

### SHEIKHBAHAEE UNIVERSITY

### SCHOOL OF FOREIGN LANGUAGES

# THE EFFECT OF USING FULL-FEATURED VIDEO GAMES ON VOCABULARY RETENTION OF IRANIAN EFL STUDENTS

## A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN TEACHING ENGLISH AS A FOREIGN LANGUAGE

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# In the name of God

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# THIS IS TO CERTIFY THAT THE CONTENT, FORMAT AND QUALITY OF PRESENTATION OF THE THESIS SUBMITTED BY

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# THE EFFECT OF USING FULL-FEATURED VIDEO GAMES ON VOCABULARY RETENTION OF IRANIAN EFL STUDENTS

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## DECLARATION

I declare that this thesis was composed by me, that the work contained herein is my own except where explicitly stated otherwise in the text. This work has not been submitted for any other degree or professional qualification except as specified.

# Dedication

My affectionate thanks to my precious parents for their steadfast love and moral support. And here is my deep gratitude to all my friends, who have been a source of encouragement and inspiration throughout my life.

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#### ABSTRACT

Vocabulary learning is considered to be an important part in learning a new language; however, it is often perceived as boring by learners, especially for those who grew up in the digital age. Therefore, the goal of this study was established upon examining the efficiency of using Full-Featured Video Games (FFVG) to teach English vocabulary to Iranian EFL Students. For this purpose, 60 pre-intermediate male EFL participants were chosen via using an OPT. They were then randomly assigned to three groups (Traditional, PowerPoint, and Game). These participants underwent a pre-test followed by 6 sessions of treatment during which the Traditional group worked on list of English words, the Power Point group learnt vocabulary via using Power Point files and vocabulary was taught to the Game group via using a Game called "WarCraft 3". The data were collected via, an immediate post-test and a delayed one. The statistical analysis of the test scores using ANOVA and "Post hoc" tests revealed that the Game group performed better in the delayed post-test. This may suggest that English vocabulary retention of students can be improved via using FFVG in English classes. This study can provide second language teachers with a suggestion that English words taught via using a video game are more likely to be learnt and retrieved in comparison with other types of vocabulary teaching.

Chapter 1 Introduction

# Chapter 1

### Introduction

#### **1.1. Chapter Overview**

This chapter provides the basic information about the topic of the thesis in general and theoretical background of the study. Then the major issues relating to English vocabulary learning are brought up and the reason why those issues are so important to be the main topic of this thesis is discussed. Then the significance of this study and features which makes this research distinct from other studies are discussed followed by two research questions which are investigated in the current study. Finally, definitions of key terms used in this study are presented.

#### 1.2. Background

The rapid rate of technological change imposed a new challenge on society, as the skills and knowledge gained by a traditional education would no longer suffice for success in life. New jobs in 21<sup>st</sup> century are characterized by technology use, extensive problem solving, and complex communications (Levy & Murnane, 2004). These are skills which need something beyond typical reading and writing that are taught in traditional classrooms. It's not only about what students need to learn, but also how and when they learn. Students of today are growing up with laptops, tablets, cell phones, video calls, video games and they need to use these technologies in their daily life.

In the last two decades, using new technology has become more and more important in education (Walsh & Apperley, 2011), and this importance can be best described in terms of using CALL (Computer Assisted Language Learning). Digital games as one of these recent technologies which fall under the category of CALL can be integrated into instructed language learning contexts and curriculum. Digital games seem to encourage deep learning of students, so they have been the focus of many researchers in recent years and indeed they claim that they may contribute to language learning (Aghalara & Hadidi, 2011; deHaan, 2011; Turguta & Irgina, 2009; Thomas, 2011).

People of all ages are living in an environment which is highly influenced by media and with access to a variety of digital electronic devices which are available for them either at home or at school. Children and young people spend most of their free time interacting with computers or even playing computer games. According to the published statistics, each day the average teenager in United States plays one and half an hour of video games (Prensky, 2001).

One of the attractive elements of the gaming experience as a learning tool is that players or, in another word, students will have many opportunities for practice because in games mistakes don't mean a big failure or embarrassment (Gee, 2009). This encourages players to improve their skill via repeated practice by advancing within a game or replaying parts of a game. Committing mistakes with limited sense of embarrassment is one of the features and also benefits of using video games in the teaching environment.

Video games are also constructed with clear goals so they can provide immediate feedback for players (Gee, 2005). This allows players to change their game play in order to improve their

performance and reach their goals. The idea of immediate feedback is also prominent in good formative assessment processes. Students will improve their work when given constructive feedback. Although, constructive feedback may also be presented in a good assessment designed by teachers, it can be difficult for teachers to translate student performance into constructive feedback. In this case video games can be very helpful.

The other thing which is worth mentioning about the background of using video games in teaching is that traditional ways of teaching has often been considered as boring for many students. Teachers have always used various approaches including different media and art to increase engagement and motivation in the classroom. Using Power Point files can be an example of these. The ability of digital games to sustain engagement and motivation across time can be considered as one of the important characteristics of these games (Gee, 2005). Digital games can be more engaging and motivating than traditional classroom activities. Students are also more engaged when a narrative story is present within the games (Prensky, 2001). The narrative story is used to piece together different tasks and makes one whole concept of the game into a coherent unit and keeps students engaged as they work through these tasks.

Another factor related to efficient learning is motivation which also can be considered as another benefit of games. Players are more motivated when they feel that they are personally attached to a goal (Gee, 2009). Some games can be based on external motivations, where students receive particular rewards for playing the game. The case of using video games in classrooms as a task or assessment can also create this kind of external motivation. However, if the goals of the game and the learning outcomes are closely tied, students tend to be more intrinsically motivated, and the rewards are in solving the game challenges and learning.

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In terms of pedagogy, games have active nature and this feature can help maintaining learnercentered pedagogy. As mentioned by Rieber (1996), play is a natural learning strategy for children according to the Piagetian theory; therefore, video games can be suitable for computerbased learning. "Game-based learning is usually associated with the situated learning theory, because in many games, especially 3D games, any action has a meaning within a situation in the game, however, in many educational games the player's actions are not used to promote situated learning" (Gee, 2003, p. 84). Theoretically, these factors theoretically can place the full-featured video games higher in learning value rank in comparison to other types of media.

#### **1.3. Statement of the Problem**

Vocabulary learning is considered to be an important part in learning a new language. For instance, as quoted by Hirsh and Nation (1992), it is assumed that in order to reach text comprehension (e.g. understanding of all main points), readers need to be familiar with 95 per cent of the words in a text (Hazenberg & Hulstun, 1996). In addition, as was mentioned in Lee (2003), studies have shown that insufficient vocabulary accounts for writing difficulty for foreign language learners. Hence, knowing vocabulary is one of the most important features that determine writing quality.

Feeling a sense of helplessness and frustration is frequent among students who are confronted with lists of isolated vocabulary to memorize, and little connection between assignments and our everyday life. As is mentioned in Turguta and Irgina (2009, p. 2), "Vocabulary learning is often perceived as boring by learners, especially for those who grew up in the digital age". New

technology has opened up a world of possibilities for improving the vocabulary repertoire of learners. In addition to traditional methods of teaching which merely used written texts and dictionaries for teaching new vocabularies, new ways of vocabulary teaching and learning have come to the scene. Using video games which has recently emerged is a new way of teaching vocabulary.

While recently numerous suggestions have been advanced for collaboration of video games in language learning experience (Turguta & Irgina, 2009), much of the potential for the integration of video games in mainstream of language learning remains untapped. Although, many universities and private institute in Iran don't have enough computers to allocate to each student in their English classes, even those few ones which are equipped with enough computers are not using video games in the classes and this might be due to the lack of well-grounded research in this field in Iran. What is common in the point of view of many Iranian English teachers and instructors is that just simple educational video games may be helpful in teaching some simple concepts to children with the low proficiency level of English. Therefore, this study was designed to investigate the effect of using full-featured video games on English vocabulary learning and also vocabulary retention of sample male students in Isfahan with intermediate English proficiency level.

#### **1.3. Research Questions and (Null) Hypothesis**

The research question to be taken into account in this thesis is:

To what extent does use of full-featured video games contribute to the English vocabulary retention of Iranian students compared with traditional and Microsoft power-point based ways of teaching?

The research hypothesis:

Use of full-featured video games doesn't result in development of the English vocabulary retention of Iranian students in comparison with traditional and Microsoft power-point based ways of teaching.

#### **1.4. Significance of the Study**

Young people are interested in playing their own games and these games are mostly noneducational full-featured video games which are brought up by the era of new technologies. Therefore, this current study and potential outcome of its findings can have contribution to enthusiastic English teachers who are willing to use new technologies in their classroom to improve their teaching efficiency. They may also use these games as homework assignments for their students. Therefore one of the uses of this study can be related to the pedagogical approaches which can be inferred from the results.

This study was done on the use full-featured video games of English vocabulary retention of Iranian students. Therefore, the findings of this study can also contribute to Iranian researchers who are willing to conduct new research about different aspects of using video games in English teaching and also material designing in Iran.

#### 1.5. Definition of Key Terms

**Edutainment:** The concept of edutainment was mostly used in the study which could refer to how content originally designed for entertainment purposes can be modified to provide natural and context rich language learning environments, without sacrificing its entertainment value (Purushotma, 2005).

**Full-featured video games:** kind of games which are played in different consoles, both online or offline and are played both in multi-player or solo-player mode. According to Salen and Zimmerman (2004), they are defined as a system in which players engage in artificial conflict, defined by rules, which results in a quantifiable outcome. These games are high definition games supported by a strong graphical engine. They are available in the market and their basic purpose is entertainment. They are not basically designed for any teaching purposes.

**Immersion in gameplay:** Immersion here is defined the extent to which the player has a sense of being 'in' the game world, and identification as degree to which one feels attached to one's character in the game (Kontour, 2009).

**Playful learning:** It defined as a kind of learning which puts different factors engaged in both pleasure and learning of students into consideration and tries to make use of them, these factors are: motivation, rewards, or positive affect in learning. (Hubbard, 1991; Prensky, 2001)

**Vocabulary retention:** In this study vocabulary retention also means vocabulary learning. It is defined as "the ability to recall or remember things after an interval of time. In language teaching, retention of what has been taught (e.g. vocabulary) may depend on the quality of teaching, the interest of the learners, or the meaningfulness of the materials" (Richards & Schmidt, 2002, p. 457). As Richards and Schmitt (2002 ) puts it, "the deeper the processing, the better it is for retention and recall" (p. 132)