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Procedia - Social and Behavioral Sciences 98 (2014) 286 – 291

**Procedia**  
Social and Behavioral Sciences

International Conference on Current Trends in ELT

# The Impact of Online Games on Learning English Vocabulary by Iranian (Low-intermediate) EFL Learners

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## Abstract

The present study reports the usefulness of online games in vocabulary learning of Iranian EFL students. The participants, (24) low-intermediate EFL learners, were randomly assigned to experimental and control groups. The experimental group learnt some new words via online computer games in 15 weeks. A vocabulary-based test, acting as pre-test and posttest, was conducted in the first and 15th weeks. The findings of the analyzed data indicated that the experimental group outperformed the control group statistically significant in the post-test. Therefore, on line games proved to be more effective in learning English vocabulary for these students.

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Selection and peer-review under responsibility of Urmia University, Iran.

*Keywords:* English vocabulary; online games; internet technology; computer games; low-intermediate

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## 1. Introduction

Vocabulary is the core of any language. Several studies have paid special attention to vocabulary, and a variety of methods and strategies have been examined by different scholars who seek to propose an appropriate way to facilitate vocabulary acquisition. Vocabulary acquisition sounds to occur in a relaxed, motivating, and enjoyable environment where learners concentrate on the new word and its contextual usage. Several factors may be critical in creating an environment with similar enjoyable features, e.g. games, drawings, humorous behaviors, materials and

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illustrations. Recently with the emergence of new computerized and net-based technologies such as the internet learners have access to online games. Learners can easily connect to the internet and sign into specific kinds of net games in order to participate actively in interactive games. Computers are used in almost every field of life, and the internet has become an important information source. While adults may not be willing to employ computers at home or in their work, the use of computers and the internet and its multimedia capacity are natural for children. This is why schools should employ them as often as possible to increase their learners' achievement (Sütüheó, 2004). Thus, the main purpose of the current study is to explore the effects of online games on vocabulary learning among EFL intermediate learners.

### *1.1. Statement of the problem*

Vocabulary is the basis of any language to be learned. How to instruct new words to the learners is of a great significance in the field of English Language Teaching (ELT). One of such tools is games in general and online games in particular. The current study aims to find answers to the following question:

Do online games significantly affect learning of English vocabulary by Iranian EFL learners?

To achieve the statistical answer to the research question the null hypothesis is stated as: Online games do not significantly affect learning of English vocabulary by Iranian EFL learners.

## **2. Literature Review**

Regarding language teaching and learning process, as Gee (2005), believes, games are understood as conceptual models working across formal and informal learning contexts. In language teaching, according to Warschauer and Healey (1998, as cited in Sørensen & Meyer, 2007), games have often been utilized to increase motivation and authentic communicative practices, since games have been conceptualized as an enjoyable factor in language learning. They create a fun environment in which learners and even the teacher become more interested in learning and teaching process. In addition to this, games have been found as a serious and pervasive element for providing stimulation and simulation in educational settings. In informal contexts, games have often been related with the leisure activities of children since gaming is a key activity in children's off school practices and most interactive games provide learners with communicative activities as they play games. Thus, the game players will be using the language and accordingly learn it in order to participate in games (Sørensen & Meyer 2007). Interactivity in gaming means as communication patterns in conversation, consultation, transmission and registration. These understandings partly are compatible with communicative and socio-cognitive approaches to language and language learning, i.e. the prioritization of negotiation and communicative ability, which is supported by Warschauer and Kern (2000), and Warschauer and Healey (1998). In off school contexts, according to Sørensen & Audon (2004), and Warschauer (2004) children usually understand and utilize languages as a communicative tool, gathering information and gaming, whereas in schools the understanding and use of languages is often understood to be the purpose of doing the tasks. Wu, Yen, and Marek (2011) investigated the effects of online EFL interaction on confidence, motivation, and ability suggesting enjoyment as a key factor in increasing these learning variables. This is also intuitive, since learners who are bored or who do not see the value in a course will not apply the lesson themselves. Because learner-centered active learning increases enjoyment, EFL teachers need to include such tools in their lesson plan. Teachers should try to provide their learners with fruitful interactions with native speakers, or skilled speakers of English from a variety of cultures, on interesting topics. Such beneficial, and therefore fun, interactions increase learners' motivation leading to improved ability and confidence. The real benefit of such tool is not only making students more enthusiastic to take part in such activities, but rather increasing their confidence in every kind of English interaction, and also promoting their English ability. Any type of communication in the target language or with the target culture will ultimately improve the learners' confidence, motivation, and ability.

Ke (2009) in their study entitled "a qualitative meta-analysis of computer games as learning tools" concluded that the most effective models or practices of designing and utilizing instructional gaming would be resulted by carefully regulating and integrating the three clusters of critical variables such as learning, learner, and instructional game design.

Yolageldili and Arikan (2011) explored the effectiveness of using games in teaching grammar to young learners. Teachers view games as a crucial and significant part of English language teaching and learning in the context of primary schools' English lessons since they provide EFL teachers with many educational benefits. Games are effective in directing young learners' energy into language learning because young learners prefer to be physically active; also, they are imaginative and creative and learn subconsciously. Therefore, teaching young learners needs a particular endeavor and challenge by the teacher and games are one of the most effective ways to achieve this. However, to achieve games' purpose, teachers should take into consideration some factors like deciding on which game to utilize and the time to use the game in their classes (Yolageldili & Arikan 2011).

Yip and Kwan (2006) in their study entitled "Online vocabulary games as a tool for teaching and learning English vocabulary" found that learners playing online vocabulary games tend to learn more appropriately and could retain the new words for a longer period of time and retrieve more words compared to those who aren't provided with vocabulary games. Vocabulary instruction is a long-time process. If the games are fun, relaxing, motivating and confidence boosting, the learners' interest will increase. To become sure that learning continues, it is required to see if the games provide the learners with continuous motivation. Although excitement is effective in motivating learners to play a game again, it is important to become sure that the excitement element does not negatively influence the learning objectives. In specific, the kind of excitement induced by game playing is mainly associated with game skills. However, a requirement for sophisticated game skills to play educational games can be overkill. Teachers should be careful when bringing the games into the class. Information about designing an effective lesson plan and skills required for incorporating online elements into teaching and learning process are deemed necessary to become effective facilitator (Yip & Kwan 2006).

The key findings of Yip and Kwan study (2006) are as following:

- Students and teachers alike, view online games as effective vocabulary learning tools;
- Students prefer online games as an educational aid when compared with traditional learning lessons;
- To increase students' interest and guarantee learning effectiveness, more motivating games which provide learners with a sense of achievement and scope for development are required;
- Teachers think that their role as researcher and facilitator has grown more prominent after employing information communication technology (ICT) tools.

### **3. Method**

#### *3.1. Participants*

Forty five lower intermediate learners, ranging from 16-22 years old learning English as a foreign language (studying at Khorasan Language Institute in Kashmar, Iran) were selected to sit for a proficiency test. Based on their score in the proficiency test, 24 students for the purpose of this study were finally selected. The participants were divided into control and experimental groups (12 subjects per group).

Some new words with a vast application domain in online games were randomly chosen by the instructor to be taught in the class.

#### *3.2. Instrumentation*

##### *3.2.1. Nelson Proficiency Test*

Nelson Test of Proficiency was administered to a group of 45 lower-intermediate EFL learners to select a homogenized number of participants based on their language proficiency level (explained below). The researcher

administered this test at Khorasan Language Institute in Kashmar, Iran. The reliability index of this test was estimated through Cronbach's Alpha as 0.82.

### 3.2.2. *Pretest*

Participants in both experimental and control groups took a vocabulary-based pre-test (Fill in the blank=5, and multiple choice=15 items). This kind of test aimed at guaranteeing the participants' homogeneity, and also required data for comparing means of both groups in pre-test and post-test. The reliability of this test was estimated through Cronbach's Alpha as 0.86.

### 3.2.3. *Posttest*

In order to evaluate the participants' achievement during the course, a vocabulary-based test including 20 items was developed by the researcher. The new words were selected from those instructed during the course. Having analyzed the data, the result showed that the reliability calculated through Cronbach's Alpha formula was 0.81.

## 3.3. *Procedure*

At first, a Nelson test as homogenizing tool was administered to 45 lower-intermediate EFL participants. Those participants (24) who were located one standard deviation above and below the mean were selected to participate in this study. They were randomly assigned into experimental and control groups with 12 in each group.

In the next phase of the study, the participants in both groups took a pretest. Some new words with a broad application domain in game nets or online games were selected to be presented to the participants of both groups. The researcher explained the project to the participants of the online-game group. They received step-by-step instructions on playing online games. The control group didn't receive online games training. Participants in experimental group were allowed to use the internet in the classroom where they could play social, history, role playing, economy, and guessing games such as Sims, Chess Master, FIFA 2011, Counter Zero and Call off. During the class time students in the experimental class enjoyed an enjoyable environment where they used a variety of words in the context. Acquiring the new words can enable subjects to cooperate and compete with each other so they are willing for learning them quickly.

The conventional method, paper and pencil technique, was used in order to instruct new words to the participants of control group. This group learnt new words in sentences, texts and passages. The course lasted for fifteen weeks, 2 sessions per week.

At the end of the course, the participants in both groups (N=24) sat for the posttest. The posttest included 20 items (Fill in the blank=5, and multiple choice=15 items).

## 4. **Results and discussion**

### 4.1. *Pretest results*

The results obtained from the pretest, including 20 vocabulary-based items, at the outset of the course showed no statistically significant difference between the control and experimental groups confirming the fact that they were in a similar status.

#### 4.2. Posttest results

The results from the analysis of posttest (a researcher-made vocabulary test) administered to both groups are indicated in Table 1.

Table 1. Independent T-test of Posttest

Group	SD	M	<i>t</i>
Exp	3.22	14.75	2.40
Cont	3.62	11.41	

As the results of Table 1 reveal, participants in experimental (online games) group (M= 14.75, SD= 3.22) significantly outperformed [ $t= 2.40$ ] those in control group (M= 11.41, SD= 3.22). Therefore, the null-hypothesis indicating that there is no significant difference between scores in experimental and control groups after the treatment can be rejected with 95 per cent confidence and the researcher hypothesis is supported. As a result it can be suggested that online games can be viewed as an effective tool in English classes in general, and in vocabulary teaching classes in specific.

#### 5. CONCLUSION

As the findings indicate, online games can be effective in vocabulary acquisition. The current findings indicate that online games, due to creating an interactive and motivating context where learners can easily and subconsciously share their information, and also due to the requirements and obligations encountered by them during playing, are effective in vocabulary acquisition. The subjects acquire the new words via the games because they are willing to be the winner. They compete and cooperate with each other in an enjoyable environment.

The results obtained here are in agreement with what found by Sørensen, and Meyer (2007) and Yip and Kwan (2006). They viewed games in general and online ones in specific as effective educational aids which result in learners' increased motivation and improved performance during the process of vocabulary learning. It's also worth mentioning that people learn more if necessary, as they say "Necessity is the mother of invention", and this issue was clearly observed during the treatment. Participants in "online games" had to understand the content of the context written on the screen to survive or win the game. On one hand, the gamers became more interested in playing and wished to achieve better results, and on the other hand, they tried to learn more new words in addition to the vocabulary prepared for the class. The more and sooner they acquire the new vocabulary, the better they play the game.

The above described game-based concept for teaching vocabulary in language schools will serve as an example of how game-based prototypes for educational use can be assessed and developed with the aim of innovation.

Regarding teachers, their roles should be more that of researcher and facilitator when vocabulary games are brought to the classroom. A possible area for teachers to explore further as researcher is information retrieval. To become an effective facilitator, a knowledge of lesson planning and the skills necessary to incorporate online elements into teaching and learning process are deemed necessary. Modern English teachers must gather up-to-date information about the internet and websites that provide vocabulary games, hence providing the learners with such information. Finally, it is hoped that the findings can be further developed in the light of research in the same area.

## References

- Allen, V. F. (1983). *Techniques in teaching vocabulary*. New York: Oxford University Press.
- Basurto, I. (2004). *Teaching vocabulary creatively*. In G.E. Tompkins & C.L. Blanchfield (Eds.). *Teaching vocabulary: 50 creative strategies, grades K–12* (pp. 1–4). Upper Saddle River, NJ: Pearson Education.
- Blachowicz, C., & Ogle, D. (2001). *Reading Comprehension*, New York: Guilford Press.
- Blachowicz, C. & Fisher, P. (2004). Vocabulary Lessons. *Educational Leadership*, 61(6): 66-69.
- Carter, R. (1992). *Vocabulary: applied linguistic perspectives*. New York: Routledge.
- Channell, J. (1988). *Psycholinguistic considerations*, In R. Carter & M. McCarthy (Eds). *Vocabulary and language teaching*. London: Longman, 83–97.
- Gallo-Crail, R. & Zerwekh, R. (2004). *Language learning and the internet: student strategies in vocabulary acquisition*. In C. A. Spreen (Ed.), *New technologies and language learning: Cases in the less commonly taught languages* (Technical Report #25; pp. 55–79). Honolulu, HI: University of Hawai'i, Second Language Teaching & Curriculum Center.
- Gee, J. P. (2005). Pleasure, Learning, Video Games, and Life: the projective stance. *E-Learning* 2( 3).
- Jensen, J.F. (2000). *Interactivity – Tracking a new Concept*. In Meyer, P.A. (ed). *Communication, Computer Media and the Internet: a Reader*. Oxford: Oxford University Press.
- Ke, F. (2009). *A Qualitative Meta-Analysis of Computer Games as Learning Tools*. Retrieved from: eportfolio.lib.ksu.edu.tw/
- Levent, U. (2009). *An evaluative checklist for computer games used for foreign language vocabulary learning and practice: vocaword sample*. Novitas-ROYAL, 2009, 3(1), 45-59.
- McGregor, M. (2011). *Using Excel to Make Personalized Games*. Digital Learning 2011 Conference, Personalized Learning for the 21st century, Chicago Public Schools.
- McKeown, M.G. (1993). Creating effective definitions for young word learners. *Reading Research Quarterly*, 28, 16-31.
- Sørensen, B.H., & Meyer, B. (2007). *Serious Games in language learning and teaching – a theoretical perspective*. Retrieved from: www.digra.org/dl/db/07312.23426.
- Sørensen, B.H. & Audon, L. (2004). Nye Læringsformer og rum – digitale medier i vidensamfundets skole. Forskningsrapport. [New ways of learning and Spaces – digital media in the knowledge society] København: Danmarks Pædagogiske Universitet.
- Sütthő, C. (2004). *Using Online Resources in Teaching Vocabulary*. Retrieved from: www.nefmi.gov.hu/nemzetkozi-kapcsolatok/cikkajanlo/sutheo.
- Warschauer, Mark (2004) “Technological change and the future of CALL” in Fotos & Browne (eds.) *New Perspectives on CALL for Second Language Classrooms* Lawrence Erlbaum Ass.
- Warschauer, M. & Kern, R. (2000). *Network-based Language Teaching: Concepts and Practice*. Cambridge. UP.
- Wu, W.V., Yen, L.L., & Marek, M. (2011). Using Online EFL Interaction to Increase Confidence, Motivation, and Ability. *Educational Technology & Society*, 14 (3), 118–129. Retrieved from: www.ifets.info/journals/14\_3/10.
- Yolageldili, G.,& Arikan, A. (2011). Effectiveness of Using Games in Teaching Grammar to Young Learners. *Elementary Education Online*, 10(1), 219-229, 2011. Retrieved from: http://ilkogretim-online.org.tr.
- Yip, F.W.M., & Kwan, A.C.M.(2006). *Online vocabulary games as a tool for teaching and Learning English vocabulary*. Retrieved from: wiki.umd.edu/teamill/images/9/9f/Vicki's\_article.