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## Video-Gaming and English Vocabulary Learning. <br> Case Study of Third Year Students at the Department of Letters and English Language, University 8 mai1945-Guelma.

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## DEDICATION

To my parents and sisters who supported me through my whole journey

To my best friends who have been there since day one, Wissal, Zineb, Chourouk, Tahani, Katia, Nourelhouda, Nouha, Feriel, Amani, and Khadija

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To everyone who believed in me

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#### Abstract

Vocabulary learning has a significant role in the process of learning languages. Given the significance of vocabulary, the present dissertation seeks to examine the correlation between video games and English as foreign language vocabulary learning. In this regard, two main research hypotheses are set forward; $\left(\mathrm{H}_{1}\right)$ suggests that if English as a foreign language students play video games, their vocabulary learning will improve, while $\left(\mathrm{H}_{0}\right)$ suggests that if English as a foreign language students play video games, their vocabulary learning will not be improved. In order to offer relevant data to this study and evaluate the hypothesis of research, quantitative methods are opted for. A test was conducted to examine the vocabulary competence level of the learners; in addition, a questionnaire was designed and administered to investigate participants' attitudes towards vocabulary learning, the specific strategies used, and the use of video games. Results and the findings from correlation and variance analyses, in which a positive correlation coefficient ( $r=0.67096$ ) and significant variance $\rho$ value ( $\rho=$ 0.0001 ) were reported, confirm the research hypothesis claiming that video games truly satisfy the language student's needs for an easy understanding and learning of the target language vocabulary. It is advised, then, that teachers lay down pleasant learning situations that Video Games bring to the attention of students and focus their instructional worth on such tools.


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## LIST OF ABBREVIATIONS

| EFL | English as a Foreign Language |
| :--- | :--- |
| ICTs | Information Communication Technology Services |
| SLA | Second Language Acquisition |
| SPSS | Statistical Product and Services Solutions |
| L1 | First Language |
| L2 | Second Language |

## GENERAL INTRODUCTION

The presence of diverse foreign language learning techniques that could be judged dull for the learner is after the false belief that learners should be committed, serious, and determined for the learning experience to take place. However, the latter might turn out to be quite enjoyable and exciting through using new methods of learning such as videogames which was defined by Tsai and Fan as an activity that incorporates both video games and education (2013, p. 115, as cited in Ebrahimzadeh, 2017, p. 1). Learners usually find difficulties concerning finding ways to learn a language properly and without getting bored. In addition, most of them face the challenges of being involved in the process of learning without getting distracted by other factors or simply demotivated to learn new vocabulary items. Henceforth, video gaming could have a positive and significant impact on the vocabulary learning experience.

## 1. Statement of the Problem

Vocabulary is generally described by many researchers and layperson as the words of a language. In learning a foreign language, vocabulary is extremely necessary because learners need it to understand and produce various thoughts and ideas. As Wilkins states, a small amount of meaning could be conveyed without grammar, but without vocabulary nothing can be transmitted (1972, pp. 111-112, as cited in Alfaki, 2015, p.1). However, learning new vocabulary items could come off as difficult, time consuming, or rather boring which is why scholars developed approaches and techniques that could facilitate vocabulary learning process. A case in point could be combining learning vocabulary with video games, as language learners face various difficulties in the process of learning vocabulary such the vast amount of vocabulary items that students need to learn and the complexity of some words.

Therefore, this present study urges to investigate the relationship between video games and vocabulary learning.

## 2. Aims of the Study and Research Questions

On the topic of learning a foreign language and its vocabulary, learning by playing video games could be an enjoyable and beneficial strategy. Therefore this research aims to:

- Endeavor to investigate how video games can be effective in regard to enhancing the vocabulary learning of EFL students.
- It sheds light on learners' attitudes and practices about video gaming.
- It investigates the relationship between video gaming and students' vocabulary learning.
- It explores the extent of effectiveness of video gaming as a helpful strategy in vocabulary learning.

On this account, the current research addresses the following questions:

- Does video gaming influence the learning of vocabulary of EFL?
- If yes, to what extent can video gaming influence vocabulary learning?
- Are learners aware of video gaming effectiveness to learn, use, and practice vocabulary?


## 3. Research Hypotheses

This study was conducted based on the assumption that video gaming influences language and vocabulary learning. Therefore, if video gaming enhances vocabulary learning, then Algerian learners of EFL who play video games would demonstrate a more advancedlevel vocabulary for everyday spoken English.

- $\quad \mathbf{H}_{\mathbf{1}}$ : If EFL students play video games, their vocabulary learning will improve.
- $\quad \mathbf{H}_{0}$ : If EFL students play video games, their vocabulary learning will not improve.


## 4. Research Methodology Design

In order to gather in-depth knowledge about the theme examined, the present dissertation adopts quantitative statistical, comparative, and correlational approaches.

### 4.1. Research Method and Tools

In order to get a deeper understanding of the relationship between video gaming and vocabulary learning. A test was conducted to measure the students' productive vocabulary knowledge. In addition, a questionnaire was distributed aimed at investigating the students' EFL learning preferences and practices, strategies of learning vocabulary, and attitudes towards playing video games. Both research tools, the test and questionnaire, were combined into one form and distributed to third year English Language students at University of 8 mai1945 - Guelma, serving the aim of exploring the effects of video gaming on their vocabulary learning process.

### 4.2. Research Population and Sampling

This study involves ( $\mathrm{n}=54$ ) Third year students, at the Department of Letters and English Language, University of Guelma. The sample consists of two groups of (27) students; the gamers group that targeted the students who play video games, while the non-gamers group was selected with the condition that they do not play video games. In so doing, the method made for exploring the influence of video gaming on vocabulary learning.

### 4.3. Data Analysis

The study was conceptualized to collect quantitative data. The latter was ground for quantitative statistical, comparative, and correlational analyses that involve the discussion of
the results collected through the phase of taking the test and completing the questionnaire. Henceforth, conclusions will be formulated out of the achieved outcomes.

## 5. Structure of the Dissertation

The current study is organized into two parts. The theoretical part that includes two chapters. The first chapter is composed of an overview about learning English as a foreign language, vocabulary learning. The second chapter tackles video gaming and video games, and video games for vocabulary learning. The second part is practical, that first determines the methodology through the defining the research method and tools, population and sample, and data analyses. Moreover, it provides detailed analyses and discussions of the results obtained from the both the research tools used, the test and questionnaire. Finally, conclusions and implications, limitations of the study, and future research goals will be drawn on at the end, based on the study results.

## CHAPTER ONE: VOCABULARY LEARNING

Introduction
1.1.Approaches to Vocabulary learning
1.2.Vocabulary Learning Strategies
1.3.Receptive vs. Productive Vocabulary learning
1.4.Vocabulary Learning Challenges
1.5.Ways to Improve Vocabulary Learning
1.6.Vocabulary Learning and ICTS

Conclusion

## Introduction

Language brings order to our lives and it forms our social experiences, people all over the world strive to learn different languages to communicate with the rest of the world, in fact being a bilingual or a multilingual is one of the very crucial skills in the world. Nevertheless, to master a foreign language, students must be familiar with all aspects of the language, including grammar, phonetics. However, mastering different language skills also requires acquiring vocabulary, which is the language's building block.

It is obligatory to fathom why should vocabulary be taught and learned before getting to explain what it means, and though there are many scholars who think it is not necessary to study vocabulary as a subject matter or direct vocabulary learning. According to Nation (1999), there are many reasons why vocabulary should be taught, including having a good understanding of what to do with vocabulary and what vocabulary to concentrate on. This means that the focus of vocabulary work can be on useful words and offering students experience with useful skills. As a result, it can be assured that students will be rewarded for their efforts. Moreover, when studying a foreign or second language, there are several approaches to coping with vocabulary. Some teachers are uncomfortable with some of these methods, such as having students research words out of context or interrupting students' reading to have them guess at an unfamiliar word in context. In addition, the learners should not be alarmed or intimidated as a result of their exposure to the foreign language. One of the central concepts is that both direct and indirect vocabulary learning have their place. Therefore, this chapter tends to cover different view about approaches to vocabulary learning, investigates the different vocabulary learning strategies and challenges that learners face, in addition to the methods that learners can use to improve their vocabulary learning and explores the relationship btw the use of ICTs and vocabulary learning.

### 1.1. Approaches to Vocabulary Learning

Vocabulary learning encompasses both direct and indirect ways of acquiring. Activities such as word-building exercises, guessing words from meaning as a class activity, learning words in lists, and vocabulary games are examples of the direct vocabulary learning tasks that concentrate their attention on vocabulary. However, the attention and focus of indirect vocabulary learning shifts towards another aspect which is the message delivered by a speaker or writer. Even if the learners' attention is not geared toward vocabulary learning, significant vocabulary learning will occur if the amount of unknown vocabulary in such messages is low (Nation, 1990, pp. 2). This is known as the input theory of language learning, according to Krashen (1981a) certain conditions must be met for such learning to take place. First and foremost, the students must be involved in comprehending the message. This curiosity generates a desire to grasp the unknown terms in the message from the standpoint of vocabulary learning which means that when students participate in understanding the message. This interest produces the urge to understand from the point of view of vocabulary acquisition the unfamiliar phrases of the communication. Second, the message should include certain elements that are just below the current level of achievement of the learners meaning the words are not too advanced for the learned nor below their level of learning. These objects, on the other hand, should be understandable in their context. This applies to both linguistic and nonlinguistic convention documents. Third, learners should not be frightened by their foreign language encounter (Nation, 1990, pp. 2-3).

Young students learn vocabulary passively by listening or reading, and later by speaking with others with words .As students learn to read and write, by comprehending what they read, they get additional vocabulary and then integrate these vocabulary items into the production of language. Most learners learn vocabulary by chance via repeated exposures of terms in their homes and at their schools by listening, speaking, and reading different
materials by themselves. Nation (1990) proposed four different ways to incorporate vocabulary learning into a language learning course, ranging from the most indirect to the most direct. First, teachers should put in mind vocabulary learning when they design and choose the materials, hereupon, the preparation of condensed materials and the careful grading of vocabulary in the first lessons of learning English are two typical examples. Second, teachers should deal with words when they occur in the teaching/learning process meaning if an unfamiliar word appears in a reading passage, the teacher pays attention to it while it is causing a problem. Third, other language practices should be dealt with along with vocabulary teaching/ learning, the vocabulary of a reading passage, for example, is addressed before the students read the passage. Forth, learners should spend their time studying vocabulary in class or outside of school with no direct link to any other language activity. For instance, learning spelling rules or on activities such as using a dictionary, guessing words, using word pieces, or learning lists (pp. 3-4).

### 1.2. Vocabulary Learning Strategies

Learners use a variety of methods and strategies to help them memorize, understand, and recall various words in a foreign language in order to successfully acquire and learn vocabulary, those methods could be effective for some students while others could face difficulties learning languages through those techniques. Oxford in his definition of vocabulary learning states that learners implement particular actions and behaviors to ease the learning process, make it more fun, self-controlled, more efficient and adaptable to new circumstances (1999, p. 8 as cited in Ali Rezvani Kalajahi \& Pourshahian, 2012, p. 138). Cameron (2001) defines learning vocabulary as the ways in which students take actions to aid in the understanding and retention of vocabulary (p. 92, as cited in Ali Rezvani Kalajahi \& Pourshahian, 2012, p. 138). Hence, Students either learn vocabulary in the classroom, which entails learning new words using the teachers' techniques, or they learn it on their own, using
their own strategies since it is not enough to commit only to the classroom activities and strategies. Sokemen (1997, p. 225) sheds light on how to aid students to develop their vocabulary learning solely by stating that acquiring all the vocabulary needed in the classroom is not enough and therefore impossible to achieve (as cited in Ali Rezvani Kalajahi \& Pourshahian, 2012, p. 139).

In order to learn a foreign language, you must have a good vocabulary. Language learners are aware of the value of words in a language, but they may or may not be aware that vocabulary learning strategies will assist them in successfully learning vocabulary.

Scholars have attempted to connect these strategies with language learning skills since the advent of the concept of language learning strategies, assuming that each strategy improves vocabulary learning (Ali Rezvani Kalajahi \& Pourshahian, 2012, p. 139). Similarly, most language learning strategies are used for vocabulary learning activities (O'Malley (1985) \& O'Malley et al. (1990), as cited in Ali Rezvani Kalajahi \& Pourshahian, 2012, p. 139). Accordingly, Nation (1990) clarifies that using learners' own techniques is the most effective way to learn vocabulary (as cited in Ali Rezvani Kalajahi \& Pourshahian, 2012, p. 139).

Multiple researchers defended and chose different language and vocabulary learning methods, with some, including Kudo and Schmitt, going so far as to clarify what are known as mnemonics or memory strategies which is defined as any learning strategy that aids knowledge retention or retrieval in the human memory is referred to a memory device, an example on this is, instead of descriptions, learners use pictures of the word's meaning (Ali Rezvani Kalajahi \& Pourshahian, 2012, p. 139).

Word lists have long been associated with the term vocabulary, and vocabulary learning strategies have been equated to methods for committing these lists to memory. Previous researchers paid attention to learning strategies that aid rehearsal strategies and explored
issues such as how many repetitions are needed to learn a list (Crothers \&Suppes, 1967; Lado, Baldwin, \& Lobo, 1967, as cited Gu and Johnson, 1996, p. 644).

Schmitt's (1997) taxonomy of vocabulary learning strategies is one of the most wellknown. There are two types of strategies in this taxonomy: discovery strategies and consolidation strategies. Consolidation strategies include social characteristics, storage strategies, mental imagery, and metacognitive knowledge, whereas discovery strategies include determination strategies and social characteristics (as cited in Heng, 2011, p. 4).

Lip (2009, p. 77) discovered that the most commonly utilized and most beneficial vocabulary learning strategies are mentally spelling the word, observing the word by disintegrating the sound segments,memorizing words by doing a task and requesting classmates for the interpretation of the utterances (as cited in Heng, 2011, p. 6).

Shiwu (2005) When studying EFL learners in Taiwan, it was discovered that the use of digital dictionaries, particularly two languages dictionaries, and predicting the definition of words from surroundings are the most common tactics utilized by individuals of diverse ages and levels (ibid).

### 1.3. Receptive vs. Productive Vocabulary Learning

According to earlier studies about vocabulary learning, it can be divided into two main categories which are receptive and productive vocabulary. Thus, the capacity to understand a word when heard or seen by learners is referred to as receptive vocabulary knowledge, while when a learner is able to use a word in their writing or production, it is said to have productive knowledge (Faraj, 2015, p. 12).

Zhou (2010) assumes that the learner is said to know vocabulary words receptively first, and only after deliberate learning do they become usable for productive use (p. 15, as cited in Faraj, 2015, p. 12). Additionally, the distinction between receptive and productive knowledge becomes apparent when learning a new language for example, recognized and understood
vocabulary elements are referred to as receptive vocabulary. Whereas productive vocabulary terms are lexical elements that we can use in our conversation and writing (ibid). Schmitt divided English language skills into receptive and verbal (productive) knowledge competence. According to him, receptive knowledge competence refers to both listening and reading abilities, while productive knowledge competence refers to speaking and writing abilities (2004, p.4, as cited in Faraj, 2015, p. 12).

Although, there is a lot of research on both receptive and productive vocabulary learning, there is not any research comparing them both. However, this problem is illuminated by studies on learning word pairs. Receptive and productive learning influences what kind and quantity of knowledge is acquired (Griffin \& Harley, 1996; Stoddard, 1929; Waring, 1997b, as cited in Webb, 2005, p. 34). Learners are likely to acquire slightly more receptive knowledge if they read words receptively, while constructive learning leads to greater improvements in producing the language they learned. This could explain why a learner's receptive vocabulary is greater than his or her active vocabulary, which is a situation discussed in recent research (Laufer; Laufer \& Paribakht; Waring, 1997a, as cited in Webb, 2005, p. 34). Consequently, receptive vocabulary learning is more common within foreign language learners (ibid).

### 1.4. Vocabulary Learning Challenges

Typically, students face a variety of challenges when learning a language, especially when it comes to learning vocabulary. It is more effective to identify and recognize student's difficulties to successfully teach vocabulary. Thornbury (2004: 27) suggests certain factors that make some terms more difficult than others such as pronunciation since it is easier to acquire easily pronounced words than difficult ones. Spelling could also be a problem since mismatches in sounds and spelling is common causes of errors in pronunciation and spelling, and they may add to the complexity of a word. Moreover, Long terms do not seem to be any
harder to understand than short ones. The grammar associated with the word is also problematic, particularly if it differs from that of its first language (L1) counterpart. Moreover, understanding the meaning of words could also be a problem, for instance, when the meanings of two words written similarly differ, learners are likely to mix them up. However, pupils confront additional hurdles when it comes to the range of words to acquire, connotation, and Idiomaticity; consequently, words that may be employed in a number of settings are thought to be easier to learn than synonyms with a narrower range of usage. Additionally, not being sure about the meanings of certain terms can also be problematic since most words are ambiguous, and lastly idiomatic terms or expressions are more difficult to understand than words with a clear meaning (as cited in Rahmatillah, 2014, pp. 79-80).

Gower, Philips and Walter (1995) explain what makes a vocabulary item simple or difficult (143). They present a variety of factors that can influence how simple or difficult a vocabulary item is. Exempli gratia, how close the item is to the students' first language in terms of form and contexts determine the complexity of a vocabulary item. Though, words that are identical in both the first and second languages may be confusing rather than helpful. When students have a basic understanding of English, a word that is similar to an English word they already know is easier to learn than one that is not. The connotation of the word is another challenging factor for learners to grasp. Not only that, pronunciation and spelling also pose major difficulties as explained earlier. Many students could find multi-word items difficult to memorize and retrieve when needed along with collocations since the way lexical items collocate can also be an issue. Finally, it is also difficult to know when to use words correctly. Some terms and phrases can only be used in specific situations. It is important for students to understand whether a word or expression has a distinct style, casual or formal (as cited in Rahmatillah, 2014, pp. 80-81).

### 1.5. Ways to Improve Vocabulary Learning

For learners to witness progress in learning languages, they are obliged to use particular methods and way that help to boost their linguistic competence and therefore their vocabulary competence. According to the national reading panel (2000), three key models can help improve the vocabulary learning process. First, Vocabulary improvement necessitates repetition. Second, rewriting the content or materials to satisfy the needs of the students and aid vocabulary learning. This model asserts that asking students for definitions of specific terms is less critical than concentrating on students' needs and interests in Vocabulary learning. Third, instructional strategies that enhance learning activities, such as creating conceptual definitions and including pictures for learners, must be provided in vocabulary learning. In the same vein, to Nakata (2006) vocabulary learning models are not the same as grammar learning models; rather, learning vocabulary is a process that requires time, training, and persistence (as cited in Ahmadi et al., 2012, p. 190).

Besides the several models that help students improve their vocabulary learning, there are other ways that could aid the improvement of students' vocabulary competence. In addition, Nation in his book Teaching and Learning Vocabulary discussed different ways that learners could use to improve their vocabulary learning; he introduced 3 strategies that learners could use. First, learners should try to predict the meaning of words from the context surrounding them, He explains that after learners have learned more than 2 thousand words, they use their reading skills to guess the meaning of an unknown word from context; some learners who have become accustomed to this technique use it frequently, while others require specific strategies to help them interpret the word. Second, utilizing mnemonic devices in which learners come across an unfamiliar term and learn its meaning, they want to make an extra effort to memorize it. The term strategy is a good way to go about it. Learners use this strategy to make an uncommon connection between the word form and its meaning. Third,
learners should make use of suffixes, prefixes and roots. To him for an advanced English learner, knowing Latin affixes and roots has two purposes. It can be used to aid in the acquisition of unfamiliar words by linking them to known terms or recognized prefixes and suffixes, as well as to verify if an unfamiliar word has been correctly predicted from context (Nation, 1990, PP. 160-168).

There are some factors that influence students' ability to use vocabulary effectively and either help or slow down the learning process and their acquisition of Vocabulary. Materials are very crucial when it comes to learning new Vocabulary in the classroom setting, choosing the appropriate textbook, classroom activities and lessons objective affect learners' ability to fathom, remember and produce new words. Teachers must choose an adequate and fitting teaching methodology by avoiding teaching lexical items in isolation and instead relating them to either real life context or the word's linguistic family. Moreover, instead of dedicating so much time for learning new words, teachers should focus on letting their students practice different words. And since learning vocabulary is not an easy task, teachers should maintain a positive learning environment and help the learners to boost both intrinsic and extrinsic motivation (Faraj, 2015, pp. 12-13).

### 1.6. Vocabulary Learning and Information and Communications Technology (ICT)

During the past eras, scholars and scientists have always been on the look for the best and most effective way to help learners learn languages and language skills, they went through so many methods, theories and strategies of language learning including using the information and communication technology to aid language learning and therefore vocabulary learning. However, before establishing the connection between the two, an introduction to ICTs is needed. Additionally, ICT could be defined as any service or program that allows interaction and communication such iPads, portable computers, phones, search engines and other numerous applications and software and even video gaming (Khan et al., 2015, as cited
in Hussain, 2018, p. 149). According to Kopinska (2013), teachers and learners in the EFL setting around the globe are increasingly directing their interest towards using technologies (as cited in Hussain, 2018, p. 149). Web 2.0 innovations have now become an indisputable part of our everyday lives. Millions of people use different technologies such as video games to connect, interact, search, and enjoy different activities. It is claimed that Web 2.0 tools in many L2 learning contexts have changed the language learning process (Wang \& Vasquez, 2012, as cited in Hussain, 2018, p. 149). ICT is characterized as technical devices that are used to interact with others, store information and to save time and space (Raval, 2014, as cited in Hussain, 2018, p. 150). According to Mikre (2011), information and communication technologies (ICTs) have changed the way people function nowadays and are shaping educational sectors (as cited in Hussain, 2018, p. 150). There is a growing consensus that using ICTs in education leads to more knowledge construction, elevated levels of practice and student accountability (Mikre, 2011, as cited in Hussain, 2018, p. 150). Technology can provide opportunities for effective teaching and learning experiences, which can motivate students, develop their critical thinking skills and autonomy (Rahimi \&Yadollahi, 2011, as cited in Hussain, 2018, p. 151).

Studying vocabulary is a very crucial step in language learning, teachers and students try their at most best to facilitate this process. According to Alqahtani (2015), the words we use to interact efficiently while listening and speaking is referred to as Vocabulary (as cited in Hussain, 2018, p. 151). According to Koptyug (n.d.), there are many ways to use ICT in language teaching vocabulary. First, the instructor can hold a daily class with the use of a computer and access to the internet. Second, students should be given the ability to use the search engine as a research platform. Third, students are writing essays as the teacher checks the class in, and then students can use the machine and the internet to send their work to the
project site. Forth, genuine communication is established, students prefer to send their work (as cited in Hussain, 2018, p. 151).

According to Atiqotulmuna (2018) teachers will require new strategies to engage new vocabulary and employ new terms in context, as well as new techniques to communicate with and satisfy pupils living in the ICT era. As a result, the significance of ICT tools increases. It's a useful tool for improving vocabulary teaching and learning, not just for students but also about teachers. ICT is a practical source for instructors to investigate numerous approaches of teaching vocabulary, and it provides opportunity for students to enhance their vocabulary through a variety of activities. Using ICTs in learning is viewed as a tool through which a range of instructional methods and philosophies can be applied (para. 3).

## Conclusion

Teaching or learning vocabulary is a difficult but a crucial task, and students all over the world are looking for ways and approaches that will help them stay focused and motivated while also allowing them to make progress, meet their goals, and save time. As a result, both teachers and language learners should make the learning process as enjoyable as possible, which is why using technology, such as playing video games to boost vocabulary learning, is such a great method to do so. Moreover, learners should use ICTS as a way to learn and acquire new vocabulary which increases students' engagement and motivation to work harder.

# CHAPTER TWO: VIDEO GAMES AND VOCABULARY LEARNING 

Introduction
2.1. History of video gaming
2.2. Benefits of video gaming
2.3. Types of video games
2.4. Video games and language learning
2.5. Video games and vocabulary learning

Conclusion

## Introduction

The gaming industry is undoubtedly one of the most critical and forward-thinking segments of the computer industry nowadays. This form of entertainment began as a way to relax and enjoy oneself, but quickly evolved into a cultural, educational, and occupational reset. Numerous studies have found both benefits and drawbacks of online and offline video games on a variety of psychological aspects and health behaviors (Sharma et al., 2021, p. 1). These studies have proved that its influence on neuropsychological and psychological development is increasingly becoming more prevalent. In nowadays videogames such as firstperson shooters and virtual reality simulation necessitate powerful analysis, spatial visualization, as well as a variety of other mental capacities. Fluid intelligence is one such trait that can have a favorable or unfavorable connotation. Fluid intelligence is described as the ability to think abstractly and solve problems while being unaffected by education, training, or schooling.

This chapter examines the connection between vocabulary learning, as discussed in the preceding chapter, and how it may be influenced by video game play. Furthermore, the nature of video games will be examined through a brief historical overview, as well as outlining the various sorts of video games and how each one may affect the players' mental capacities while also discussing their benefits whether they were social, motivational, emotional or cognitive advantages. Therefore, the influence of video games on language learning and vocabulary learning in particular would also be discussed in this chapter.

### 2.1. A Brief History of Video Games

A look into the past of gaming is required before discussing the impact of video games on the human mind. The need to play dates back to the dawn of time. It is a crucial tool
for preparing children for adulthood, and it is a way for adults to escape reality while enjoying and learning every day.

The nationalmuseum.ch blog (2020) traced the historical background of video games that is summarized as follows. This type of technology started first in the 1970s, students experimented with progressively lightweight computers until the early 1970s. The company Atari was founded in 1972. Not only did the business dominate the video game market for the coming era, but it also produced Pong, the first global hit which was similar to playing tennis. Despite the fact that the game's concept was not novel, Atari combined the device with a monitor screen in a container with an aperture dedicated for money, thereby creating the video game console, and that was the first time people play a computer game for a cheap price. The arcade game Space Invaders (1978) signaled the start of the era of arcades, where 1980s youth squandered their extra cash on this technology. With the establishment of Apple in 1976 and the advent of microchips, digital machinery had advanced significantly. And with the Atari 2600 home console, Atari brought to the people yet another revolution, which contains multiple games and not just one, that over 30 million people rushed to buy it.

Pac-Man and Mario Bros are only a few examples of classic games from the 1980s that people still love to play even nowadays. Home computers with greater processing capacity began to emerge. Commodore, with its Commodore 64 desktop, arose from the ruins of the industry (1982), as well as Nintendo, with the NES (Nintendo Entertainment System) console (1985). Video games moved forward towards a better quality and innovative characters and game play. Kids and adolescents in the 1980s played these games on their computers for hours, and spent even more time when the Game boy was created.

By the 1990s, video games went on another level by creating three-dimensional graphics which made this fictional world seem a little bit closer to reality. Sony released the

PlayStation in 1994, which was a technological and visual leap forward from previous machinery. Game designers started creating new unique concepts inspired by historical events such as the following games, Age of Empires (1997) or Command \& Conquer (1995).

People could not match against each other internet at the early 2000s because the network was not that strong enough or that widely used. Instead, each gamer placed his/her device next to each other's and connected them at the arena to play together and played various games such as Counter Strike (2000) which was very famous. However, when more people started going online, different companies launched online games that people can play together such as World of Warcraft (2004).

By the 2010s, people made a lot of profits out of the video games industry since multiple businesses produced many games for multiple devices. As a result, people of all ages and at all times became more interested in video games. And what is interesting about this era is that gamers all over the globe started to record their game play and post it online for viewers to watch it and make a lot of money out of this activity.

Nowadays, this industry brought many people to the digital reality where they can be themselves, learn better and make friends by interacting with people from all around the globe.

### 2.2. Categories of Video Games

Since the beginning, video game developers and designers have sought to present both reality and fantasy in different ways and have been attempting to be as innovative as possible in order to attract as many people as possible. Apperley (2016, pp. 11-17) discerns four main categories of video games:
a) Simulation game: which are video games that replicate athletics, aviation, and transportation, as well as those that replicate the lifestyle of towns, communities, falls under this category (Apperley, 2016, p. 11). Frasca's (2003) theory contends that somehow all video games are a simulation; yet, what sets simulation apart from other categories is how these games attempt to emulate realistic practices that people engage in on a daily basis (as cited in Apperly, 2016, p. 12). For example, a simulation game named Kerbal Space Program displays different vocabulary items about space and astrology such as NASA and astronaut, henceforth, by playing this game learners will learn new words that the educational system would not usually provide.
b) Strategy games: multiple studies show that this genre could be beneficial for the players since it improves the critical thinking and aids problem solving. Real-time strategy (RTS) and turn-based strategy (TBS) are both subcategories of the strategy genre (TBS) but they share similar graphics and visionary for example by positioning the camera squarely above the subject, it takes an overhead viewpoint, with a preference for a more lifelike portrayal (Apperley, 2016, p. 13).
c) Action games: which is another popular genre that is played a lot, and it is basically thriller games that require quick thinking, strategy and fighting. According to Apperley (2016) there are two main categories within the action genre: first-person shooters where the gamer can see on his monitor only the hands and the weapon of the character whereas third-person games show the gamer his full character in a 3D form moving, running and jumping (p. 15). In a way that is different from other types of performance videogames, action games are frequently highly performative (Apperley, 2016, p. 16). He also added that in this genre, by choosing the appropriate inputs, the user should really undertake the intended action.
d) Role- playing games: according to Apperley (2016), the role-playing game genre is inextricably linked to the fictional work of literature (p. 17).

### 2.3. Benefits of Video Games

Granic et al. (2014, pp. 68-73) described four different advantages of playing video game in their article titled The Benefits of Playing Video Games. They emphasize that, despite their terrible reputation, video games provide a number of advantages. First, several advantages are related to cognitive abilities, despite popular perception that playing games is cognitively indolent and soothing, it shows that they develop a variety of mental abilities (Granic et al., 2014, p.68). For clarification, they cite Green and Bavelier's (2012) claim which suggests that if we bring two individuals to play an action game for the same period (first person shooter) while one of them is an experienced gamer who plays video games most of the his life, and the other one never played video games before and this would be his first time playing video games; when put in a fight situation, we can see that professional gamers have a well-structured strategy and quick reflexes, but the other lacks these mental qualities.

Relying on previous investigation, Garnic et al. (2014) claim that these cognitive benefits are evident in demonstrable differences in brain functioning and performance. A case in point is the study conducted by Bavelier et al., (2012) that shows that regular gamers' attentioncontrol apparatus would be not as much engaged than new gamers' throughout difficult template task, prompting the researchers to believe that video game players utilize their perceptual resources effectively and block out unnecessary knowledge more efficiently (as cited in Granic et al., 2014, p.68).

Second, along with the aforementioned benefits, Garnic et al. (2014, p.70) highlight that not only do video games help with cognitive ability, but they also help with motivation; developers of video games are masters of involvement. They have perfected the art of enticing
people of all age groups into game reality, requiring them to strive for significant objectives, persist in the despite of several setbacks, and appreciate the few times of achievement after finishing difficult tasks.

Despite the fact that gaming is typically thought of as a lighthearted pleasure, gaming surroundings can truly foster a consistent, upbeat motivational approach especially for individuals who lack motivation to study or work since the usual strategies used by learners require dull and demotivating techniques. This motivational method might then be applied to education and business settings. Several types of games are more capable of creating these healthy motivational patterns, and others are less inclined to do so. Furthermore, personality characteristics and game categories interests may well have a different influence on motivational results (Granic et al., 2014, p.71).

Third, it has been hypothesized that playing video games might generate one of the most severe pleasant emotional sensations (Mcgonigal, 2011, as cited in Granic et al., 2014, p.71). Sheery (2004) describes two of the most common emotions that gamers go through when winning. Gamers frequently describe desiring and facing considerable pride after winning in the face of significant difficulties. Another positive emotional state highlighted by gamers is flowing. This latter refers to the state of being involved in a self-rewarding practice that provides a sense of power and eliminates any poor self-esteem (Granic et al., 2014, p.72).

Though it is obvious that games are enjoyable and evoke good feelings, there are still unanswered doubts about the long-term impact of pleasant emotional responses while playing video games. Puzzle games, for example, have been demonstrated to elicit positive feelings, although they are intended to be played for short periods of time. It is unknown to what degree games especially for long participation also promote good mood changes. Furthermore, despite the fact that correlation analysis imply that people deliberately use these
games to manage their feelings (Olson, 2010, as cited in Granic et al., 2014, p.72). It's possible that happy emotions and game play go hand in hand, and that players claim that enjoying pleasant feelings was a deliberate purpose that came before they started playing.

Fourth, by far the most significant distinction between today's video games and the earlier ones from 10 to 20 years ago is their widespread social aspect. Despite popular belief, gamers are not alienated, useless geeks lay down on their sofa all the time (e.g., Fredrickson et al., 2001, as cited in Granic et al., 2014, p, 72-73). According to the Entertainment Software Association (2012) around 70\% of players game with a companion, either collaboratively or fiercely, in their games (as cited in Granic et al., 2014, p.73).

### 2.4. The Relationship between Video Games and Language Learning

Numerous studies have shown that video games have a positive impact on language learning, and scholars have investigated the relationship between the two. A few studies have surfaced in recent years attempting to investigate the impact of playing games on the language-learning procedure. Regarding the possible good impacts of gaming, claims were offered at first that video games may help with things like stress and enthusiasm, but the subject of video games' influence on language learning has yet to be completely studied (Rudis \& Poštić, 2018, p. 115). Reinders and Wattana (2011) describe a few researches that have been conducted as to how video games can aid with language learning in their paper Learn English or Die: The Effects of Digital Games on Interaction and Willingness to Communicate in a Foreign Language. The first study they analyzed was by DeHaan, Reed, and Kuwada in 2010. It was created to evaluate the gain in vocabulary of people who constantly participated in game versus those who simply observed the game that is played. People who were constantly playing scored higher than those who merely watched the game play, according to the research (as cited in Rudis \& Poštić, 2018, p. 115). This could be
explained through the claim that video games enhance engagement, reduce distraction, incorporate different language learning skills and increases motivation to learn new items.

DeeHaan (2005) is his paper titled Learning Language through Video Games: A Theoretical Framework, an Evaluation of Game Genres and Questions for Future Research entails that the ability to obtain a videogame player's motivation has been one of the key foundations for using video games to instruct. Nevertheless, while motivation is an important component of language learning, it does not ensure language acquisition. Likewise, for certain players' cognitive skills, combining playing a video game and learning its language may be too challenging.

Similarly, adventure games' conversations used among voice actors and shown in subtitles at the edge of the screen, and sports games' on-screen data spoken by real sports reporters both incorporate synchronous aural and written language which helps the learner to practice multiple skills at the same time. Moreover, video gamers have so much influence over how the game is played; they can use one input channel to interpret another, they can pull apart language at their own leisure because they have so much power over the gaming experience for example different in-game decisions, videogames can be halted, movements can be replayed, and dialogues can occasionally be created at the player's discretion. Likewise, the natural recurrence in video games, such as the continual establishment of mini-battles in role play and the regular usage of menus in the virtual masters' fields and simulation games, allows a language student to constantly be presented to the target language. Whereas movies and novels, typically don't utilize the same language or syntax and so make it harder to learn, Reiteration of video games helps a language learner to comprehend and decode new components by repeated exposure with the use of known language. In the same vein, the player might also have a helpful kinesthetic relationship to his language in a video game. Language professors commonly issue instructions to pupils, to which the instructor expects a
physical reaction. These exercises of Total Physical Response (TPR) are used to relate the language item (a grammatical or vocabulary item) to a physical movement to make it simpler to retain the language. Video game players conduct actions on screen that can be used to code the language they are learning dually (pp. 1-2).

Da Silva (2014) in his article Video Games as Opportunity for Informal English Language Learning: Theoretical Considerations, explains how video games has affected his language learning, he states that when he was young, he used to play a game on PlayStation called Breath of Fire IV. However, since his mother tongue was Portuguese, he did not have the language ability to unravel the scenario on the monitor. Thus, he believed every written language option to advance in the game was necessary for comprehension. This belief did not last long, for his idea was erroneous from the very opening scene of Breath of Fire IV. The videogame starts by showing a floating sand boat, and two major creatures - Cray and Nina, a tiny, hair-blonde fairy - communicate. Nina just says: "There, Cray," after she has seen a shooting star in the sky. And as a naïve kid he thought that the star was shooting, he looked carefully at all the terms in the dictionaries to discover that the message was not meaningful if word-for-word was translated. The word 'shooting' and 'star' did not appear to have any connection. The term "shooting star" was, nevertheless, used. This might be his first understanding of the need of analyzing and translating language into a certain context, and phrases that could transmit one or many meanings, and therefore he learned all of that through playing video games (p. 157).

### 2.5. Video games and vocabulary learning

In reality, whether the players are conscious of it or not, they are always learning as they play (Prensky, 2004, as cited in Vásquez \& Ovalle, 2019, p. 175). These thoughts have sparked a slew of research projects around the world, demonstrating that games may be used
as methods and implements in learning languages, particularly vocabulary development (Vásquez \& Ovalle, 2019, p. 175).

According to Turgut and Irgin (2005) learners, particularly those who grew up with the internet era, frequently regard vocabulary acquisition as tedious. The internet has provided a plethora of opportunities for young learners to expand their vocabularies. Teachers and parents may make sure the students are ready for the read and write adventure through using videogames. Maybe, in the early years, the previous generation had no official vocabulary training, but today's modern learners have vocabulary courses near their computers. For video games, learners utilize words in complicated and pleasant manners for their own objectives. They are a useful place to explore how new and existing forms of reading skills and multimodality can incorporate, change the knowledge of what content and involvement are and provide perspective into the highly efficient instructional methods embedded in video games (p. 761).

In terms of foreign language vocabulary learning, Gee (2007) claims that effective games are there to provide circumstances and challenges for the whole gaming, and can provide various simple equipment to play the game appropriately. The terminology that players would employ during their behaviors on the computer games is one of these tools. He contrasts this procedure to setting up a foreign languages class, where instructors lay the groundwork for students' future vocabulary and grammar instruction. Furthermore, he claims that games are accompanied by various texts such as guidelines, conversations, suggestions, and explanations, all of which he claims might help players acquire independence (as cited in Vásquez \& Ovalle, 2019, pp. 175-176).

Derakhshan and Khatir (2015) state that vocabulary learning is a difficult task, and it is necessary to try to grasp, generate and alter the aim words. Games help many students learn
the target language more readily and motivate them. They also assist teachers build contexts with valuable and relevant target words and they also make pupils enjoyable by helping them more rapidly to learn and remember new words. In other words, gaming learning may establish a meaningful framework for the language learning process. Moreover, he adds that Games are beneficial and helpful in vocabulary acquisition. They are stimulating because they often feature friendly competitions and promote a cooperative learning atmosphere. Additionally, game - based learning thereby bring the actual world into the class and increase the use of English by students flexibly and communicatively. There can be no denying the importance of games in the development of vocabulary. Nevertheless, it is important that appropriate games be selected in order to accomplish most of the vocabulary games. Where a game is to be utilized, students may consider their degree of expertise and cultural background and should also be helpful for students with lesser language skill and should be readily adapted to the class (p. 40).

Jaipal and Figg state that video games are entertaining and encouraging (2009, as cited in Rasti-Behbahani, 2021, p. 113). Nevertheless, many other scholars argued that videogames generate various types of motivation whether when it comes to gaining self-esteem or learning a foreign language. Similarly, video games that improve motivation tend to be advantageous to vocabulary learning (Rasti-Behbahani, 2021, p. 113).

## Conclusion

Many studies examined the possibility of video games being used for learning languages as a sort of both instruction and pleasure. As mentioned above, numerous studies have shown that different types of video games help to enrich the vocabulary competence; they help to motivate the learners to learn vocabulary in a fun and easy way because of their engaging nature which aids the students to achieve better academic results. Regardless of the benefits
previously mentioned, video games also help to develop various learning skills simultaneously including both the receptive and productive skills.

## CHAPTER 3:

### 3.1. Methodology

3.2. Population and sampling
3.3. Administration of the Questionnaire and Test
3.4. Section One: Questionnaire
3.4.1. Description of the Questionnaire
3.4.2. Analysis of the Findings from the Students' Questionnaire

### 3.4.2.1. The Gamers Group Questionnaire

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### 3.5.2. Frequency of Vocabulary Test Scores of Group Gamers

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### 3.5.5. Correlation and Variance Analysis Results

3.5.5.1. Results of Correlation Analysis between Video Gaming and Vocabulary Learning

### 3.5.5.2. Results of Two-Sample T-Tests (Variance Test)

3.5.5.3. Results of Correlation Analysis between Frequency of Video Gaming and Vocabulary Learning
3.6. Summary and Discussion of the Findings

## Introduction

This final chapter is dedicated to present the analyses of quantitative data obtained from a study aims at investigating the influence of video gaming on foreign language vocabulary learning. It proceeds with an overview of the case study, followed by analyses of the questionnaire and the test. Subsequently, and in order to validate or refute the research hypothesis, the findings are examined through comparative and correlational analysis.

### 3.1. Methodology

The present study used two research tools for quantitative statistical and comparative correlational analyses in order to investigate an assumed role of playing video games in enhancing vocabulary learning:a questionnaire and a test that were combined into one form. First, a questionnaire was administrated in order to check participants' background, attitudes and views about foreign language learning, as well as video games. Second, a test that was used to evaluate learners' vocabulary competence. Thereupon, comparative and correlational analyses followed in order to test whether or not a correlation to be found between video gaming and foreign language vocabulary development.

### 3.2. Population and Sampling

A sample composed of 54 students that were selected randomly, took part in this study. The participants were students enrolled in third year 'licence' degree, at the Department of Letters and English Language, University of 8 mai 1945 -Guelma, for the academic year 2020/2021. There are several reasons behind choosing third year students. First, the students have been through enough exposure to the target language. Second, that they possess a sufficient vocabulary competence. Third, they are up-to-date to new techniques and new ICTs in learning foreign languages, in general, and vocabulary, in particular. Finally, they have had enough experience in playing video games, as for the video-gamers group. The questionnaire
was administrated to 54 students who agreed to answer it completely, 27 students answered it online on the platform of Google form while the other 27 answered it face to face on paper.

### 3.3. Administration of the Questionnaire and Test

Half of the students' questionnaire was posted online on Google form for English language students who are both gamers, while the other half was distributed face to face in the department of Letters and English Language at Guelma's University from the $1^{\text {st }}$ of June 2021 till the $10^{\text {th }}$ of June 2021 since most of the students were not attending their courses as the period of final exams approached them. The online questionnaire took the participants roughly 12 minutes to complete. It should be mentioned that some students were uncooperative because they were uninterested in participating in the survey. As a result, attracting thus many people was challenging. It is also worth noting that irrelevant responses were not taken into account.

### 3.4. Section One: Questionnaire

### 3.4.1. Description of the Questionnaire

The questionnaire was designed on the basis of research on foreign language learning and vocabulary learning, on the one hand; and the influence of video games on vocabulary learning, on the other. It was written in English since they major in Letters and English Language. The questionnaire was semi-structured, consisting of sixteen (16) questions, in order to gather statistical information on the relationship between video gaming and foreign language vocabulary development. The majority of the questions were close-ended in the form of multiple-choice questions, in addition to a few open-ended ones that required a short answer of two or three words. The last question was left open-ended to allow participants to offer their views and comments on the subject. The questionnaire was composed of three sections: (1) Background Knowledge, (2) Language and Vocabulary Learning, and (3) Video

Games and Vocabulary Learning. The first section, Background Knowledge, consisted of three (3) questions aiming at identifying the gender, number of years of learning English and their graduation score range. The aim of this section is to reflect the relationship between the influence of video games on the academic achievement.

Section two, Language and Vocabulary Learning, consisted of six (6) questions. It aimed at investigating the strategies and techniques that the respondents use to improve their language and vocabulary learning.

Section three, Video Games and Vocabulary Learning, consisted of seven (7) questions that aimed to investigate the influence of video games on the process of learning and acquiring vocabulary, and to assess if video games to enhance vocabulary learning.

### 3.4.2. Analysis of the findings from the students' questionnaire

### 3.4.2.1. The gamers group questionnaire analysis

## Section one: Background Information

Question one: Gender

Figure 3.1

Student Distribution According to Gender


Most of the participants were males with a 57.7 percentage, whereas the females make 42.3 of the percentage. This was an expected finding as a result of designing "video-gamers" group in which male participants made the vast majority and thus influenced the sample's gender distribution. According to Osborn (2018), core gamers are people who feel that gaming is an important part of their lives, who spend a large portion of their free time playing games, and who love competing or playing with others, and 70 percent of gamers who consider themselves core are males.

Question Two: For how long have you been studying English?

Figure 3.2
Student Distribution According to How Many Years they Studied English


The graph shows that the sample is homogeneous in terms of the number of years that the participants have spent learning English. Almost 71\% studied English for 10-11 years. That being so, the sample is satisfactorily and consequently the length of learning cannot be an influential factor in the participants' vocabulary development.

Question three: Graduation score range

Figure 3.3
Student Distribution According to their Graduation Score Range


The students were asked to provide their graduation score range. The sample consists of a majority of participants (73.1\%) that scored an average higher than 12 and, whereas $26.9 \%$ of the sample had an average that ranges between 10 and 12 . Accordingly, the vast majority of the study's participants can be considered diligent and competent enough

## Section Two: Vocabulary Learning

Question four: Do you engage in activities outside the classroom to improve your English language skills?

## Figure 3.4

Activities Outside the Classroom


The graph shows that $77.8 \%$ of the students engage in different activities that help them to improve their English proficiency, whereas $22.2 \%$ of them do not engage in activities outside the classroom. The latter results could imply that the students did not understand the question very well since they chose the activities that they engage in to improve their language in the following questions.

Question five: What are the activities that helped you to learn English?

Figure 3.5
Activities Contributing the Most to Students' Learning of English


The graph shows different activities that learners engaged in to improve their learning of English as a foreign language. The biggest percentage (81\%) represents audiovisual activities which consists of watching movies/ series (44.4\%) and playing video games (37\%). While the other activities make $18.5 \%$ of the percentage. Nevertheless, it is apparent that using audio-visual materials aids learners in enhancing their language skill. They can see and hear the words, which may aid their recall when using the language. They can properly pronounce it because they have already heard the right pronunciation on the sound before speaking. It will consequently enhance their speaking confidence, and they will be able to overcome their feeling of being shy. Aside from that, it aids in the development of today's learning, which places a greater focus on the usage of ICT. Because the majority of
today's students are technologically adept, they will be eager to learn (Kathirvel\& Hashim, 2020, p. 2599-2608).

Question six: How much do you agree with the following statement: "Vocabulary learning is a building block of language learning?"

Figure 3.6
Student Attitudes Regarding the Claim that Vocabulary Learning is a Building Block of
Language Learning


Most of the student participants (84.6\%) either agree (26.9\%) or strongly agree (57.7\%) that vocabulary is a crucial part of learning languages, while the rest of the percentage are either neutral (11.5\%) or disagree to some extent (3.8\%).

Question seven: What contributed the most to your vocabulary learning? Choose 3 of them

Figure 3.7
Materials Contributing the Most to Students' Vocabulary Learning


The figure above demonstrates that the majority of the students believe that audio and audiovisual activities are what contributed the most to enhancing their vocabulary learning, in which (61.5\%) of the participants listen to music, (76.9\%) watch TV and movies, and (65.4\%) play video games in the target language. Whereas, the other activities make up a small portion of the percentage with (19.2\%) of the participants believe they contributed to developing their vocabulary, ( $3.8 \%$ ) of them believe in the importance of reading dictionaries, while (34.6\%) think that chatting with native speakers contributes to their vocabulary enhancement.

Question eight: What is the skill that helped you the most in learning vocabulary effectively?

Figure 3.8
Student Distribution According to the Skills that Helped Them the Most to Learn Vocabulary


The graph shows that the listening and reading skills represent the highest percentage, with (70.4\%) of the students believe that the listening skill is mostly helpful in developing their vocabulary, and $(40.7 \%)$ believe that the reading skill was very helpful as well. Such results are compatible with their beliefs about the contribution of audiovisual activities they practice (results fromQ5 and Q7) to learning the foreign language vocabulary. Whereas, (29.6\%) and ( $22.2 \%$ ) of the respondents believe that the writing and speaking skills contributed well to developing their vocabulary, respectively.

Question nine: What hinders my vocabulary learning the most?

Figure 3.9
Student Distribution According to the Factors that Could Hinder Vocabulary Learning


Students may have misunderstood the question since (48\%) of them claim that lack of chances to use English outside the classroom is what hinders their learning of English vocabulary. However, the vast majority claimed in the previous questions that they engage in activities outside the classroom, and such activities is what contributes the most to their learning. This fact is following the misconception of "use of a language" to "speaking it". Nevertheless, the same portion of the respondents, (44.4\%), believe that studying boring materials as well as having no motivation to study and learn vocabulary are reasons that hinder vocabulary learning the most. Then as well, same portion of respondents, (22.2\%), believe that factors such as borrowing from the mother tongue and time constraints are obstacles to vocabulary learning.

## Section Three: Video Games and Vocabulary Learning

Question ten: How much do you agree with the following statement: "ICTs (Information and Communication technologies) help developing my English vocabulary learning."

Figure 3.10
Student Distribution According to their Attitudes Regarding the Contribution of ICTs to English Vocabulary Learning.


The figure shows that most of the student participants (62.9\%) either agree (25.9\%) or strongly agree (37\%) with the claim that ICTs do help improve the experience of learning languages and therefore vocabulary, while the rest of the participants are either neutral $(25.9 \%)$ or disagree to some extent (11.1\%). These results that go along the line with their belief about the audiovisual activities they practice outside the classroom to contribute to improving their vocabulary learning as demonstrated in questions five, seven and eight.

Question eleven: Have you ever played video games? If YES, continue answering all of the following questions except Q 16. If NO, skip to the last question (Q 16)

## Figure 3.11

Student Distribution According to Whether They Play Video Games


The graph verifies that all the group's participants are video-gamers and have played video games.

Question twelve: How often do you play video games?

Figure 3.12
Student Distribution to the Frequency of Playing Video Games


The graph shows that the participants' frequency of playing video games range between a few times a week ( $45.8 \%$ ), everyday ( $29.2 \%$ ), and several times a day ( $25 \%$ ). Accordingly, the respondents play video games significantly frequently, the fact that allows evaluating a possible influence of video gaming on learning several vocabulary items.

Question thirteen: What are your favorite games to play?

Figure 3.13
Student Distribution According to Their Favorite Games to Play


The graph shows that most of the students play adventure/ war games (79.2\%), roleplaying games (simulation games) (33.3\%) and sports games (33.3\%). These results are in consistence with the claims mentioned in chapter two, that among the four main genres of video games, gamers tend to play more thriller gamers that involve adventure and war games.

Question fourteen: How much do you agree with the following statement: "Video gaming has improved my vocabulary learning."

Figure 3.14
Student Distribution According to their Attitudes Towards the Claim that Video Games Help to Improve Vocabulary Learning


The results obtained revealed that ( $95.8 \%$ ) of the population believe (strongly agree ( $62.5 \%$ ) or agreed ( $33.3 \%$ )), that playing video games contributed significantly to improving their vocabulary learning, while a little portion of the percentage disagreed with the statement (4.2\%).

Question fifteen: I find video games an easy vocabulary learning strategy

## Figure 3.15

Student Distribution According to their Attitudes Regarding the Claim that Video Games is an Easy vocabulary Learning Strategy


The whole population believes (strongly agreed (66.7\%) or agreed (33.3\%)) that playing video games is a much more enjoyable and easy strategy to learn vocabulary. These results go along the line with researchers (such as Granic and Sheery) claims about the benefits of video games in improving students' cognitive ability, motivating them to study more, and improving their social skills (Chapter 2, pp. 6-7).

Question sixteen: If you have not played video games before, would you consider playing them more often to learn new vocabulary?

Figure 3.16
Student Distribution According to Whether They Would Consider Playing Video Games More to Learn Vocabulary


The graph shows that the vast majority of the students ( $90 \%$ ) agreed to play video games more often to improve their experience of learning vocabulary, while (10\%) answered that they would not. The respondents misunderstood the question, because they were asked to skip question 16 if they answer yes to question 11 .

### 3.4.2.2.The Non-Gamers Group Questionnaire Analysis

## Section One: Background Information

Question One: Gender

Figure 3.17
Student Distribution According to Gender


Most of the participants were females with a ( $96.3 \%$ ) of the total sample whereas the males make (3.7\%) of the percentage. This finding was expected since females make the vast majority of the students at the Department of Letters and English Language (University of Guelma), and this group was randomly selected regardless of any factor, unlike the previous group that required participants playing video games.

Question Two: For how long have you been studying English?

Figure 3.18
Student Distribution According to How Many Years they Studied English


The graph reveals that nearly (79.9\%) of students studied English for 10 year, (15.4\%) for 11 years and $(7.7 \%)$ for 12 years. As a result, this sample is also homogeneous in terms of the respondents' years spent learning English.

Question three: Graduation score range

## Figure 3.19

Student Distribution According to their Graduation Score Range


The students were asked to provide their graduation score range, (59.3\%) of the sample had an average that ranges between 10 and 12 , while ( $29.6 \%$ ) had an average that ranges between 12-14, and (11.1\%) said had an average between 14 and 16 .

## Section Two: Vocabulary Learning

Question four: Do you engage in activities outside the classroom to improve your English language skills?

Figure 3.20

## Activities Outside the Classroom



According to the graph, (73.1\%) of students participate in activities that assist them to enhance their English proficiency, whereas (26.9\%) do not participate in activities outside of the classroom. This portion of the students misunderstood the question since all of them claimed to practice the activities outside the classroom in the following questions.

Question five: What are the activities that helped you to learn English?

Figure 3.21
Activities Contributing the Most to Students' Learning of English


The graph depicts the many activities that students practice to improve their English language skills. Audiovisual activities account for the biggest interest with largest number (37.3\%), through viewing movies/series. Then chatting with friends is what helped (33.3\%) of the participants to learn English, and reading books and articles facilitates English language learning for (29.6\%).

Question six: How much do you agree with the following statement: "Vocabulary learning is a building block of language learning?"

## Figure 3.22

Student Attitudes Regarding the Claim that Vocabulary Learning is a Building Block of Language Learning.


The largest portion of the sample (85.2\%) believe ((51.9\%) agree and (33.3\%) strongly agree) that vocabulary is an important part of learning languages, while the remaining percentage is either neutral (11.1\%) or disagrees to some extent.

Question seven: What contributed the most to your vocabulary learning? Choose 3 of them.
Figure 3.23
Materials Contributing the Most to Students' Vocabulary Learning


The graph shows that audiovisual activities have the biggest interest of the students in developing their vocabulary competence, with (59.3\%) of them showed interest in listening to music, and (70.4\%) in watching TV and movies. In addition, (55.6\%) of the respondents believe that chatting with native speakers is what contributed the most to their learning of vocabulary. While other activities, such as classroom instruction is believed to be the most useful to ( $33.3 \%$ ) of the students, then, reading dictionaries and playing video games, are seen as the most beneficial to a same portion of sample (33.3\%).

Question eight: What is the skill that helped you the most in learning vocabulary effectively?

Figure 3.24
Student Distribution According to the Skills that Helped Them the Most to Learn Vocabulary


The graph illustrates that (61.5\%) of the students believe in the listening skill being beneficial to their vocabulary learning, followed by same portion of (38.5\%) believing in the reading and speaking skills. Such results are consistent with the findings, from question five and seven, on audiovisual activities that they engage in. Finally, (34.6\%) of the total sample believe that the writing skill was helpful to them in developing their vocabulary competence.

Question nine: What hinders my vocabulary learning the most?

Figure 3.25
Student Distribution According to the Factors that Could Hinder Vocabulary Learning


A vast majority ( $63 \%$ ) of the students believe that the absence of opportunities to use English outside the classroom is a main obstacle to learning vocabulary, followed by portions of (59.3\%) and (40.7\%) that claim having little incentive to study and master vocabulary, and studying dull subjects to be hindering vocabulary learning, respectively. Whereas, a small percentage of students view factors such as borrowing from the mother tongue and time constraints to be what hinders their vocabulary learning.

## Section Three: Video Games and Vocabulary Learning

Question ten: How much do you agree with the following statement: "ICTs (Information and Communication technologies) help developing my English vocabulary learning."

Figure 3.26
Student Distribution According to their Attitudes Regarding the Contribution of ICTs to English Vocabulary Learning.


A significant majority (62.9\%) of the participants either strongly agree (14.8\%) or agree to some extent (48.1\%) that ICTs help improve the experience of learning languages and hence vocabulary, while the rest are either indifferent (25.9\%) or disagree to some amount (11.1\%).

Question eleven: Have you ever played video games? If YES, continue answering all of the following questions except Q 16 . If NO, skip to the last question (Q 16)

Figure 3.27
Student Distribution According to Whether They Play Video Games


The graph confirms that the members of non-gamers group have not played video games. As the second part of the question indicates, the participants of this group are not concerned with the questions (from 12 to 15 ) investigating the relationship between playing video games and learning vocabulary. Consequently, they will shift directly to question 16.

Question sixteen: If you have not played video games before, would you consider playing them more often to learn new Vocabulary?

Figure 3.28
Student Distribution According to Whether They Would Consider Playing Video Games More to Learn Vocabulary


According to the graph, a majority of students ( $55.6 \%$ ) of the students claimed they would not consider playing video games to enhance their vocabulary acquisition, while (44.4\%) said that they would do.

### 3.5. Section Two: Test

### 3.5.1. Description of the Test

A test was conducted to assess the level of English vocabulary of third-year English language students at the University of Guelma 8 mai 1945. The test was divided into three tasks increasing in difficulty from low, then medium, to high difficulty. The first task is a multiple-choice question contains 12 items; the second task containing is matching exercise contains 10 picture/word match choices; and the third one is a gap-fill exercise contains 5 gaps to be completed. The selection of lexical items based on the everyday life vocabulary, from a variety of semantic/lexical field. As a result, the grading scale was set at 27 points, giving one point for every lexical item. The test scores were categorized into four vocabulary competence levels, that range as follows: level 1 from 1 to 6 ; level 2 , from 7 to 13 ; level 3 , from 14 to 20; and level 4, from 21 to 27.

The test results were analyzed through the methods of frequency of vocabulary test scores of both groups (gamers and non-gamers), correlation (point biserial correlation), and analysis of variance (Two-sample T-Tests). These statistical analyzes were calculated through SPSS (Statistical Package for the Social Sciences) software.

### 3.5.2. Frequency of Vocabulary Test Scores of Group Gamers

The first means of the vocabulary test statistical analyzes to start with is the frequency of the scores of the group of gamers, first, the group of non-gamers, second, and finally comparative analysis of both.

Table 3.1
Frequency of Vocabulary Test Scores of Group Gamers

| Test scores ranges | Number of participants | Percentage |
| :---: | :---: | :---: |
| $0-6$ | 0 | $00 \%$ |
| $7-13$ | 8 | $29.6 \%$ |
| $14-20$ | 11 | $40.7 \%$ |
| $21-27$ | 8 | $29.6 \%$ |
| Total | 27 | $100 \%$ |

Figure 3.29
Frequency of Vocabulary Test Scores of Group Gamers


### 3.5.3. Frequency of Vocabulary Test Scores of Group Non-Gamers

Table 3.2
Frequency of Vocabulary Test Scores of the Group "Non-Gamers"

| Test scores ranges | Number of participants | Percentage |
| :---: | :---: | :---: |
| $0-6$ | 14 | $51.8 \%$ |
| $7-13$ | 10 | $37.1 \%$ |
| $14-20$ | 2 | $7.4 \%$ |
| $21-27$ | 1 | $3.7 \%$ |
| Total | 27 | $100 \%$ |

Figure 5.30
Frequency of Vocabulary Test Scores of the Group "Non-Gamers"


### 3.5.4. Comparative Analysis of Frequency of Vocabulary Test Scores

As was already mentioned, the test scores were divided into four levels. In the gamers group, there are no students who scored between those digits, of the lowest scores, in the first level. Whereas in the non-gamers group, 14 students scored under 6, i.e., (51.8\%) of the nongamers are level 1, the lowest students. This result indicates that the majority of non-gamers sample failed to recognize most vocabulary items of the everyday life. The second level includes students who scored between 7 and 13. (29.6\%) of the gamers belong to this level, and (37.1\%) of the non-gamers do. As for the third level, 14 to 20 score range, significant portion, (40.7\%), of the gamers are third level students; however, only (7.4\%) of non-gamers are third level students. Apropos of the fourth level, (29.6\%) of the gaming group scored above 21 to 27, compared to only (3.7\%) from the non-gaming group. To put it concisely, the gamers scored much higher than the non-gamers that is the majority of the gamers were able to find the required lexical item of the vocabulary test questions. The majority of non-gamers scored below 6 , while no one of the gamers did. The lowest scores of the gamers range between 7 and 13, and that was attested by $29 \%$ of the sample. Moreover, the majority of gamers sample,(40.7\%) scored from 14 to 20, and an important portion of (29.6\%) scored
above 21 ; however, only (7.4\%) and (3.7\%) of the non-gamers are third and fourth levels, respectively.

### 3.5.5. Correlation and variance Analyses results

### 3.5.5.1. Results of Correlation Analysis between Video Gaming and Vocabulary Learning

A correlation analysis has been conducted for the many advantages it has for every scientific inquiry. According to Samuel and Okey (2015), correlation gives the regression foundation for forecasting the value of dependent variable, foreign language vocabulary learning like the case in our study, on the basis of the available relationship with the independent, playing video games as this study is concerned (26). They also add that correlational research has a significant part in the exploration of the structure of linkages between groups of variables in quantitative research. In addition, unconnected factors can be removed from future study, thus enabling the researcher to take the related variables more seriously (ibid).

A Point Biserial Correlation was undertaken in order to study a link or its absence, between video gaming and foreign language vocabulary learning. The choice of Point Biserial Correlation method was driven by the fact that one variable is continuous (vocabulary test scores) and the other is categorical (binary, playing (yes) or not video games (no)).

According to Samuel and Okey (2015) the strength of the linear connection between two variables could be measured. The correlation coefficient will fall between -1.0 and +1.0 will constantly fall. We have a positive relationship if the correlation coefficient $(r)$ is positive and vice versa. A correlation between x and y are strong if $r$ is close to +1 . A r value of precisely +1 gives an accurate match (pp. 23-24).

Results showed that there is a strong positive correlation between playing videogames and English language vocabulary learning ( $r=0.67096$ ) which was statistically significant because $\rho=0.00001(\rho<0.01)$.

Figure 3.31
Point-Biserial Correlation Scatter Diagram


The positive slope displayed in figure 3.31 denotes a positive correlation between video gaming and learners' English language vocabulary learning.

### 3.5.5.2. Results of Two-Sample T-Tests (Variance Test)

According to Skaik (1969), a Two-Sample T-test can be used to identify if the unknown media of two groups differ on the basis of independent population samples. It is very essential to utilize this test when the two samples are independent and separate from each others. Two unrelated populations or one single population but arbitrarily divided into two groups can produce the sample. Aiming at exploring the significance of variance in vocabulary learning through vocabulary tests scores, between the two groups of gamers and
non-gamers as classified by the participants answers to the question if they play video games or not, Two-Samples T-Tests was carried as classified by the participants answers to the question if they play video games or not. This test is often called Independent Samples TTest, as it compares the means of two independent groups.
$\mathrm{H}_{0}: \mu$ gamers $=\mu$ non-gamers
$\mathrm{H}_{1:} \mu$ games $\neq \mu$ non-gamers

## T-Test Results

Group Statistics

## Table 3.3

## Two-Sample T-Test Group statistics

|  | Video <br> gaming | N | Mean | Std. <br> Deviation | Std. Error <br> Mean |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Vocabulary | Gamers | 27 | 17.26 | 5.46 | 1.05 |
| test-scores | Non-gamers | 27 | 8.07 | 4.87 | .94 |

Table 3.4
Independent Samples Tests


Table 3.1, of groups' statistics, shows that the mean of the group of gamers does not equal the mean of the group of non-gamers. Antithetically, there is a significant difference between the means of the two groups.

Table 3.2 reveals that there is an extremely statistically significant difference of vocabulary competence as related to playing video games, with $\rho=0.0001$, nothing that variance is significant at ( $\rho<0.05$ ).

With $95 \%$ confidence interval (6.36-12.01) that does not contain zero, and $\rho=0.0001(\rho<$ 0.05 ), it is concluded that the results are statistically significant. Accordingly, the null hypothesis $\left(\mathrm{H}_{0}\right)$ is rejected, and playing video games has a significant impact on improving English as foreign language vocabulary learning.

### 5.5.3. Results of Correlation Analysis between Frequency of Video Gaming and Vocabulary Learning

On a different note, a correlation analysis was carried on to explore a possible association between the frequency of playing video games and vocabulary competence. To this end, Spearman's rank-order correlation was selected. The latter method use was urged by the fact of testing one continuous variable (test scores) and another ordinal variable (five-point scale). The results reveal that, despite the existence of positive association between the frequency of playing videogames and vocabulary competence, it is still weak with ( $r=0.39488$ ), and which was statistically not significant because $\rho=0.05618(\rho<0.01)$.

### 3.6. Summary and Discussion of the Findings

To start with, the questionnaire findings reveal that Algerian learners of English are aware the positive role of ICTs in the process of language learning. Most students understand how ICTs enhance communication and facilitate the gathering of information. Moreover, they are aware that with more advanced technologies available, language learning and forms of communication appear to be simple.

Furthermore, students are aware of the importance of learning autonomy to improve their English. Most of them engage in activities outside the classroom to improve their vocabulary competence. The questionnaire findings show that most of these activities are audio and audio visual such watching videos (series, TV, and listening to music, playing video games for others) since they can assist to improve the learning process of a student by demonstrating real life situations of the ideas they study. They also help to offer the students interesting, fascinating and various experiences to help them learn.

Moreover, most of the students who play video games are aware about its contribution in enhancing their learning process in general, and in improving their vocabulary in particular. They consider it a helpful facilitating easy strategy to develop their vocabulary knowledge, enhance their engagement in learning languages, enable them to communicate with native speakers, and develop different skills simultaneously such as speaking, listening and reading.

Nevertheless, responses from the questionnaire show, in addition to agreeing that students should play more video gaming to increase their vocabulary learning process, that video games are extremely helpful in acquiring vocabulary (question 15 and 16).

As for the test, the comparative analysis of frequency of the scores reveal that the gamers vocabulary level is more advanced in comparison to the non-gamers since a high percentage of the gamers group scored high marks and were able to recognize most of the vocabulary items incorporated in the test, while most of the non-gamers scored low mark and failed to recognize most of the vocabulary items.

On a different note, correlation analysis, conducted between video gaming and vocabulary learning, submitted evidence of a positive association $(r=0.67096)$ which indicates that the $r$ factor is positive since it is close to +1 which supports the claim that video games have a positive influence on the process of learning vocabulary and that they aid the students to learn
vocabulary better. In addition, a variance analysis test, Two-Sample T-Tests, was conducted between the two groups of gamers and non-gamers. Results demonstrate that with $95 \%$ confidence interval (6.36-12.02) that does not contain 0 , and $\rho=0.0001(\rho<0.05)$, it is concluded that the results are statistically significant indicating that playing video games has a significant impact on improving English as a foreign language vocabulary learning.

Finally, correlation analysis was conducted between frequency of playing video games and vocabulary knowledge to explore a possible relationship between the frequency of playing video games and vocabulary competence.

## Conclusion

In the light of the findings from the research tools employed in this study, playing video games seem to have a significant influence on the process of learning vocabulary, regardless of the types of video games the learners usually play or how frequent they do so. Video gamers tend to develop a better vocabulary competence than the non video gamers who lack a big portion of the everyday life English vocabulary. Finally, other factors, such as the type of video games, frequency of playing video games, etc., could influence vocabulary learning more, but could not be highlighted in this study since different groups study at different times and the shortage of time allocated to test it.

## GENERAL CONCLUSION

On the account that vocabulary learning is such a priority for EFL students, it necessitates a healthy and comfortable, and seemlily fun environment. Learning vocabulary ought not to be only reliant on classroom instruction; rather, it can partake in how people use their spare time. Consequently, playing video games is assumed to be one of the most effective autonomous learning strategies outside the classroom.

The purpose of this study is to investigate the impact of video games on the process of vocabulary learning. The research hypothesis was that if learners played video games, it would improve their vocabulary learning. The study's first chapter organized several of the relevant theoretical knowledge about language learning and vocabulary learning, which provided as a solid foundation for the analysis and interpretation of the practical results. The second chapter investigated the theoretical aspects of video games and the usage of ICTS in language learning in general and vocabulary learning in particular. The third chapter presented the analyses of data obtained from two research tools, a questionnaire and a test distributed to two independent groups (gamers and non-gamers).Furthermore, the software SPSS (statistical package for the social sciences) was used to analyze the findings, in order to test correlations between the independent and dependent variables and variance between the groups of gamers and non-gamers, by conducting four types of tests.

The results of this study confirmed that video games are a good way to learn vocabulary. It provides a positive correlation between vocabulary learning and video games. The findings also demonstrated that gamers participants had a very good attitude toward using video games as a learning tool either to learn a foreign language or its vocabulary in particular.

## 1. Conclusions and Implications

The findings from the distributed questionnaire and test support multiple implications. First and foremost, the results and findings from this study report clear evidence that playing video games facilitates and helps EFL learners developing their vocabulary learning. By way of explanation, the group of video gamers demonstrated way more significant results concerning their knowledge of different vocabulary fields than the group of non-gamers who, quite the reverse, showed lower performance and thus lower scores. Second, and on the grounds of the aforementioned fact, teachers and educators should encourage their students to play different genres of video games, moderately, in order to help themselves acquire easily and rapidly more different types of vocabulary items. Additionally, both the government and teachers need to be aware of the benefits of the technological advances in the field of language learning and how can video games influence the process of learning. Therefore, they would develop a positive attitude towards it, and work on integrating video games activities in the English as a foreign language classroom.

Third, it is substantial to raise awareness about the importance of making use of ICTs in the process of language learning and therefore vocabulary learning. Students could make easier and faster their vocabulary learning by bringing their own computers to the classroom and play video games that could be related to the subject matter, in a form of an activity planned by the teacher in terms of objectives, implementation, and assigned time. Fourth, students should work on developing positive attitudes towards learning new vocabulary by using creative motivational enjoyable strategies such as playing video games, as well as raising awareness about the benefits of video games in relation to both language learning and vocabulary learning.

## 2. Limitations of the Study

Due to the conditions of the covid-19 epidemic, the individuals in the sample studied at various groups and had varied scheduling; the gaming group data was collected online rather than face to face, whilst the non-gamers group data was collected face to face in a classroom setting. Therefore, only descriptive data analysis could be conducted, as a replacement of the experiment that was originally outlined to be the research method of this work. The experiment would have been conducted as follows: a three-month experiment in which both groups take a pretest and a posttest whilst the gamers' group gets a special treatment by playing different types of video games between those two tests in order to test the hypothesis that video games improve vocabulary learning. There were also additional challenges with the experiment, such as the fact that not all of the students had good materials to play video games on or a good internet connection to log on at the same time.

Finally, just 54 students were able to complete both the questionnaire and the test. Because of the small sample size, more statistical analyses were not possible to account for more reliable data that was typical of the population studied.

## 3. Suggestions for Future Research

Considering the findings from the study about the significant role of playing video gaming in enhancing vocabulary learning, accounting for its integration in the foreign language classroom should be thought out. As a result, more research is required to further clarify the relationship between vocabulary learning and video games on different areas such as the frequency of playing video games or what kind of video games would influence vocabulary learning more. Therefore, it is recommended to conduct research on a different sample since the years of instruction or the age could have an impact on learning vocabulary effectively.

For further generalizations of conclusions and more representative results, it is also proposed that the views of EFL students toward playing video games as a technique of improving vocabulary learning be considered.

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## APPENDICES

## Appendix A

Dear students,
You are kindly requested to complete this anonymousquestionnaire.
Your genuine response is very important for the validity and reliability of the study. There are no right or wrong answers, only choose the appropriate answer.
Thank you.

Ms. Raoua KIROUNI<br>Department of Letters and English Language<br>University of 8 mai 1945, Guelma

1. Gender

| Male |  |
| :--- | :--- |
| Female |  |

2. For how long have you been studying English?

| 10 years |  |
| :--- | :--- |
| 11 years |  |
| 12 years |  |
| 9 years |  |

3. Graduation score range:

| $10-12$ |  |
| :--- | :--- |
| $12-14$ |  |
| $14-16$ |  |

4. Do you engage in activities outside the classroom to improve your English language skills?

| yes |  |
| :--- | :--- |
| no |  |

5. What are the activities that helped you to learn English?

| Books and articles |  |
| :--- | :--- |
| Movies and videos |  |
| games |  |
| Chatting with friends |  |

Other
6. How much do you agree with the following statement: "Vocabulary learning is a building block of language learning?"

| Strongly agree |  |
| :--- | :--- |
| Agree |  |
| Neither agree nor disagree |  |
| Disagree |  |
| Strongly disagree |  |

7. What did contribute the most to your vocabulary learning? (Choose only 3 and order them from 1 to 3 )

| Classroom instruction |  |
| :--- | :--- |
| Reading dictionaries |  |
| Listening to music |  |
| Watching tv, movies, etc. |  |
| Playing video games |  |
| Chatting with native speakers |  |

Others
8. What is the skill that helped you the most inlearning vocabulary effectively?

| Reading |  |
| :--- | :--- |
| Listening |  |
| Writing |  |
| Speaking |  |

9. What hinders my vocabulary learning the most is:

| Borrowing from my L1 (Arabic) |  |
| :--- | :--- |
| Lack of chances to use English outside of the classroom |  |
| Time constraints |  |
| Boring materials |  |
| No motivation |  |

10. How much do you agree with the following statement: "ICTs (Information and Communication technologies) help developing my Englishvocabularylearning."

| Strongly agree |  |
| :--- | :--- |
| Agree |  |
| Neither agree nor disagree |  |
| Disagree |  |
| Strongly disagree |  |

11. Have you ever played video games?

| yes |  |
| :--- | :--- |
| no |  |

If YES, continue answering all of the following questions except $Q 16$. If NO, skip to the last question (Q 16).
12. How often do you play video games?

| Less than a week |  |
| :--- | :--- |
| Once a week |  |
| A few times a week |  |
| Everyday |  |
| Several times a day |  |

13. What are your favorite games to play?

| Sports games |  |
| :--- | :--- |
| Adventure/ war games |  |
| Lifestyle games |  |
| Role-playing games |  |
| Puzzles and word games |  |

14. How much do you agree with the following statement: "Video gaming hasimproved my vocabulary learning?"

| Strongly agree |  |
| :--- | :--- |
| Agree |  |
| Neither agree nor disagree |  |
| Disagree |  |
| Strongly disagree |  |

## 15. I find video games an easy vocabulary learning strategy

| Strongly agree |  |
| :--- | :--- |
| Agree |  |
| Neither agree nor disagree |  |
| Disagree |  |
| Strongly disagree |  |

16. If you have not played video games before, would you consider playing them more often to learn new Vocabulary?

| yes |  |
| :--- | :--- |
| no |  |

17. Please feel free to add any comment.
$\qquad$
$\qquad$

Thank you for your cooperation

## Appendix B

## The Test

## Exercise 1: Choose the correct word for each definition

1. A way in to somewhere or something
2. Entryway
3. Outlet
4. Faucet

5. A room or space directly under the roof of a house or other building, used for accommodation or storage.
6. Studio
7. Loft
8. Terrace

9. Fail to keep up with another or others in movement or development.
10. Lag
11. Sound latency
12. Ping

13. The practice of spying or of using spies, typically by governments to obtain political and military information.
14. Surveillance
15. Espionage
16. Intelligence

17. The aspect of someone's character that is presented to or perceived by others online
18. Mask
19. Persona
20. Image

21. A person who fits and repairs the pipes, fittings, and other apparatus of water supply, sanitation, or heating systems.
22. Electrician
23. Worker
24. Plumber

25. An occurrence of death by accident, in war, or from disease.
26. Disaster
27. Loss
28. Fatality

29. A secret or illegal cooperation or conspiracy in order to deceive others.
30. Collaboration
31. Cult
32. Collusion

33. A small nocturnal Old World mammal with a spiny coat and short legs, able to roll itself into a ball for defence.
34. Beaver
35. Hedgehog
36. Koala
37. The raised spots you get on your skin when you feel cold, frightened or excited.
38. Goosebumps
39. Serotonin
40. Adrenalin
41. A short period of good or bad luck
42. Trace
43. Vein
44. Streak

45. Something that's not quite finished but that's maybe in like a testing phase
46. Model
47. Replica
48. Beta version $\square$
Exercise 2:Match the words and the pictures
49. Archery, 2. Pliers, 3.Padlock, 4. Pouch, 5. Highvis, 6. Tray, 7. Dipper, 8. Dumptruck, 9. Fungus, 10. Brussels sprouts.


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| ..................... | $\ldots \ldots . . . . . . . . . . . . . . . . .$. |  | ........................ |

Task 3: fill in the gaps with words you think fit the sentence right
1- Mr. Brown is thinking about quitting his job if he doesn't get a ............................... this year.
2- The state of Iowa has a good climate and good .for growing corn.
3- I think the word means an extremely strong feeling of happiness and excitement that usually lasts only a short time.
4- Let's have lunch on the behind the house.
All game players have a spacesuit, a and a ray gun.

## ملخص

لطالما كان تعلم المفردات عملية صعبة ولكنها ضرورية للغاية لتعلم اللغات الأخرى. بالنظر إلى أهمية المفردات، تسعى الأطروحة الحالية إلى دراسة تأثير ألعاب الفيديو على تعلم المفردات. في هذا الصدد، تم وضع فرضيتين بحثيتين رئيسيتين أنه إذا لعب طلاب اللغة الإنجليزية كلغة أجنبية ألعاب الفبديو ، فلن يتم تحسين تعلم المفردات الخاصة بهم ، (H1)؛ يقترح أنه إذا لعب طلاب اللغة الإنجليزية كلغة أجنبية ألعاب الفيديو ، فسيتم تحسين تعلم المفردات لليهم. من (H0) بينما يقترح أجل نقديم البيانات ذات الصلة لهذه اللر اسة وتقييم فرضية البحث، يتم اختيار الأساليب الكمية. تم إجراء اختبار لفصص كيف يمكن لألعاب الفيديو أن تعزز مفردات المتعلمين؛ بالإضافة إلى ذللك، تم تقنيم استبيان للتحقيق في مو اقف المشاركين تجاه استخدام ألعاب الفبديو لتعلم المفردات. بناءً على النتائج، تم دعم فرضيات البحث من خلال حقيقة أن ألعاب الفيديو تلبي حقًا احتياجات الطالب اللغوية من أجل فهم سهل لمفردات اللغة المستهوفة. يُصصح، إذن، أن يضع المعلمون مو اقق تُليمية ممتعة تجذب ألعاب الفيديو انتباه الطلاب إليها وتركز قيمتها التقليمية على هذه الأدوات.

## RESUMÉ

L'apprentissage du vocabulaire a toujours été un processus difficile mais extrêmement nécessaire pour apprendre d'autres langues. Compte tenu de l'importance du vocabulaire, la présente thèse cherche à examiner l'impact des jeux vidéo sur l'apprentissage du vocabulaire. A cet égard, deux hypothèses de recherche principales sont avancées ; (H1) suggère que si les élèves EFL jouent à des jeux vidéo, leur apprentissage du vocabulaire ne sera pas amélioré, tandis que $(\mathrm{H} 0)$ suggère que si les élèves EFL jouent à des jeux vidéo, leur apprentissage du vocabulaire sera amélioré. Afin d'offrir des données pertinentes à cette étude et d'évaluer l'hypothèse de recherche, des méthodes quantitatives sont choisies. Un test a été mené pour examiner comment les jeux vidéo peuvent améliorer le vocabulaire des apprenants ; en outre, un questionnaire a été soumis pour enquêter sur les attitudes des participants envers l'utilisation des jeux vidéo pour apprendre le vocabulaire. Sur la base des résultats et des découvertes, les hypothèses de recherche ont été soutenues par le fait que les jeux vidéo satisfont vraiment les besoins de l'étudiant en langue pour une compréhension facile du vocabulaire de la langue cible. Il est donc conseillé aux enseignants de définir des situations d'apprentissage agréables que les jeux vidéo portent à l'attention des élèves et de concentrer leur valeur pédagogique sur de tels outils.

