Equality of Means				95% Confidence		
		Equality of						Interval of the		
		Variances						Difference		
		F	Sig.	T	Df	Sig. (2-	Mean	Std. Error		
						tailed)	Difference	Difference	Lower	Upper
Posttest	Equal variances assumed	3.728	.058	2.322	58	.024	1.53333	.66043	.21134	2.85533
	Equal variances not assumed			2.322	48.922	.024	1.53333	.66043	.20609	2.86057



IV. CONCLUSION

According to the result of this study, LAN-based instruction through NetSupport School can enhance and improve the vocabulary retention and reading comprehension between EFL students. As the results of this study indicate, the students who were taught by NetSupport School software significantly performed better than students who were taught by the traditional printed text.

Result of this study showed the LAN-based software specially NetSupport School has a positive effect on learning vocabulary. This study showed that computer software can enhance the students' vocabulary retention and reading comprehension, so it can enhance the other aspects of language too. Using LAN in the instruction of other parts of language can have the same result.

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