Effects of Strategy Instruction and Focused Activities for Students

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Abstract

This study investigated the impact of electronic learning (E-learning) on vocabulary learning by Iranian EFL Learners. Out of 80 intermediate English learners at Daneshpajouhan Higher Education Institute in Isfahan, 61 were selected based on the Oxford Placement Test (OPT). An experimental-control group method was used. The experimental group was taught in E-learning for seven sessions using techniques like Computer Aided Vocabulary Learning (CAVL) through Wordwazir software; the control group was taught via traditional method (i.e. word definitions…). The instruments included the same test used as pre and post-test and a delayed post-test consisting of 40 English words based on the students' textbook. Independent and paired samples t-tests and one way ANOVA were used. The results showed that E-learning enhances EFL learners' vocabulary achievement.

Keywords: *E-learning, Computer Aided Vocabulary Learning (CAVL)*

1. Introduction

Vocabulary is the building block of language learning and without an adequate knowledge of vocabulary; students have difficulty performing the tasks required. According to Richards and Renandya (2002), vocabulary is a core component of language proficiency, and provides much of the basis for how well learners speak, listen, read, and write. Zhang (2009) concerning English, states that the effective learning of new lexical items seems to be one of the major aims for learners of English. Decarrico (2001) points out that vocabulary learning is central to language acquisition whether it is a second, or a foreign language. Even in a learner's mother tongue, there is an incessant learning of new words.

Technological advancement and widespread access to computers and electronic devices have rather changed different aspects of language learning and teaching in general and vocabulary learning and teaching in specific. Therefore, a paradigm shift is needed to alter the education, training, and preparation of the current generation of learners (Oblinger, 2005). Printed books can no longer be the primary means for preparing our students for the 21st century. Until quite recently, computer-assisted language learning (CALL) was a topic of relevance mostly to those with a special interest in that area. Recently, though, computers have become so widespread in schools and homes and their uses have expanded so dramatically that the majority of language teachers must now begin to think about the implications of computers for language learning. Using computers provides a number of advantages for language learning (Warschauer, 1996):

1. Repeated exposure to the same material is beneficial to learning.
2. A computer can present materials on an individualized basis, allowing students to proceed at their own pace.
3. The process of finding the right answer involves a fair amount of student choice, control, and interaction.
4. The computer can create a realistic learning environment, since listening can be combined with seeing, just as in the real world.
5. Multimedia and hypermedia technologies allow a variety of media to be accessed on a single machine. Hence, skills are easily integrated, since the variety of media makes it natural to combine reading, writing, speaking and listening in a single activity.
6. Internet technology facilitates communications among the teacher and the language learners.

1.1. Vocabulary Instruction

Since students mostly point to the lack of vocabulary as their primary problem in second language learning, the recognition of the importance of vocabulary in language learning by many researchers has propelled the search for effective pedagogical methods of teaching new words. One pedagogical method that has gained the interest of many researchers is introducing new words through a meaningful context. Shrum and Glisan (1994) provided many pedagogical methods for foreign language learning. They expressed the view that new vocabulary should be

IJISET - International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 4, April 2015.

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ISSN 2348 – 7968

introduced in a context using familiar vocabulary and grammar.

Indirect & Direct Vocabulary Learning Many researchers advocated implicit or indirect vocabulary learning; for example, Coady (1993) and Meara (2005) claimed that vocabulary acquisition in the reading context has become prominent currently for both foreign and second language learners. However, incidental vocabulary acquisition has many deficiencies, such as being time-consuming, and making it an unpredictable process. In other words, production and formal recognition depend on implicit learning, while meaning relies on explicit and conscious processes. Since the emergence of computers in education, the research scope for effective methods of teaching and learning vocabulary has extended to the use of computers in the form of Computer Assisted Language Learning (CALL). (CALL) is the use of the computers to assist in language learning. It is commonly used to refer to tutoring applications such as drill and practice, tutorials, simulations, and games (Rieber, 1994).

1.2. E-learning

The origin of the term electronic learning or E-learning is not certain, although it is suggested that the term most likely originated during the 1980's. While some authors explicitly define E-learning, others imply a specific definition or view of E- learning in their article. These definitions materialize, some through conflicting views of other definitions, and some just by simply comparing defining characteristics with other existing terms.

Synchronous E-learning: This type of E-learning requires learners and instructors to communicate online at the same time from different places. This type needs modern equipment and good network connection. However, it has the advantage of immediate feedback and live online interaction. Some examples of the synchronous E-learning are video conferencing, audio conferencing and chat rooms.

Asynchronous E-learning: This type of E-learning does not require students and teachers to be online at the same time. Sussman (2006) believes that the advantage of asynchronous E-learning is that the student can choose the suitable time for him to access what he needs, and will allow him to do his learning at his own pace. On the other hand, with this type of E-learning students will be unable to get immediate feedback from the instructor. But as yet in both types of E-learning the students need to be motivated for learning in order to overcome the negative effects of the separation from one another and from their instructor (Ellis, 2004).

The results indicated that CALL produced better results in contextualized vocabulary learning, plus better pronunciation. Hassan (2010) conducted a research on the effect of CAVL software called "Arab CAVL" on students' vocabulary acquisition. It was hypothesized that students who use the Arab CAVL software in blended learning environment will surpass students who use traditional vocabulary learning strategies in face-to-face learning environment even though both groups were using the same framework for introducing vocabulary. The results of the treatment group exposed to Arab CAVL software were clearly higher than those of the control group. Finally, the results supported the previously mentioned hypothesis, and it was shown that students had a positive attitude toward the software. Two of the most recent researchers on the topic under question are Tehrani and Tabatabaei (2012) who investigated the impact of blended online and face-to-face classroom on Iranian EFL learners' vocabulary knowledge.

Finally, as the literature review revealed, not many studies to date have conducted a comparative study measuring the degree to which gender differences affect e-learning. The final and ultimate goal of this study was therefore to make an attempt to contribute and fill this gap.

2. Methodology

2.1. Participants

The participants of the present study were a total of 61(29 males and 32 females) out of 80 learners who initially participated in this experiment. They were intermediate level English language learners enrolled for studying English in EFL department at Daneshpajouhan Higher Education Institute, Isfahan, Iran. Their age range was between 19 and 28 years. The two groups of the study and their participants were then arranged; using stratified random sampling to assure the same proportion regarding their gender, in the following way: 1. Quasi-experimental group, QEG, or group A, that had to receive instruction based on E-learning method. There were initially (31) students in this group, (16) female students and (15) male students who started the experiment. But during the experiment (4) students (2 males & 2 females) were dropped out. The total number of participants who finished the course were then (27) students (13 males & 14 female). 2. Control group, CG, or group B, that had to receive the usual treatment which was the traditional learning method. There were initially (30) students in this group, (16) female students and (14) male students who started the study. But during the experiment (4) students (1 male & 3 females) were dropped out. The total number of participants who finished the course were then (26) students (13 males & 13 female).

IJISET - International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 4, April 2015.

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2.2. Materials and Instruments

The materials and instruments utilized in this study included an Oxford Placement Test (OPT), a pre-test, a post-test and a delayed post-test consisting of 40 new English words, a typical computer with internet access, CAVL Software named WordWazir with 40 preplanned new English words based on the students' textbook, which are described in the following sections.

2.3. Procedures for Data Collection

The first step was then to establish the homogeneity of the participants, so they were chosen from among the learner population who were able to pass the Oxford Placement Test (OPT) with a score higher than 40-60 out of 100. The 61 final participants were those whose scores were within the aforementioned range. The second step was to make sure of students' unfamiliarity with the to-be-learned words and to eradicate possible students' background knowledge so a test of vocabulary was utilized prior to the experiment.

A vocabulary test serving as pre-test, post-test, and delayed post-test was constructed by the researcher based on the students' textbook (Let's Speak). The collected data were coded into computer by means of the Statistical Package for Social Sciences (SPSS) version number 20.

3. Results

The obtained data of the OPT were calculated and analyzed, the result of which appear in the table below As it is shown in table 1, there was no statistically significant difference between the mean scores of QEG and CG groups (the mean score for experimental group is 48.4444 and that for control group is 48.8462 that is a difference of .4018 which is not a significant difference). As it is shown in this table the t-observed is -.327 which is lower than the t-critical from the table of t-scores, so it can safely be claimed that the two groups are homogeneous in terms of their proficiency level. As a result, the study went on safely with these two groups.

3.1. Investigating the first Hypothesis

The first hypothesis was that electronic learning affects vocabulary recall among intermediate learners instructed through electronic learning compared to learners instructed via traditional method. Therefore, the following steps were taken in order to test the hypothesis.

3.2. Investigating the second Hypothesis

In the present study, the second hypothesis stated that electronic learning has no effect on the intermediate level EFL learners' long term vocabulary recall enhancement. To test this hypothesis, the participants of the QEG were asked to take the delayed post-test. The test was the same test as their pre and post-test with the same item arrangement as the pretest which the students took two weeks after the treatment.

As Table 1 & Table 2 shows, in column called "mean differences", there are some asterisks next to the values listed. Asterisks show that the four groups being compared are significantly different from one another at p level. The exact significant value is given in the column labeled sig. In the results presented above, sub-group 1 or females QEG which received instruction through E-learning, is statistically and significantly different from sub-groups 3 and 4 (.000). That is, females QEG sub-group outperformed females CG and males CG both receiving traditional method of vocabulary learning. Group1 (females QEG) has also surpassed sub-group 2 (males QEG) which received the same treatment (E-learning), but the difference was not significant (219).

Table 1. Descriptive Statistics for the Mean Comparison of the OPT between QEG and CG

VAR000	VAR000				
	02	N	Mean	Std. Deviation	Std. Error Mean
VAR000	1	27	48.444	5.18380	.99762
	2	26	48.8462	3.58544	.70316

1= Quasi-experimental group, QEG, or group A; 2= Control group, CG, or group B

These results of Table 1 & Table 2 tell us that even though females in QEG performed better on post-test than all other groups, since the difference was not statistically significant comparing to that of males in both groups, we cannot reject the hypothesis. To put it in other words, we have to accept the null hypothesis expressing that gender has no meaningful effect on vocabulary acquisition through E-learning. That means that E-learning is an effective way for improving vocabulary achievement regardless of gender and that E-learning is not gender specific.

Thus, it can be concluded that there was no meaningful interaction between gender and E-learning and that the observed difference may or may not occur in other similar situations.

IJISET - International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 4, April 2015.

www.ijiset.com

ISSN 2348 – 7968

Table 2. Results of the Independent Samples Test of the OPT between QEG and CG.

	Levine's Test for Equality of Variance		T-test for Equality of Means						
	F	Sig	T	Df	Sig(2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence interval of the Diff.	
								Lower	Upper
	-	-	-	-	-	-	-		
Equal variances assumed	4.364	.042	-.327	51	.745	-.40171	1.22884	-2.86871	2.06529
Equal variances not assumed	-	-	-.329	46.353	.744	-.40171	1.22053	-2.85800	2.05458

Independent Samples Test

DISCUSSION & CONCLUSIONS

This study aimed at investigating the impact of E-learning and traditional learning on the teaching and learning of new English words among Iranian intermediate EFL students. To this end, two classes of EFL Iranian male and female students at the intermediate level enrolling to continue their language learning course at Daneshpajouhan Language Institute, Isfahan were selected as the experimental (n=27) and control groups (n=26). In order to answer the second question of the study the same test as the pre-test was used as the delayed post-test. Finally the post-test results of all the participants of the study were analyzed via appropriate statistical procedures to arrive at conclusions regarding the purpose of the study. According to the data gained from this study it is obviously clear that E-learning has a significant effect on the vocabulary achievement of the Iranian intermediate EFL learners. Given its many benefits and advantages e-learning is considered among the best methods of education. These benefits have been referred to by a number of researchers (Al-Musa & Al-Mobark, 2005; Akkoyuklu & Soylu, 2006; and Hameed, Badii & Cullen, 2008). The results of the study also indicated that though both methods enhanced vocabulary development of the learners from the pretest to the posttest, the experimental group seemed to be better than the control group. That is, the experimental group students had significantly better vocabulary gain scores than the control group students at the end of the study. A positive point which is worth mentioning is that during the instruction period, students themselves found that they benefited from this method.

This conclusion is in line with some previous research about the effect of E-Learning method which had a significant positive impact on students' achievement. The results are also in harmony with those gained by Son (2001) and Kawauchi (2005) which support the outcome of this study as in their study CALL-based vocabulary learning was effective for the students of the lower level. The findings of the study at hand; however, are against some other studies that do not show a meaningful difference for E-learning such as (Al-Zahrani, 2002; Al-Mubarak, 2004). Moreover, Kaya (2006) also found that there are no significant differences between electronic method, conventional and blended approaches with regards to the effect of them on the students' outcome. Regarding the effectiveness of the E-learning programs on vocabulary achievement of the students, the outcomes s of this study is also in harmony with that of Hassan (2010) who concluded that the results of the treatment group exposed to Arab CAVL software were clearly higher than those of the control group. Finally, it was shown that students had a positive attitude toward the software. Tehrani and Tabatabaei (2012) investigating the impact of blended online and face-to-face classroom on Iranian EFL learners' vocabulary knowledge, also concluded that blended learning provided more authentic and real-life language contexts for learners when it is compared with traditional and paper-based learning situations. Moreover, these situations provided enthusiasm and excitement for learners. Based on the

results of the dependent t-test administered on the results of post and delayed post-test, it was concluded that long-term memory is enhanced by the E-learning. This result is parallel with what the other researchers in the field gained as a case in this point. However, these findings are not totally on the contrary to that of Iheanacho (1997) who explored the effects of two multimedia CALL programs on vocabulary acquisition. The results yielded no treatment effects. The study conducted by Ghabanchi and Anbarestani (2008) further supports the outcome of this study as in their study the results indicated that in using CALL program, learners have an intensive mental processing which results in long term recall of words.

There were a number of reasons for the greater effectiveness of E-learning for vocabulary retention. The CAVL software provided learners with opportunities to encounter vocabulary repeatedly.

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