

International Conference on Current Trends in ELT

On the Effect of Playing Digital Games on Iranian Intermediate EFL Learners' Motivation toward Learning English Vocabularies

Nahid Shahriarpour^{a,*}, Zahra kafi^b

^{a, b} English Department, Islamic Azad University, Torbat-e-Heydarie branch, Iran

Abstract

The most important skill in learning English is vocabulary. Learners usually learn English vocabularies by means of rote learning, therefore; it can be so boring for them because there is lack of motivation for learners who want to continue memorizing vocabularies. Previous investigations show that game-based learning has had an important role in increasing the level of learning and has promoted imagination in learners. This study applies digital games to develop learning English vocabularies especially through video games. These days teenagers spend most of their time playing digital games; therefore, more attention must be centered on the use and effectiveness of digital games. It is useful that educators have more information about video games such as L.A.Noire. This digital game is very popular among teenagers; consequently, teachers can utilize this game as a strategy for teaching English vocabularies. This paper collected data by the use of two tools; interview and observation. There are interviews with teachers and students about their observations and reactions toward playing the digital game. Finally, it is believed that digital games do increase motivation in learners toward learning, consequently, changing the direction from rote learning to meaningful learning. Using digital games is one of the factors which make the learners interested and motivated.

© 2014 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

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

Keywords: Digital games; Vocabulary Learning; L.A. Noire game.

*Corresponding author:

E-mail address: n.shahriarpour@gmail.com

1. Introduction

The use of multimedia in education has made different learning processes, producing a meaningful learning. Previous researches show that game-based learning has had an important role in increasing the level of learning and motivation, along with promoting imagination in learners. Also, some researchers have studied computer-assisted instruction (CAI) program. For example, Pillay has studied the influence of recreational computer games on children's subsequent performance on instructional task (Pillay, 2002). Digital games are viewed as a tempting form of student engagement given the power of games to profoundly immerse and engage players. Such power comes from game design embracing six fundamental elements: a storyline, challenge or quarrel, goals, rules of engagement, interaction, and outcomes and immediate feedback (Prensky, 2004). There are research studies that are related to video games and they are attended to study of psychology and behavior of children (Squire, 2003). Other researchers; such as Funk, has studied children behavior which investigated the great force of video games and it has caused a violent behavior in children (Funk, 2001). This study debates about role of digital games on vocabulary learning and follows these questions:

1.1 Problem Questions

- How is it possible that video games facilitate learning a language?
- How do video games motivate teenagers for learning a language?

1.2 Research Question

- Do digital games affect on learners motivation toward learning English vocabularies?

1.3 Hypothesis

There is a null relation between playing digital games and learning English vocabularies among Iranian intermediate EFL learners.

2. Literature Review

In the last two decades language education has also seen developments in digital technologies that have made significant contributions to computer-assisted language learning (CALL) along similar lines. The research presented in this special issue draws on the wider discourse of CALL; to examine exactly *how* digital games can be integrated into instructed language learning contexts and curricula as well as how *effective* they are in promoting so-called deep learning in autonomous contexts. Drawing on learners' out of- school use of digital games to enhance motivation, some research claim that they may contribute to language learning and further studies have been undertaken in the last few years utilizing Web 2.0 and Massive Multiuser Online Role-Playing Games (MMORPGs). Assertions that digital games could become an integral part of language teaching have been made at varying points over the last two decades, but are clearly yet to be realized. Nevertheless, advances in network-based learning and the large, online communities, now using games have stimulated renewed interest in the field. This special edition on digital games and language learning presents four research based articles dealing with studies undertaken in Asia, a region which is significant in this respect, as it maintains a great interest in language learning and policy formulation as well as a central role in the creation of digital technologies and digital gaming. According to Patricia Deubel(2006), digital game-based learning has the ability to engage and motivate students and present learning experiences while helping long-term memory and providing practical experience. Deubel suggests that in order for teachers to effectively use game-based learning in the classroom, they must first find games without violent that facilitate planning and problem-solving and relate to the curriculum. Deubel advocates role-playing, simulation, and adventure games because they often appeal to the development of more than just one skill. Deubel also notes the function of game-based learning in the development of vocabulary skills and the enhancement of mental quickness (Deubel, 2006). In regard to Mark Griffiths (2003), video or digital games supply a great tool for managing educational research. Griffiths asserts that digital games have "great variety," while attracting students of various demographic backgrounds. They also help students set and work towards achievement of goals, provide

helpful feedback, and maintain records for measurement purposes. Furthermore, Griffiths suggests that the interactive nature of video games stimulates learning and encourages participants to challenge new topics or knowledge. Griffiths also notes that video games can help students develop computer skills that they may need in a society that continues to develop technologically. Gee (2003), for example, identified 36 learning principles that he found to be present in many of the games he investigated. The examples of these are the ‘‘Active, Critical Learning Principle’’, and the ‘Regime of Competence Principle’. These principles are intuitively appealing and grounded in educational research, but it is not clear how and to what extent they are related to second language acquisition. There are some Iranian researchers who have worked on game-based vocabulary learning. Alemi (2010), for example, studied on the use of games with reference to the motivation that they can provide for the students. This study attempted to investigate the role of using word games in expanding the learner’s vocabulary. The different learners take different roles of games. They can reveal different words or meaning differently from their perspective which the other learners can learn from those perspectives as the suggestion.

In addition, word games can reflect the learners themselves in their classroom and teachers can assess teaching process by themselves through word games as well. These motivate them to the succeeded goal. (Naraghizadeh & Barimani, 2013) investigated on effect of CALL on vocabulary learning. Their goal of the study was to examine the effects of the application of CALL on students’ attitudes towards CALL before and after the instruction. There were two groups, the traditional group and CALL group. A vocabulary achievement test as pre-test was administered to participants of both groups. The Computer Assisted Instruction group experienced 16 sessions of instruction using the CALL. The traditional instruction group received the same hours of instruction and materials but on paper with no audio-visual features. The result of paired sample t-test between pre-test and post-test of both groups of study revealed that there is a significant difference between experimental and control group regarding their vocabulary knowledge. CALL instruction improved EFL learners’ knowledge of vocabulary. Besides, the results of descriptive statistics showed that the group who received Computer Assisted Language Learning was outperformed in this study. Other Iranian researchers like Vahdat & Behbahani (2013) studied on the effect of video games as a new tool for Iranian EFL vocabulary learning. Their participants were divided into two groups, control group and experimental group, there were 10 males and 10 females in each group. While the control group studied vocabulary via traditional classes, the experimental group experienced vocabulary learning (the same words) via a video game called *Runaway: A Road Adventure*. Results of their study showed that learning vocabulary via video games is beneficial, and that males are more inclined toward video-game learning than females. Many claims are made for the benefits of games on affective factors such as anxiety and motivation, but few studies have directly investigated the effects of digital games on second language acquisition. (Yip & Kwan, 2006) in Hong Kong University of Science and Technology; reported a study of the usefulness of online games in vocabulary learning for some undergraduate students. Three teachers and 100 engineering students participated in a quasi-experimental study for approximately nine weeks. The experimental group learnt some vocabulary from two carefully selected web sites with games, while the control group learnt the same vocabulary through activity-based lessons. A pre-test and post test were conducted in the first and ninth weeks. The findings indicate that the experimental group outperformed the control group statistically in the post-test. The students in the experimental group generally preferred online learning supplemented with digital educational games to conventional activity-based lessons. The teachers thought highly of the online games, but they expressed concern that extra support was required if the online games were adopted as a core part of their teaching. In ‘‘Digital gaming and second language development: Japanese learners interactions in a MMORPG,’’ Mark Peterson explores the use of massively multiplayer online role-playing games as suitable environments for English language learning.

Findings from an experimental qualitative study with Japanese learners, highlights a number of the obstacles to the process, focusing in particular on the importance posed by communication in online environments, the appropriate degree of learner training vis-à-vis the technologies used learner language proficiency levels, and prior gaming experience. Balancing these factors, a range of positive indicators were also identified, including social engagement, reduced anxiety, and exposure to new vocabulary and opportunities for language practice. Finally, the special edition concludes with Darren Elliott’s review of Nicola Whitten’s new book, *learning with digital games: A practical guide to engaging students in Higher Education* (2010). (Neville & Shelton & McInnis, 2009) reported on a mixed-methods study using an interactive fiction (IF) game to teach German vocabulary, reading, and culture to

university students. The study measured knowledge retention and transfer, and evaluated the attitudes of students toward the game. The results tentatively indicate that contextualized, immersive role play may have helped students to learn. Nevertheless, most students were apprehensive about the game as a learning platform given the departure from traditional instruction. By using an IF (interactive fiction) game to immerse students in a second language and simulated foreign culture, the authors of the study hoped to outline the possible application of DGBL in foreign language pedagogy, highlight areas of potential difficulty that this application may present, and suggest practical ways in which to make second language (L2) education more contextual, persuasive, and student-centered. Seen more broadly, we attempted to predict possible student reaction to loosely structured, digital, and immersive learning environments. Neville & Shelton & McInnis (2009), in department of foreign language of USA.

3. Methodology

3.1 Participants

The population includes 25 male students ranged from 14-16. They are studying English language at Zabansara Institute in Mashhad, Iran and the book is New Interchange. 15 students in group play L.A.Noire digital game and 10 students are not familiar with the game. This game is very popular among teenagers. The language used in this digital game is English.

3.2 Instrument

In order to estimate the result of using digital game (L.A.Noire) in improving English vocabulary learning, we used two research tools for collecting data: interview and observation techniques. We interviewed 25 intermediate learners, out of which 15 were familiar with that digital game and the rest had no information about it. We interviewed 15 teenagers who knew this game and played it. They spent their time for making progress to the next level. Players should know some words for solving the problems and then go to the next level and they must interact with characters of the game. L.A.Noire is the most famous third-person neo noire crime video game. During the observation techniques, we provide careful descriptions of learner's activities to see whether there is any difference among the ones who played the game and the ones who did not.

3.3 Procedural

Students participated 3 sessions in every week about 1 hour and 30 minutes. All of 25 students were male. Fifteen students play L.A.Noire game. Majority of students play it 4 times in a week about 2 or 3 hours. We asked them some questions about the game and they should answer these questions about how they play the game, what vocabularies they should know for continuing the game, and how much the game engages them and to what extent it can influence the vocabulary retention. We used 2 techniques for gathering data: interview and observation. In structured interview, we asked an identical set of questions of all respondents. The interview resembled verbal questionnaires and we compared answers from different participants. The interview was performed in Zabansara institute in Mashhad, Iran. We asked the learners some pre-selected Yes/No questions in the interview process such as:

- It is an enjoyable process to learn English vocabularies.
- It is very difficult for me to embed educational content to the game.
- While developing my game I need to learn new vocabularies.
- The topic of developing computer game enhanced my willingness to continue learning vocabularies.
- I believe that it will be entertaining to play with my game.
- I found digital games a motivating instructional method.
- If there wasn't any educational content I would develop the game easier.
- I tried to develop an entertaining game.
- I developed a multiplayer game.

➤ In the future, I want to develop new computer games.

Generally, teenagers have said that this game has helped them for learning new vocabularies in English and retention of these vocabularies. Because, they have to know the meanings of different vocabularies for continuing the game so they should search the unknown vocabularies in the dictionary. The strategy helps them that vocabularies root in their long term memory. One of the interviewees is M.Rezvani who mentioned that in this game, “you are a detective and try to solve various cases. This has very graphical blood and is very realistic. Language is heard in pretty much every cut scene and also you should know some words for solve the dilemma and you should know how to interact with different characters and what appropriate words apply for continuing the game. Overall from what I have seen this is an AMAZING game and I would say it is by far the best Play Station 3 game of 2011, December20, 2012”. Observation technique provides opportunities to collect large amount of rich data on participants’ action within playing the game. During the 8th sessions of observation, we tried to apply some new vocabularies used in the game in our speech. They presented what they have experienced while playing L.A.Noire game. The learners get deeply in touch with the characters in the game which leads to a sort of interest and motivation. We observed the fact that the ones who played the game were more active and successful learners while doing some related tasks. We came to the conclusion that students who played the digital game at home were more motivated in class and were able to use the new vocabularies of digital games in the their speech which were observed by the teacher in the class. Using digital games causes to engage learners in achieving new vocabularies without stress and it makes much more motivated learners in learning process of English vocabularies because, learners apply new vocabularies in their speech in the class.

The storyline, L.A. Noire's game play is similar to that of a crime game and an action game. They play as Cole Phelps, a police officer returning from World War II, solving cases by looking for clues and interrogating suspects. By solving crimes Phelps ranks up among the police ranks from a normal officer all the way up to a homicide detective. The game allows players to play at their own pace, allowing them to simply cruise around the 1940s Los Angeles. L.A. Noire also blends in an action component, allowing players to get into gun fights and car chases. Player's health isn't displayed on the HUD, instead when Phelps takes damage; the screen fades into a black and white tone. Avoiding damage reveals Phelps.

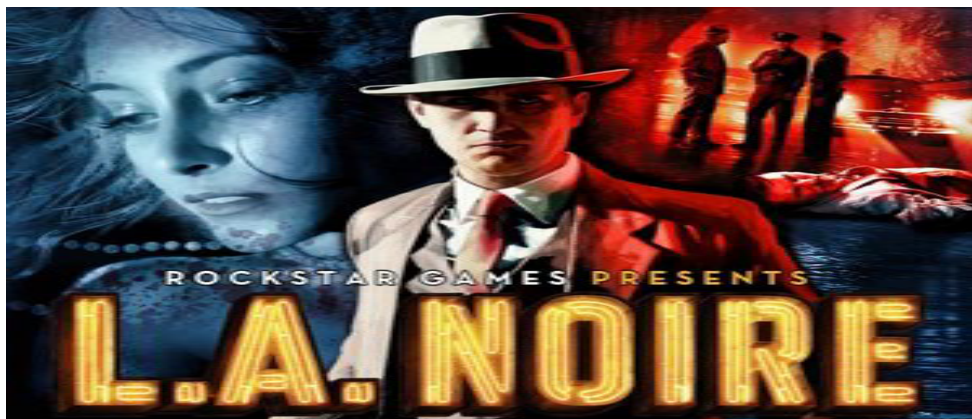


Fig. 1. Cover photo of L. A. Noire game

4. Conclusion

Vocabulary has an important role in learning English language. These days, teachers try to make an interesting environment for teaching vocabulary and not applying traditional methods for teaching which deals with paper and pencil. Learners in traditional methods; such as, Audio-lingual method, imitate the teacher and repeat every word

he/she says. It is rote learning and not meaningful leaning. Learners don't have any motivation for going to class because, it is boring for them. There is not any interaction between learners, so it is teacher-centered. This study provides new data or views for using digital games in learning vocabularies and these new data can influence on teaching methods vocabularies. It creates new environment for learning in which learners can enjoy the learning process and their learning level can improve by using it. Games are not only fun, they can be educational too! In digital games based learning, teachers make use of games that integrate education and video games. This method engages learners and can be implemented in classrooms for all ages and subjects. Digital games help students to be active participants in our 21st Century technological society. Digital games help facilitating vocabulary learning and easier memorization vocabulary through, interaction, motivation for learners and more meaningful learning. As we began saying in this review, our students today are 'digital immigrants' and digital games are very much a part of their lives. The employment of games in education has yet to develop to its full potential and educational digital games may not be readily available for all learning scenarios. However, they present us an opportunity to teach in a way that aligns with the student interest, thereby increasing the probability of engagement and motivation which may result in independent and meaningful learning. An opportunity not to be missed! To summarize, it was found that using games and activities to practice vocabulary enhances students' ability to acquire words; encourages student interaction; and enhances student motivation. Furthermore, if there is opportunity to implement digital games in our educational system, learners will be more willing to learn English specifically here English vocabularies. The use of digital games in education is one of the factors which make the learners interested and motivated. Using digital games in the classroom results in better motivation and it facilitates the learning process of EFL learners. The learning vocabularies become more enjoyable. It engages learners in such games and there will be low stress environment for learning process.

References

- Alemi, M. (2010). Educational Games as a Vehicle to Teaching Vocabulary. *MJAL*, 425-438. Retrieved from <http://www.mj-al.org/Journal/Educational%20Games%20as%20a%20Vehicle%20to%20Teaching%20Vocabulary.pdf>.
- Bahman, M., Pazhakh, A., & Sharif, M.R. (2012). The effect of peripheral learning on vocabulary acquisition, retention and recall among Iranian EFL learners. *Cscanada*, 3, 44-52. doi:10.3968/1927024020120301.1132.
- Deubel, P. (2006). "Game on!" T.H.E. *Journal of Technological Horizons in Education*, 33 (6), 30-35.
- Frederick, P. A. (2010). Using digital game-based learning to support vocabulary instruction for developmental reading students. (Doctoral dissertation). Retrieved from <http://proquest.umi.com/pq-dlink?did=1949628581&Fmt=7&clientId=79356&RQT=309&VName=PQD>
- Griffiths, M.D. (2003). Video games: Advice for teachers and parents. *Education and Health*, 21, 48–49.
- Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. Basingstoke: Palgrave Macmillan
- Liu, T., & Chu, Y. (2010). Using ubiquitous games in an English listening and speaking course: Impact on learning outcomes and motivation. *Computers & Education*, 55(2), 630-643.
- Naraghizadeh, M., & Barimani, S. (2013). The Effect of CALL on the Vocabulary Learning of Iranian EFL Learners. *Journal of Academic and Applied Studies*, Vol. 3(8), 1-12. Retrieved from: <http://www.academians.org/Articles/August2013-1.pdf>
- Neville, D., Shelton, B. E., & McInnis, B. (2009). Cybertextredux: Using DGBL to teach L2 vocabulary and reading to beginning university students. *Computer Assisted Language Learning*, 22(5), 409-424. doi: 10.1080/09588220903345168
- Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes?. *Language Learning*, 44(4), 493-527.
- Reinders, H., Wattana, S. (2011). Learn English or die: The effects of digital games on interaction and willingness to communicate in a foreign language. Retrieved from http://www.digitalcultureandeducation.com/uncategorized/dce1049_reinders_html_2011.
- Suh, S., Kim, S. W., & Kim, N. J. (2010). Effectiveness of MMORPG-based instruction in elementary English education in Korea. *Journal of Computer Assisted Learning*, 26 (5), 370-378.
- Thomas, M. (2011). Editorial: Digital games and second language acquisition in Asia. *Digital Culture & Education, University of Central Lancashire*, 3(1), 1-3. Retrieved from: 15April,2011 <http://www.digitalcultureandeducation.com>
- Vahdat, S., & Behbahani, A. R. (2013). The Effect of Video Games on Iranian EFL Learners' Vocabulary Learning. *Journal of Reading Matrix*, 13(1), 61-71. Retrieved from http://www.readingmatrix.com/articles/april_2013/vahdat_behbahani.pdf
- Whitton, N. (2010). *Learning with digital games: A practical guide to engaging students in Higher Education*. New York: Rutledge