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MODALITY: RESEARCH REPORT

LEARNERS' PERCEPTIONS OVER USING VIDEO GAMES AS A LEARNING
TOOL FOR VOCABULARY ACQUISITION.

Research report before obtaining the bachelor degree in National and Foreign Language Pedagogy,
English Major

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AUTHORSHIP DECLARATION

We, Rodríguez Mejía Cristhian David, with citizenship ID No. 131391490-3, and Troya Fuentes Carlos Xavier, with citizenship ID No. 172088125-7, declare that we are the authors of the present RESEARCH PROJECT: “**LEARNERS’ PERCEPTIONS OVER USING VIDEO GAMES AS A LEARNING TOOL FOR VOCABULARY ACQUISITION**”, with Venegas Álvarez Gina Silvana Phd. as the tutor of this work. We expressly release the Technical University of Cotopaxi and its legal representatives from any possible claims or legal actions.


Additionally, we certify that the ideas, concepts, procedures, and results presented in this research work are our sole responsibility.

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TUTOR'S ENDORSEMENT

As the Tutor of the Research Project titled "**LEARNERS' PERCEPTIONS OVER USING VIDEO GAMES AS A LEARNING TOOL FOR VOCABULARY ACQUISITION**" by Rodríguez Mejía Cristhian David and Troya Fuentes Carlos Xavier, of the National and Foreign language Pedagogy. I consider that this Research Report deserves approval as it complies with the technical standards, translation, and required formats. It has also incorporated the observations and recommendations proposed during the pre-defense.

Pujilí, 22 of August, 2024



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COMMITTEE APPROVAL

As the Reading Committee, we approve the present Research Report in accordance with the regulatory provisions issued by the Technical University of Cotopaxi and the Pujilí campus. The candidates, Rodríguez Mejía Cristhian David and Troya Fuentes Carlos Xavier, with the Research Project titled **“LEARNERS’ PERCEPTIONS OVER USING VIDEO GAMES AS A LEARNING TOOL FOR VOCABULARY ACQUISITION”**, have taken into account the recommendations provided in a timely manner and have met the necessary merits to be submitted for the thesis defense.

Therefore, the corresponding files are authorized to be recorded on a CD, in accordance with institutional regulations.

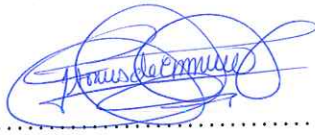
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GRATEFULNESS

We want to express our gratitude for all the people in our lives who supported us in many ways. To our teachers at The Technical University of Cotopaxi who shared their knowledge, granting us the opportunity to pave our way forward. We would want to thank our tutor Dra. Venegas Gina for the support and feedback to make our project a reality. Lastly, to our families who stood with us in our journey, we wished to repay their support beginning to become an independent member they can be proud of.

Cristhian Rodríguez & Carlos Troya

DEDICATION

I would not be here if it weren't for my family. So, firstly, I would like to thank my parents, who were there for me in the worst times, who taught me to fight, and who helped me to never give up. I would also like to thank every single one of my friends who were my reliefs in the darkest days. I am also grateful to my teachers, whose support was one of the reasons for which this study exists. Finally, I express my gratitude to the artists who inspired me to be the person I am, and whose music is the reason for which I am still alive.

Cristhian Rodríguez

DEDICATION

Here I express my gratitude to a lot of people. First, I want to sincerely thank my parents, who supported me unconditionally since the very beginning, as well as my sister who gave me tips during my period in this work. The trust they gave me motivated me to keep going despite the difficulties I faced in this road I have taken. I also want to thank my teachers and educators who guided me and taught me the way to work successfully on this project. My friends and classmates who helped at least with the little things, I managed to build up my confidence and hope that we could get through this together. And finally, my thanks to my partner who stood with me through this endeavor in the hopes to achieve important things in the future and helped me get up during the most difficult times, otherwise I wouldn't be here.

Carlos Troya

TECHNICAL UNIVERSITY OF COTOPAXI

PUJILÍ EXTENSION

THEME: “LEARNERS’ PERCEPTIONS ON USING VIDEO GAMES AS A LEARNING TOOL FOR VOCABULARY ACQUISITION.”

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ABSTRACT

During the last decade, video games and their effects in learning have been studied, showing promising effects regarding long-term memory retention and motivation. Nonetheless, compared to other regions of the world, less research has been done in Latin America, and particularly in Ecuador, on the use of video games as learning tools. The main objective of this study was to analyze pre-intermediate EFL university students' perceptions on using video games as learning tools for vocabulary acquisition. To achieve this objective, it was decided to use a quantitative approach to obtain the information in a numerical measure, the research type was descriptive and the technique used to gather the necessary data was a survey applied to 80 EFL university students after participating in two English lessons with video games involved as learning tools. The answers from the questionnaire were gathered, organized as tables and graphed using the SPSS Statistics program by IBM and presented using descriptive statistics. It was concluded that the perceptions of learners towards using video games as learning tools for vocabulary acquisition are positive, considering that they are useful, helping them to remember the meaning of words and making the learning process more engaging and fun. Consequently, the perception of the students towards the use of video games was fairly satisfactory signaling the advantages it brought during class. The results of this study also showed that, when used as an extra learning tool with the target language involved in them, video games can be implemented into lesson plans as a medium to practice vocabulary in context.

Keywords: acquisition, perceptions, video games, vocabulary.

UNIVERSIDAD TÉCNICA DE COTOPAXI

EXTENSIÓN PUJILÍ

TÍTULO: “PERCEPCIONES DE LOS ESTUDIANTES SOBRE EL USO DE VIDEOJUEGOS COMO HERRAMIENTA DE APRENDIZAJE PARA LA ADQUISICIÓN DE VOCABULARIO.”

Authors: Rodríguez Mejía Cristhian David

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RESUMEN

Durante la última década, los videojuegos y sus efectos en el aprendizaje han sido estudiados, mostrando efectos prometedores en cuanto a la retención de la memoria a largo plazo y la motivación. Sin embargo, en comparación con otras regiones del mundo, en América Latina, y particularmente en Ecuador, se ha realizado menos investigación sobre el uso de los videojuegos como herramientas de aprendizaje. El objetivo principal de este estudio fue analizar las percepciones de los estudiantes universitarios de inglés como lengua extranjera de nivel pre-intermedio sobre el uso de los videojuegos como herramientas de aprendizaje para la adquisición de vocabulario. Para lograr este objetivo, se decidió utilizar un enfoque cuantitativo para obtener la información en una medida numérica, el tipo de investigación fue descriptiva y la técnica utilizada para recopilar los datos necesarios fue una encuesta aplicada a 80 estudiantes universitarios de inglés como lengua extranjera después de participar en dos lecciones de inglés con videojuegos como herramientas de aprendizaje. Las respuestas del cuestionario se recopilaron, se organizaron en tablas y se graficaron utilizando el programa SPSS Statistics de IBM y se presentaron utilizando estadísticas descriptivas. Se concluyó que las percepciones de los estudiantes hacia el uso de los videojuegos como herramientas de aprendizaje para la adquisición de vocabulario son positivas, considerando que son útiles, les ayudan a recordar el significado de las palabras y hacen que el proceso de aprendizaje sea más atractivo y divertido. En consecuencia, la percepción de los estudiantes hacia el uso de los videojuegos fue bastante satisfactoria, señalando las ventajas que aportan durante la clase. Los resultados de este estudio también mostraron que, cuando se utilizan como una herramienta de aprendizaje adicional que involucra el idioma meta, los videojuegos pueden implementarse en los planes de clase como un medio para practicar el vocabulario en contexto.

Palabras claves: adquisición, percepciones, videojuegos, vocabulario.

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UNDERGRADUATE DEGREE WORK STRUCTURE

1. GENERAL INFORMATION

Theme:

Learners' perceptions over using video games as a learning tool for vocabulary acquisition.

Starting Date:

March 2024

Ending Date:

August 2024

Place of Research:

Technical University of Cotopaxi (UTC) Campus Pujilí

Sponsoring Faculty:

Extension Pujilí

Sponsoring Major:

National and Foreign Language Pedagogy: English

Macro Project of the Major:

A transdisciplinary study of education and linguistics in linguistic-communicative contexts for the teaching of the English Language.

Research Group:

Eighty pre-intermediate EFL university students.

Work Team:

PhD. Venegas Álvarez Gina Silvana

Rodríguez Mejía Cristhian David

Troya Fuentes Carlos Xavier.

Knowledge Area:

Education

University Research Line:

Education, communication, and design for human and social development.

Extension Subline:

Pedagogical, didactic, curricular, and inclusive practices in the areas of knowledge.

2. PROBLEM STATEMENT

Innovation related to the use of different methodological strategies has been explored as a field in language teaching, a type of technology that has shown great effectiveness as of late to help learners acquire new vocabulary, are video games, since they grant advantages like visual cues for players to interact (Winaldo & Oktaviani, 2022).

Even though the implementation and investigation of technological media to learn has become increasingly popular during the last years, videogames have not been as used as much as other types of media such as music, videos, movies, etc. (Grande de Prado, 2017). In fact, video games possess the reputation of only used for personal entertainment not suitable for educational purposes (West, 2012), even though cues used in video games can be suitable for a wide group of learning with different learning styles. As a result, little is known about the benefit video games can bring forth in the area of vocabulary learning.

The reasons behind this issue stems from the incorrect and biased beliefs not only from educators but also for parents responsible who think that the use of video games in education can be prejudicial as they may end with a violent behavior or emotional instability in children. As Utoyo (2018) mentions in her study, there existed (and still exist) educators who see video games as strong and dangerous environments and fear the notion that they can lead to savagery, aggression, harassment, and seclusion that negatively impact not only the learning process but the students themselves. Another reason is that there is not enough knowledge on how to implement video games in a learning environment and in a suitable way for the level of the learner, as Cebrián (2005) says that some teachers prefer to inhibit or avoid the use of technology as they believe that it can negatively affect in many levels such as literacy, leading to addiction , which decreases social interaction.

Therefore, educators might experience struggles to apply and implement video games in a way for it to be beneficial to the students process of acquiring real and relevant knowledge by using them. But not only that; but this also creates the issue of not understanding this new approach in class

due to the lack of guidelines for learners, impeding a correct use of video games aimed to learn a foreign language (Gros, 2004). This generates ignorance and negligence over how beneficial video games can be to adapt, keeping alive the infamous myth that video games are merely an entertainment tool that has more negative effects than positive ones (Diez, 2007).

For these reasons, the main objective of this study is to explore learners' perceptions of using video games as learning tools for vocabulary acquisition in pre-intermediate EFL university students. The investigation has relevance as in Ecuador there does not exist enough information over how video games can be useful as EFL learning tools in Ecuador, the investigation of this topic will contribute to the implementation of technology with learning purposes, discussing guidelines for using video games in a suitable way alongside a demystification of the common belief that video games are negative for learners.

3. OBJECTIVES

3.1. General Objective

- To analyze pre-intermediate EFL university students' perceptions of using video games as a learning tool for vocabulary acquisition.

3.2. Specific Objectives

- To identify the literature review, data collection and conclusions of other projects.
- To determine learners' perceptions regarding using video games as learning tools.
- To describe learner's perceptions regarding using video games as learning tools.

4. ACTIVITIES AND TASK SYSTEM IN RELATION TO THE OBJECTIVES PROPOSED

Specific Objective	Activities	Verification Means
To identify the literature review, data collection and conclusions of other projects.	<ul style="list-style-type: none"> • Search for books, research (non-empirical), and book chapters. • Do the literature review • Develop the theoretical framework. 	<ul style="list-style-type: none"> • Outline • Theoretical Framework • References
To determine learners' perceptions regarding using video games as learning tools	<ul style="list-style-type: none"> • Interpret the instrument to be used (questionnaire) • Implement the questionnaire • Create suitable lesson plans according to the student's progress. • Apply the lesson plans in class • Collect the data • Create tables and graphic the results 	<ul style="list-style-type: none"> • Questionnaire • Results • Statistics • Tables • Graphics • Lesson plans
To describe learner's perceptions regarding using video games as learning tools	<ul style="list-style-type: none"> • Describe the results • Analyze the results of the questionnaire. • Discuss guidelines to use video games in lessons based on the results obtained. 	<ul style="list-style-type: none"> • Results • Conclusion • Discussion

5. JUSTIFICATION

The importance of this project lies in the fact that video games, despite exhibiting an important positive effect on helping learners acquire new knowledge, have not been implemented in classrooms as a learning tool. Shaffer et al. (2005) consider that video games give us a glimpse into the creation of innovative and more effective ways of learning.

The reluctance regarding the use of video games in an educational environment comes from the negative view that authorities have towards them. As Widitiarsa (2021) says educators overshadowed the great remarks video games can offer by judging it by its bad qualities. Furthermore, video games have received constant criticism because of a wrong first glance from

the media, politicians, and parents alongside studies that, by using false equivalence, state that video games and violence are closely related. As an example, Bushman & Anderson (2002) found out that students who played violent video games tend to be more aggressive, however this study is not clear enough as Arias (2014) states that many authors have not classified the result as violent only labeling normal reactions such as frustration as aggressive. In Latin America, this problem is not different as a big part of the population, middle aged and third age adults, believe that video games are nothing but a mere distraction (Rosas et al., 2003). Gee (2005) believes that the endeavor is not monetary cost related or anything as such, instead, the main impediment is being able to persuade both educators and students into applying this new principle when learning.

Even though video games have been constantly pointed out as negative, several studies have found that, if they are well-orientated, video games can be useful in developing skills and knowledge in different areas. According to Alamri (2016) as video games continue to grow, they become more persuasive towards the players to immerse them more into the gameplay by satisfying their competence and curiosity as well as to promote cooperative collaboration whether in or off game. It is important to mention that although the use of video games for learning has been studied recently, there are no guidelines on how to implement them in a classroom outside some recommendations. This is why this study is also intended to provide possible guidelines to use them in future lessons and studies.

It was decided to investigate about learner's perceptions given that, as Wahyudin & Wahyuni (2022) mention, the teacher should consider the preferences and the learning styles of the students to make sure that they will acquire the language in an efficient way. It was also decided to investigate video games due to, despite having several advantages for memory retention and motivation in English learning, they have not been used as learning tools as much as other types of media with similar characteristics such as videos, movies, music, and others. This is especially visible in Ecuador, where research about video games for vocabulary acquisition is scarce.

6. SCIENTIFIC AND TECHNICAL FOUNDATION

Background

Clausen (2023) carried out a study to find out the correlation between video games and receptive and productive vocabulary. The study had a quantitative and descriptive design, and it was done in an upper secondary school in the south-east of Norway. The participants were 116 8th to 10th-grade EFL Norwegian students who did a questionnaire, a survey, and a test that was made in three stages. To analyze the data, the investigator made use of linear regression, as well as Excel spreadsheets to give a correlation coefficient between the variables. The main results of the study showed that video games that make use of large amounts of vocabulary have a positive effect over passive vocabulary learning. It was also found that games that make use of interaction between players have a positive effect on active vocabulary. In conclusion, it was stated that there is not a direct correlation between gaming or playing video games in general and the acquisition of vocabulary, nevertheless, the use of specific genres of video games, in line with vocabulary strategies, can be useful to help EFL learners to move from a passive to active use of vocabulary.

In a similar study, Winaldo & Oktaviani (2022) investigated if there exists a relationship between playing video games and being fluent in the English language. To do this, by using a qualitative and descriptive design, they applied a variant of Postic's (2015) questionnaire to a group of students from the English Education batch 2018 in Teknokrat, Indonesia. The data obtained was later analyzed and graphically presented. The genres that were more useful for fluency development were those that had large amounts of dialogues; it was also discovered that video games can help those students who already know English to develop mastery over the language. However, it was also noticed that the use of videogames might be hard to implement as the kind of language used is more complex. The conclusion was that even though the use of video games has a positive effect on language development, they cannot be used as a main tool in teaching given the limitations of some video games or some institutions. The authors concluded that video games should be used as a complementary tool to learn English or to develop mastery over it.

Another study that was used as a scientific foundation was the study made by Katemba (2021), who investigated the gap between three different types of approaches or methods: Educational

Online Games (OG), Educational videos (V), and conventional teaching methods (CON). The research approach was a mix of quantitative and qualitative as to gather data from both ways, being an experimental methodology to have information with precision and accuracy. This research was done for a Program of B.A [Bachelor of Administration] in English at the University of Tolima, where 93 participants of seventh grade from Parongpong of Bandung were chosen to partake in the program and project. Their ages ranged between 12 and 14 years old. Two sets of questionnaires were used, pre-test and post-test, to gather the information needed. The participants were later divided into three different groups for OG, V, and CON. The findings of this research go as follows; a great gap was discovered by the use of conventional methods, while online games and educational videos did not show the same gap. As such, there is a significant enhancement in student's vocabulary knowledge.

Theoretical Framework

English as a Foreign Language

Nowadays, English is considered as an international language. More countries use English as a neutral language to write instructions, warnings, advertisements and many other texts as most of tourist already speak this language (Getie, 2020). Due to these reasons, the English language is taught in a specific way to foreign learners, this is known as English as a Foreign Language (EFL) teaching and learning. (Rustamov, I., 2022)

Language Input Acquisition

According to the Input Hypothesis proposed by the linguist Krashen (1993), language acquisition occurs when learners receive comprehensible input, which refers to language input that is slightly beyond the current proficiency level of the learner but still understandable through context and other linguistic cues. "The input Hypothesis states that we acquire language by understanding messages, that "comprehensible input" (CI) is the essential environmental ingredient in language acquisition" (Krashen, 1992). Additionally, Krashen (1993) states that the concept of input encompasses various modalities of language exposure, including spoken, written, visual, and interactive forms, reflecting the diverse sources and mediums through which learners receive

linguistic input; all these modalities stem from the vision of having the ideal comprehensible input (p. 299).

Input refers to the language to which the learner is exposed. When we refer to the first language, children receive input from their surroundings; this includes the people who interact with them. These first interactions generally come from the parental figures of the child. For this reason, the first words acquired by a baby are those constantly repeated by the parents. On the other hand, when we talk about a second or foreign language, the input is different, given that second and foreign languages are mostly taught at schools. The type of input provided to the learner will be more diverse and not as natural as the first language (Escudero, 2001).

In brief, the different aspects of a language are learned through inputs that may come from the learner's surroundings or through external sources, the inputs will differ depending on if the learners are in the process of acquiring their mother language or a second language.

Relationship between input and language acquisition

The acquisition of language input is intertwined with cognitive processes and individual differences in language learning. Learners engage in active processing of input, which involves comprehension, interpretation, and reconstruction of linguistic input to construct mental representations of language (White, L., 2021). Cognitive mechanisms such as attention, memory, and pattern recognition contribute to the processing of linguistic input, influencing the encoding and storage of language information in the learners' mental lexicon. Additionally, individual differences in input processing, such as learning styles, cognitive strategies, and perceptual abilities, shape how learners engage with and internalize language input.

Understanding the interplay between language input, cognitive processing, and individual variability provides insights into optimizing language learning environments and instructional approaches to cater to diverse learner profiles (Liu, 2015). It is important to mention that depending on the type of learner, the input should be changed or adapted to the learners' needs, this is more noticeable in the case of students with special needs. According to Mason & Krashen (2020) input

not only has to be comprehensible for the learner but it should also be engaging, this may vary depending on the age, level, and fluency level of the student, the input should be presented in different ways or mediums according to this.

The cognitive process of acquiring knowledge, and specifically, acquiring a language must start with a type of input; an input can be considered as the first contact with the content that will be acquired, with this in mind, it is evident that without a first input, the learner will not be able to acquire the target language (VanPatten, 2004). According to de Rowe & Snow (2020) when a child is not exposed to any type of language (input) they will not be able to communicate what they are thinking even if they have a visual image of what they want to say.

It is worth mentioning that the hypothesis of input for second language acquisition and foreign language acquisition has been debated. This does not affect the fact that a learner needs to have an initial input to start learning but instead opens the conversation to how this input is processed. According to Hummel (2021), how learners process the role of input depends on the conceptualization one has towards the language theories.

Role of comprehensible input in language acquisition

The comprehensible input refers to the concept invented by Krashen stating the language input needed to reach a level of understanding. It represents a slight linguistic challenge that encourages language development (Patrik, 2019), as the comprehensible input plays an important part in the foreign language development and language acquisition, overall, to ease the process of learning a new language. Furthermore, Thach (2022) reiterates that input catalyzes improving language socialization and interactions for bilingual learners, contributing to the gradual development of language proficiency. Because of this, the quality and quantity of language input can directly influence learners' ability to internalize and produce language, shaping their receptive and productive language skills.

Additionally, the investigation of Lewis (2020) mentions that language input not only can improve SLA, but also, it helped in providing the structure needed for acquiring the language.

It is worth mentioning that incomprehensible input may generate more problems than not using any input at all. The most common example is that if a teacher does not pronounce words correctly, the students will present the same problems as their teacher. Input can be incomprehensible even if it is grammatically or phonetically correct if it is not selected or given considering the level of the learners. According to Krashen & Mason (2020), there has to be a differentiation between comprehensible input and optimal input, which they state has four principal characteristics: the input has to be understandable for the learner even if he does not understand everything; the input has to be compelling for the learner. The input must be interesting; the input must be rich in language and must support the learner to understand the message; and finally, the input has to be abundant to provide the learner with several opportunities to acquire a new language.

Vocabulary acquisition

The acquisition of vocabulary is an essential part of learning and building up mastery over a foreign language. According to Pateşan et al. (2019), a fundamental part of the process of learning/teaching a second language is the enrichment of vocabulary to allow learners to communicate more effectively. If an individual knows a decent amount of vocabulary, this person could communicate more effectively, even with little knowledge about grammar, than someone with not as much knowledge on vocabulary.

Vocabulary acquisition is the process of learning the meaning of many words as well as how to effectively use them in a sentence. In addition, Hu & Deng (2007) consider that these small pieces of vocabulary play a key role in understanding a foreign language, needing to know at least 2,400 words only to read everyday texts.

The importance of vocabulary acquisition is a topic that is still discussed. Some authors even consider vocabulary more important than grammar, affirming that an individual can decipher a complete message even if any grammar is involved. In the words of McCarthy (1990) he emphasized that without a comprehension or understanding of a words meaning or having a wide variety on the English lexicon, a student is bound to lack the ability to convey a message no matter how much mastery they have in other fields like pronunciation or fluency. A poor lexicon can also

affect learners who already know the grammatical rules of a foreign language as they may not be able to communicate their ideas efficiently (Susanto, 2017). Vocabulary can be considered as the vertebral column of a language, Tabassum & Naveed (2024) state that “vocabulary is vital as it’s the foundation of all languages.” (p.1)

The process of vocabulary acquisition can occur in diverse ways; however, there are models to simplify how this happens. Ellis (1997) says that the acquiring process starts with the input or the first contact that the learner has with the vocabulary that they will learn afterward; after receiving the input, the intake process occurs in which the learner will start to understand what they heard or read, this process is faster if the chunk of language was small (for example a single word) or if it had a visual image to match as its meaning. After the intake comes to the knowledge, this refers to the acquisition of the vocabulary, in this stage the learner understands the meaning of it; finally, comes the output, in this stage, the learner can give a response to the input given as well as use that input correctly.

Benefits of interactivity in vocabulary acquisition

Interactivity is defined as the capability and limitations a player has to change or modify the content granted in each environment (Kühl, T., & Wohninsland, P., 2022). Interactivity involves a wide variety of inputs that involve several senses. Being exposed to these elements centered in a specific aspect when learning has shown positive results in this process. According to Kaplan-Rakowski, R., & Thrasher (2024) learners are capable of forming stronger neural connections when they are capable of experimenting with the format not only by looking but also listening to the sound cues, this in turn allows for them to better remember as they associate this visual and sound design into the things they have learned in that particular scenario. The use of interactivity with learning aims is not an unexplored field, during the initial stages of life, children constantly learn new things by interacting with their environment (Li, Y., Ying, S., Chen, Q., & Guan, J. 2022)

Another benefit that interactivity has over learning is that it helps learners to understand more deeply the content that they are learning, Takacs et al. (2015) say that books which were technology-enhanced can leave a better impact on children’s story learning rather than using the

traditional printed books as they can absorb both verbal and nonverbal information. This factor is essential to motivate learners, creating an enjoyable and more effective learning process than employing tools that do not provide these advantages (Chen et al., 2022).

Studies also show that interactivity, as a part of the learning process, allows learners to retain information longer. For example, Lee (2012) found that students who interacted and were active by using media with the target language involved during the learning process benefited from higher language retention and were initiative-taking during the lesson. Along the same lines, Tseng, Liou & Chu (2020) found out that by using interactive books, learners can learn new vocabulary indirectly by being asked questions about the content they read without the need to give the explicit meaning of the words.

Another factor that seems to benefit from interacting is the acquisition of knowledge in an incidental way; studies have shown that interacting with different elements or people results in a lower mental load and better learning outcomes due to incidental learning (Türk & Erçetin, 2014).

Incidental Learning

Acquiring new knowledge is a process that sometimes is not done on purpose. Authors have proven that a person can learn different skills indirectly by performing other activities without consciously intending to learn something (Craik & Lockhart, 1972; Hyde & Jenkins, 1973; Morris et al., 1979). Unlike intentional learning, incidental learning results as a by-product that, according to Dang & Webb (2022) “[...] plays a significant role in L2 vocabulary learning.” (p.1).

Incidental learning is more commonly seen during the first years of the life of a child, as children do not receive formal education but rather explore their surroundings and receive constant exposition to certain things, one of these being their mother tongue. According to Bisson et al. (2013) a similar exposure can get identical results in a foreign language with little effort and with better outcomes in areas such as pronunciation, whereas, repeated exposure to stimuli has a great impact in learning during the first exposures, basically if a learner receives constant exposition to something they will eventually acquire knowledge over it.

Learning incidentally by being exposed to something also applies to vocabulary acquisition. Serrano & Huang (2018) discovered that when students are exposed to pieces of text with recurring vocabulary, they will be able to understand these words after some time.

Incidental learning shows some advantages to teaching and learning small chunks of language, including vocabulary. Dang & Long (2024) state that incidental learning helps acquire knowledge using focused activities, thus avoiding the stress that regular learning carries. Vocabulary can be acquired indirectly by implementing meaning-focused activities in which words are used in context to show their meaning instead of explaining it.

Video Games

Video games are a big part of the free time of people; they are defined as a type of game in which the elements such as images, sounds, are completely digital and manipulated through electronic devices denominated as “consoles.” This type of games is displayed in a screen that can be part of a console or that can be external. For example, a television or a monitor.

Video games in Incidental Learning

Video games as an interactive medium, show an advantage to acquiring vocabulary through incidental learning. Theodorsen (2015) states that incidental learning that occurs within the video game environment as an effect while focusing on the main language target from continuous repetition, enhancing learning effectiveness.

Following this, Letchumanan et al. (2015) state that the elements of video games, such as images, music, and actions that the player does, aid the process of incidental learning, making learners more likely to retain information.

Video games also present the perfect environment for the use of language in context, given that this is necessary to give the player the instructions to complete missions (Lu, 2021). Which, alongside visual cues (images, icons, or subtitles), functions as a great asset to allow incidental

learning, allowing students to experiment with the language in scenarios where they are exposed to the language similarly to a face-to-face interaction (Danan, 2004; Garza, 1991; Neuman & Koskinen, 1992). In vocabulary learning, when compared to other types of media, video games seem to improve learners' performance. Gunel & Top (2022) states that implementing interactivity in second language acquisition is crucial as it facilitates the process for vocabulary learning.

A factor that is very important about video games in learning is that they can be used as a type of informal learning in which they are not orientated as tools but are part of the daily life of the learner, according to Liu (2021) video games are more effective in comparison to a regular lesson in school as the learner is who decides to learn instead of being forced to do so. Video games can also be oriented to self-learning, permitting the learner to explore and obtain knowledge without the problems that traditional learning methods present (Toh & Kirschner, 2020).

Digital Games for Learning

The use of digital games has shown to be an effective method to learn; the entertainment factor that they have as a leisure activity shows the potential to capture learners' attention and make the whole process of learning more tolerable given the bond that these types of games have to gamification (Deterding et al., 2011). This potential is perceived in activities that learners may consider boring. According to Faiella & Ricciardi (2015), a safe way to promote a desired behavior to encourage is the inclusion of gamification, highly recommended especially in areas where there is a bad habit of boredom and repetition that causes loss of motivation.

When digital games are mentioned, we refer to any kind of game that can be played on a digital device (e.g., computers, consoles, cell phones). According to Hanghøj, Kabel & Jensen (2022), if educators successfully implement digital games into the class, young learners will become more curious about the new lessons and how they are managed, this provides a good opportunity for them to immerse to the target language.

Previous studies with similar themes have concluded that using them is highly beneficial to teaching and learning several abilities, including scientific literacy, grammatical knowledge, and social skills (Sabirli & Çoklar, 2020).

It has been shown, as well, that video games can help learners improve in other areas, as Zohud (2023) stated that the games provided can enforce a vital role in someone's English vocabulary as they can hold many advantages for learners like: motivating them to partake in class, enhance a student's ability to understand vocabulary and awakening a new interest to learn new words.

Benefits of Digital Games on Learning

For the last few years, there was an increase in positive review and feedback regarding the idea of implementing digital games. According to Anastasiadis et al (2018), this form of gamification attracts the student's attention in a playful manner. This involvement seems to lead to a response in which the learners challenge themselves to prove their abilities. In the same field, Kokandy (2021) mentions that using them as tools can promote a new and unique learning environment where the learning process is more enjoyable. These statements respond to why video games seem to be so effective in catching students' attention, but they also give a hint of the other aspects in which video games show clear advantages.

When it comes to learning English as a second language, video games can be a valuable tool to supplement traditional teaching methods. Here are some key points to consider when using video games for English learning (Kenny & Gunter, 2011):

- **Engagement:** Video games are inherently interactive and engaging, making the learning process more enjoyable for students.
- **Motivation:** The element of competition, rewards, and progression in video games can motivate students to actively participate and improve their English skills.
- **Language Acquisition:** Video games expose learners to authentic language use in context, helping them develop vocabulary, grammar, and listening skills.
- **Cultural Understanding:** Many video games offer insights into distinct cultures, which can broaden students' perspectives and enhance their cultural awareness.

- **Critical Thinking Skills:** Certain video games require critical thinking, problem-solving, and decision-making, which can help students develop these skills in English.

Another feature that has been beneficial by the implementation of video games is remembering concepts, words, features, and others; due to the different cues and qualities that video games make use of it is easier for students to remember concepts and learn things that would be otherwise hard to demonstrate or show in real life (Felicia, 2009).

In accordance, Green and McNeese (2011), Griffiths (2002), and Alshammari et al (2015) mention that the constant interaction of the players with the environment inside the video game, or with the videogame itself, allows them to remember the concepts, actions, and other aspects seen in the game, also helping them to develop motor and social skills. In turn Behnamnia, Kamsin, Ismail & Hayati (2020) state that the use of video games has a highly beneficial effect on developing social skills when the games are meant to be played in groups.

This can be seen in online games where certain tasks require cooperation between players. This kind of task can also trigger a positive effect on values, making players more empathic and aware of their actions. By this, it can be noticed that video games benefit the development of other skills, including social and motor skills.

Thompson & von Gillern (2020) remark that the benefits of using digital games in learning are vast, ranging from increased engagement and collaboration to personalized learning experiences that enhance student outcomes. By leveraging the innovative potential of digital games, educators can create dynamic and effective learning environments that cater to the diverse needs of students.

Digital-Game Based Vocabulary Learning

Digital game-based vocabulary learning refers to using digital games as a tool or platform to facilitate the acquisition and reinforcement of vocabulary knowledge. This approach leverages the engaging and interactive nature of video games to make vocabulary learning more enjoyable, effective, and immersive for learners (Vnucko & Klimova, 2023).

Hon (2016) also explains that Digital Game-Based Vocabulary Learning is an innovative approach that combines education with gaming elements to enhance vocabulary acquisition. Here are some key points about Digital Game-Based Vocabulary Learning (Naderi & Moafian, 2023):

- Learning is an innovative approach that combines education with gaming elements to enhance vocabulary acquisition.
- Cognitive Engagement: It emphasizes engaging gameplay to stimulate learning.
- Clear Learning Objectives: The games are designed with specific vocabulary learning goals in mind.
- Effectiveness: Research has shown that using digital games for vocabulary development can be highly effective.
- Motivation: Game-based strategies can boost motivation and interest in learning new words.

Overall, Digital Game-Based Vocabulary Learning can be considered as a fun and engaging way to make not only learn but also understand vocabulary a dynamic and smooth process as they enjoy on the many ways they can interact the digital stages.

The use of digital games to learn is not limited to scientific skills; since they are highly effective in learning vocabulary (Chowdhury et al., 2024). According to Kazu & Kuvvetli (2023), digital games show effectiveness in helping learners remember small chunks of information, including words and vocabulary. Digital games also provide a platform to allow learners to use the language in a real way given the situations in which the player is involved.

Alongside this, digital games show better effects when implemented as tools for learning. Castillo-Cuesta (2020) states that digital games can help with the students in acquiring knowledge in both grammar and lexicon with better results of their development in EFL.

Knowledge can be acquired through various video games and platforms, including educational apps, online games, interactive quizzes, and serious games designed specifically for language

learning purposes (Jia & Zhang, 2024). It is part of a broader trend toward using technology to enhance educational outcomes by making learning more engaging and effective.

Something that teachers must consider when using video games for vocabulary learning is that if they are not correctly used or investigated before implementing them, they will not show any advantage. According to Chandra & Kepirianto (2021), there can be problems in making students acquire knowledge even if video games motivate them to learn.

The Use of Video Games for Vocabulary Acquisition

To acquire something is not the same as learning it; Hussain (2017) says that language acquisition is a natural process in which practice must be involved; with this in mind, it can be assumed that acquiring knowledge is more difficult as practice must be involved, in this instance, video games show an advantage providing a medium to practice (Silva, 2020).

In addition, one of the positive points video games have to offer in the educational area is for the learners to develop a sense of eagerness of knowing the use of words in different context (Johnson, E. K., Giroux, A. L., Merritt, D., Vitanova, G., & Sousa, S., 2020). It is highly possible in that sense that this motivation comes from the familiarity that young learners have as they depict video games as an enjoyable experience (Hazar, 2020).

Korza (2015) briefs with some practices for the integration of video games into English learning:

- **Supervised Use:** Ensure that students use educational or age-appropriate games under supervision to stay on track with learning objectives.
- **Variety of Games:** Offer a variety of games to cater to different learning styles and preferences among students.
- **Feedback and Assessment:** Use video games as a formative assessment tool to track students' progress and provide feedback on their language skills.
- **Integration with Curriculum:** Align video games with curriculum goals to reinforce and complement classroom instruction.

Using video games for English learning can be a fun and effective way to engage students, enhance language skills, and foster a positive learning environment. By leveraging the immersive and interactive nature of video games, educators can create dynamic learning experiences that cater to the diverse needs of English language learners (Ningtyas, A., & Suganda, S. P., 2020).

The potential of video games as a learning tool for vocabulary acquisition

The potential of using video games as a learning tool has not been explored in completeness, although it is constantly being investigated (Rasti-Behbahani, 2021). The characteristics that video games have made them a perfect tool for developing the cognitive processes that require remembering something and using it, which is aligned with the required skills to acquire a language (Lorenset & Tumolo, 2019), Ali, Bakar, Ahmad & Saputra (2022) states that the interface, story and design which a DVG (digital video games) can feature plays a crucial part in the effectiveness of vocabulary acquisition.

Several authors agree that video games have the potential to be a new kind of classroom tools such as videos, music, movies, books, and many others as they enhance motivation, improve remembering capacity, and increase social skills (Lorenset & Tumolo, 2019; Andreani & Ying, 2019; Tan & Tan, 2020) the main advantage that video games have is interactivity, which is a feature that other mediums do not possess, according to Rudis & Poštić (2017) interactivity not only helps with making a video game more engaging but mission instructions and goals become easier to understand. That way students can follow the learning process.

As such, digital games have become a valuable tool in learning, offering numerous opportunities to enhance the learning experience. Klimova & Kacet (2017) remarks some key advantages of using digital games for learning:

1. Active Student Participation: Digital games enhance active student participation by providing interactive and engaging learning experiences.
2. Collaborative Learning: Games stimulate students' interest and encourage collaboration, fostering a sense of teamwork and shared learning.

3. **Increased Joy and Curiosity:** By incorporating game elements, digital games increase students' joy in learning and spark curiosity, making the learning process more enjoyable.
4. **Skill Acquisition:** Digital games help students acquire new skills and knowledge in a fun and engaging way, promoting effective learning outcomes.
5. **Personalized Learning:** Games can be personalized to cater to individual learning styles and paces, allowing students to practice at their speed in a safe environment.

A characteristic that videogames have that is not as highlighted as others is the adaptability that video games have for the different kinds of learning styles; whether a student is visual, auditive, tactile, or kinesthetic, there are different video games, consoles, and platforms that a teacher can use to adapt to these learning styles (Soflano et al., 2015).

It is clear that video games have the potential to be learning tools given their characteristics, how close learners are to them, and the variety of types of games that there are out there that can be adapted to the level and the needs of every student.

7. METHODOLOGY

Research approach

The study takes a quantitative approach, due to using analytics and scales to order the information with numbers (Bicen, 2018). This approach was used to show the results from the instrument, which has closed questions, visually, making it simpler to identify, to group, and to interpret these same results.

It is important to address this problem since video games have not been studied nor implemented properly as tools for acquiring vocabulary despite the advantages that they have shown to help learners to remember concepts and to catch their attention, which are crucial points for correct learning (Charsky, 2011). If this problem is not addressed, there will be a lack of understanding regarding the correct implementation of video games as learning tools.

Research level

For this study, a descriptive method was aimed in order to gather the data about the perceptions the participants had over the demonstration of using video games as learning tools by using 15 closed questions from a questionnaire originally designed by Vahdat & Behbahani (2013), which results were needed to be interpreted to get a conclusion (Zhuo, 2017). It is worth mentioning that closed questions can be used to gather data on perception in large quantities, as long as the questions are aimed at collecting the necessary and fundamental information in each of the questions as estimated by Fonseca (2013).

Research context

The study was conducted at the Technical University of Cotopaxi, an urban public institution located in Pujilí, Cotopaxi. The participants were 80 B1 EFL undergraduate students who belong to the major of Pedagogy of Languages, most of them young adults who were between 20-22 years old. 51 of them were women, while the other 29 participants were men. The participants of the study were divided into 3 groups, according to the class and course they belong to.

The process for selecting the participants of the study was made through non-probability as the sample group needed to have an intermediate level of English to be able to use the tools for learning proposed in this study as well as to understand the contents involved in the lessons.

The technique used was a survey and the instrument selected was the questionnaire made by Vahdat & Behbahani, which was previously mentioned.

Data collection procedure

The first step was the design of 4 lesson plans developed by the researchers of this study based on Presentation, Practice and Production (PPP). The lesson plans included content from the English books used by the participants to ensure that the lessons would be suitable for them. Added to this, 4 different video games were selected for each lesson plan based on its content and topics. Video games were used as learning tools for the autonomous parts of each lesson; in the case of PPP,

video games were implemented during the practice stage as it was considered that video games would help learners to remember words previously presented as well as check their use in context (See Annex 2). The selection of this stage was made given the practice stage looks to demonstrate how the target language can be used and its meaning in context from the learners which is an aspect that video games use frequently (Bakhsh, 2016). The lesson plans were also reviewed and approved by the English teachers that were in charge of the group of learners.

For the development and design for the lesson plans, it was first considered the vocabulary they had already seen as well as what they were going to learn from their respective books (Cambridge Intermediate).

Two lesson plans were designed for sixth “C” semester students. The first one had the topic of “Extreme Adjectives.” As for the Warm-up, a brainstorm was chosen to welcome the topic. For the Presentation stage, we decided on an easy audio activity to introduce the new vocabulary; in the Practice stage, we presented the video game “Resident Evil;” as for the Production stage, students wrote a small essay using the adjectives to describe the experience of playing a horror game. The second one has the topic of “Natural World”, starting with a brainstorm for the Warm-up activity; for the Presentation stage, students looked at pictures of animals and try to match with their names as well with their corresponding habitats; in the Practice stage, the chosen game was “Super Mario 64” since it contains different environments classified as Worlds; and for the Production stage, they had to describe the environments they encountered.

Two more lesson plans were designed for seventh “A” and “B” semester students. The first topic was “Describing food” using the respective activities for each stage. In the Warm-up stage, students made guesses of what could be for the topic and build a brainstorm with their ideas; in Presentation stage, students described the food they mentioned using a list of adjectives; for the Practice stage, we prepared the video game “Cooking Mama” where they selected one of the dishes to prepare step by step; and as for the Production stage, they wrote down the recipes of the dishes they have chosen during the Practice stage as well as describing the resulting dish. The second topic was “Describing houses and buildings.” Starting the class by asking the students what kind of place they were currently living; as for the Presentation stage, the new vocabulary was introduced with a labeling the parts of the building activity; for the video game we decided for “The Sims” a daily

life simulator; lastly for the Production stage, they described the parts of the buildings from the town they were living within the game using the vocabulary to remark its parts.

These four lesson plans were used for the 3 groups of participants. Each lesson lasted 2 hours, and the lessons were applied during May.

Afterward, once the lessons were given, it was aimed to gather data regarding the participants' thoughts on the lessons and their opinions on how video games could be implemented to acquire vocabulary. To accomplish this goal, it was made use of an instrument, specifically a questionnaire, which consists of 15 items. This instrument was originally designed by Vahdat & Behbahani (2013), this instrument was selected as it was previously validated. For the study, this questionnaire was modified by shortening the number of items from 26 questions to 15 questions. The modified version of the questionnaire was also revised and approved by two English teachers from UTC: Msg. José Ignacio Andrade and Msg. Sonia Ximena Castro. (check Annex 1)

8. ANALYSIS AND DISCUSSION OF RESULTS

Once the questionnaire was provided and answered, the results obtained were put under a series of statistical analyses using the program: "Statistical Product and Service Solutions (SPSS)" by IBM to organize the information obtained, this same information was represented in graphics that were interpreted to draw conclusions.

When the information was organized and graphed, conclusions and discussions were made to provide guidelines based on the perceptions of the participants. Depending on how positive or negative the answers were, different changes were suggested for future studies or lessons on how to implement video games in suitable ways.

Analysis of Results

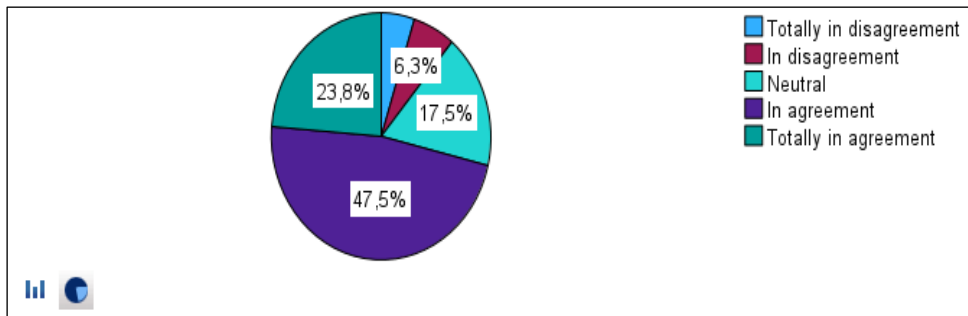
Table 1

I'm motivated when I try to learn English via video games.

	No. of answers	Percentage
Totally in Agreement	19	23,8%
In Agreement	38	47,50%
Neutral	14	17,50%
In Disagreement	5	6,25%
Totally in Disagreement	4	5,00%
Total	80	

Source: Surveys
Elaborated by: Researchers.

Graphic 1



Source: Surveys
Elaborated by: Researchers.

It can be seen in figure 1 that almost all participants believe that video games can help them to motivate themselves when trying to learn English during lessons. A 23,8% (19) of the participants totally agreed that video games motivate them to learn, similarly a 47,5% (38) agreed with this statement. 17,5% (14) of the learners were neutral, not agreeing or disagreeing. Lastly, 6,2 % (5) disagreed that video games motivate them to learn and 5% (4) of the participants totally disagreed with this statement.

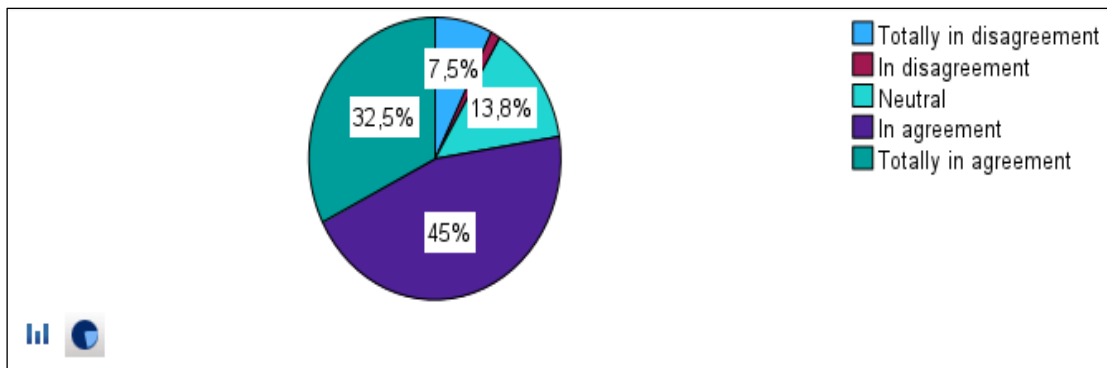
Table 2

When I face a word in English that I don't know, I'm so motivated to learn it.

	No. of answers	Percentage
Totally in Agreement	26	32,50%
In Agreement	36	45,00%
Neutral	11	13,75%
In Disagreement	1	1,25%
Totally in Disagreement	6	7,50%
Total	80	

Source: Surveys

Elaborated by: Researchers.

Graphic 2

Source: Surveys

Elaborated by: Researchers.

As shown in figure 2, many participants answered positively that when it comes to words, they have not learned prior. 32,5% (26) of the participants totally agree that they feel motivated to learn new words, as well as 45% (36) of the participants, who agree with this statement. 13,8% (11) participants answered that they do not feel motivated but do not find any problem about learning a new word as well, feeling neutral. Finally, only 1,2% (1) of the participants disagreed about feeling motivated when finding new words in English and 7,5% (6) of them totally disagreed.

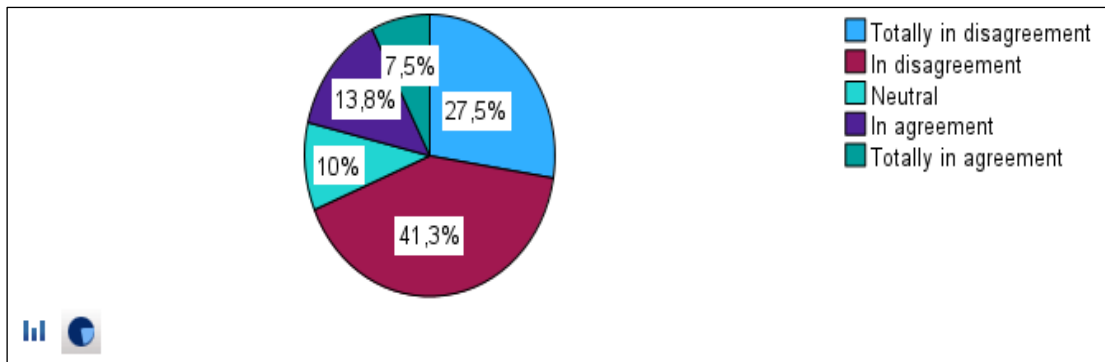
Table 3

Video games make vocabulary learning more boring.

	No. of answers	Percentage
Totally in Agreement	6	7,50%
In Agreement	11	13,75%
Neutral	8	10,00%
In Disagreement	33	41,25%
Totally in Disagreement	22	27,50%
Total	80	

Source: Surveys

Elaborated by: Researchers.

Graphic 3

Source: Surveys

Elaborated by: Researchers.

Most of the participants did not believe that implementing video games during class can make learning vocabulary as well as new words to be boring which can be seen from figure 3. Of the total participants, only 7,5% (6) totally agreed that video games make learning boring, while 13,8% (11) of the learners agreed with this statement. 10 % (8) of the participants did not consider that video games make vocabulary learning neither more interesting nor more boring, answering neutral. On the other hand, 41,3% (33) of participants disagreed that video games make learning boring, and a further 27,5% (22) totally disagreed with this statement.

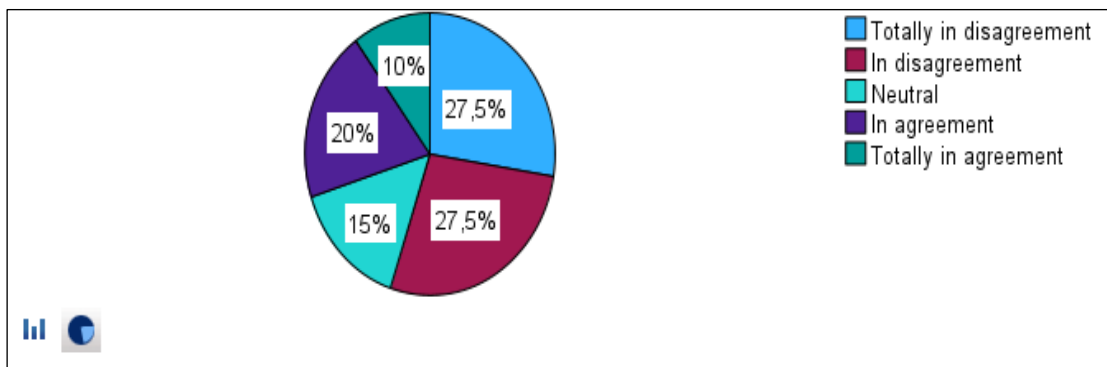
Table 4

Learning vocabulary via video games is stressful.

Items	No. of answers	Percentage
Totally in Agreement	8	10,00%
In Agreement	16	20,00%
Neutral	12	15,00%
In Disagreement	22	27,50%
Totally in Disagreement	22	27,50%
Total	80	

Source: Surveys

Elaborated by: Researchers.

Graphic 4

Source: Surveys

Elaborated by: Researchers.

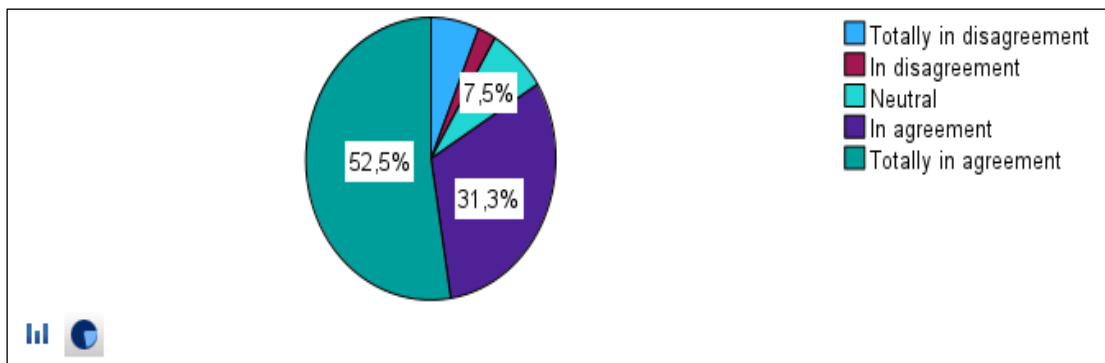
From figure 4, despite most of the participants answering that video games can be entertaining and engaging, others found it to be stressful. 10% (8) of the participants totally agreed that video games make vocabulary stressful, in parallel 20% (16) of the participants agreed. The 15% (12) of the group found vocabulary learning through video games neither more stressful nor more enjoyable. Finally, 27,5% (22) of the participants disagreed and totally disagreed that video games made vocabulary learning more stressful.

Table 5

Encountering new words in English incidentally helped me to get them better.

Items	No. of answers	Percentage
Totally in Agreement	42	52,50%
In Agreement	25	31,25%
Neutral	6	7,50%
In Disagreement	2	2,50%
Totally in Disagreement	5	6,25%
Total	80	

Source: Surveys
Elaborated by: Researchers.

Graphic 5

Source: Surveys
Elaborated by: Researchers.

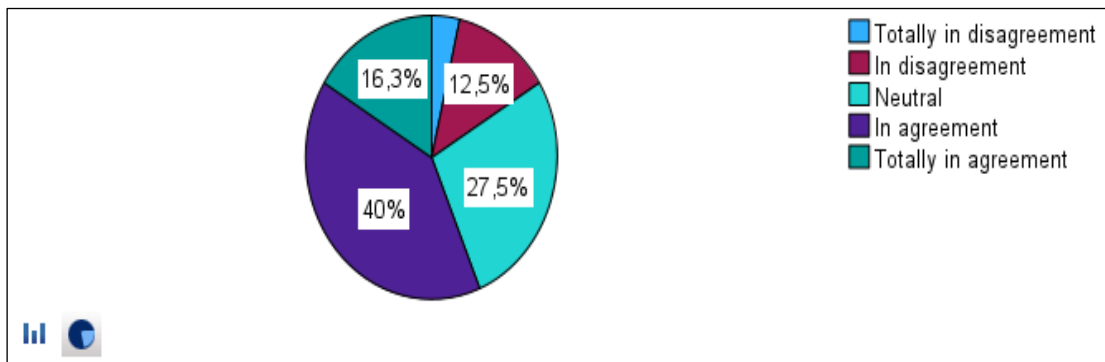
In Figure 5, most of the participants answered positively, affirming that they learned new words in English incidentally as 52,5% (42) of the participants totally agreed with this statement, as well as 31,3% (25) of them who agreed. 7,5% (6) of the participants answered neutral while 2,5% (2) of the participants disagreed and 6,2% (5) of them totally disagreed, affirming that they did not learn vocabulary incidentally.

Table 6

The meaning of the words in English became crystal clear by supports from the virtual world of the game.

	No. of answers	Percentage
Totally in Agreement	13	16,25%
In Agreement	32	40,00%
Neutral	22	27,50%
In Disagreement	10	12,50%
Totally in Disagreement	3	3,75%
Total	80	

Source: Surveys
Elaborated by: Researchers

Graphic 6

Source: Surveys
Elaborated by: Researchers.

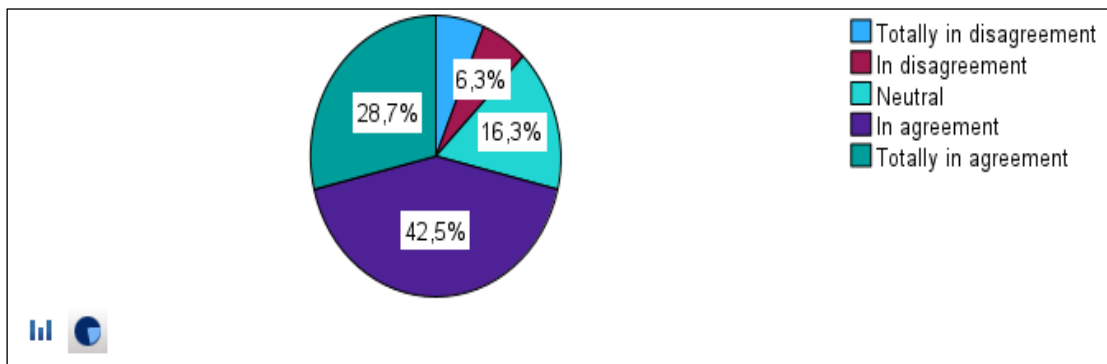
As seen in Figure 6, most of the participants agreed that the game's elements help them understand the meaning of new words as well as how they are used within context. 16,3% (13) of the participants totally agreed that the elements from the video games make the meaning of words in English totally clear. Correspondingly, 40% (32) of the participants agreed. 27,5% (22) of the participants felt neutral. In comparison, 12,5% (10) of the participants disagreed that the elements of the video games make the meaning of words in English clearer, as well as 3,8% (3) who totally disagreed.

Table 7

When I recall the words I learned via the video game, I remember their images too.

	No. of answers	Percentage
Totally in Agreement	23	28,75%
In Agreement	34	42,50%
Neutral	13	16,25%
In Disagreement	5	6,25%
Totally in Disagreement	5	6,25%
Total	80	

Source: Surveys
Elaborated by: Researchers.

Graphic 7

Source: Surveys
Elaborated by: Researchers.

With more than half of the participants in agreement in Figure 7, it signifies that they can recall the images associated with the new words they have learned during class. 28,7% (23) of the participants agreed that they recall the words learned through video games visually, the same as 42,5% (34) of them who agreed with this statement. 16,3% (13) of the participants answered neutral, neither agreeing nor disagreeing. Finally, 6,3% (5) of the participants disagreed and totally disagreed recalling the meaning of words learnt through video games visually.

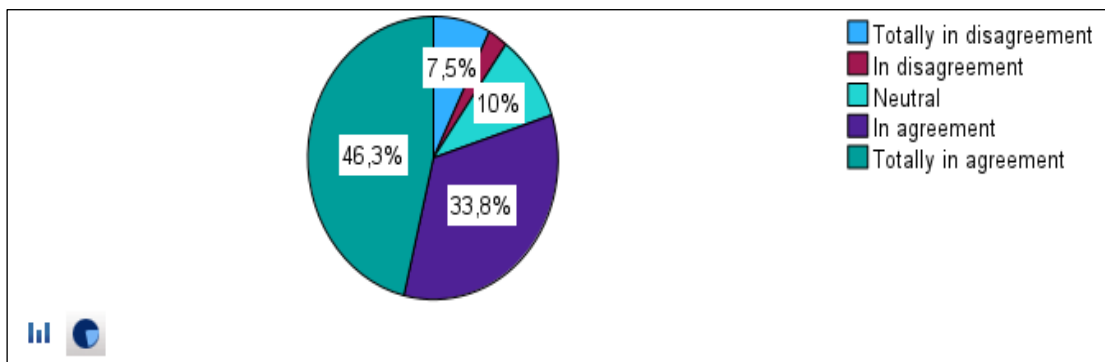
Table 8

Having fun didn't lessen my learning.

	No. of answers	Percentage
Totally in Agreement	37	46,25%
In Agreement	27	33,75%
Neutral	8	10,00%
In Disagreement	2	2,50%
Totally in Disagreement	6	7,50%
Total	80	

Source: Surveys

Elaborated by: Researchers.

Graphic 8

Source: Surveys

Elaborated by: Researchers.

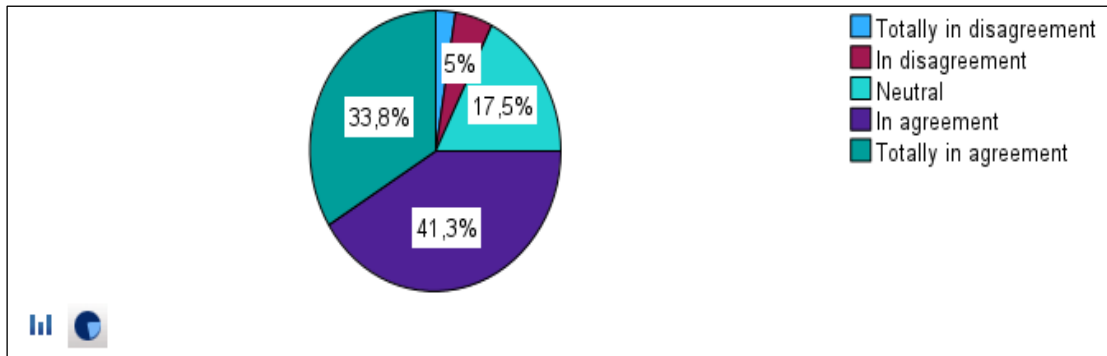
As it can be seen from Figure 8, a big majority of the participants did not think that the fun experience of the video games could affect their learning process. 46,3% (37) of the participants totally agreed that having fun did not affect their learning, 33,8% (27) agreed with this same statement. 10% (8) of the participants felt neutral. Lastly, 2,5% (2) of the participants disagreed and 7,5% (6) of the participants totally disagreed, affirming that having fun makes their learning less effective.

Table 9

Having fun motivated me to continue my learning for long hours.

	No. of answers	Percentage
Totally in Agreement	27	33,75%
In Agreement	33	41,25%
Neutral	14	17,50%
In Disagreement	4	5,00%
Totally in Disagreement	2	2,50%
Total	80	

Source: Surveys
Elaborated by: Researchers.

Graphic 9

Source: Surveys
Elaborated by: Researchers.

Figure 9 shows that many of the participants are positive that the fun and entertaining experience from the video games motivates them to be able to continue their learning for a longer period. 33,8% (27) of the participants totally agreed with this statement. 41,2% (33) of the participants also agreed that video games motivate them to learn for long periods of time. 17,5% (14) of the participants did not agree nor disagree. Lastly, 5% (4) of the participants disagreed that video games helped them to learn for a longer time as well as 2,5% (2) of them who totally disagreed.

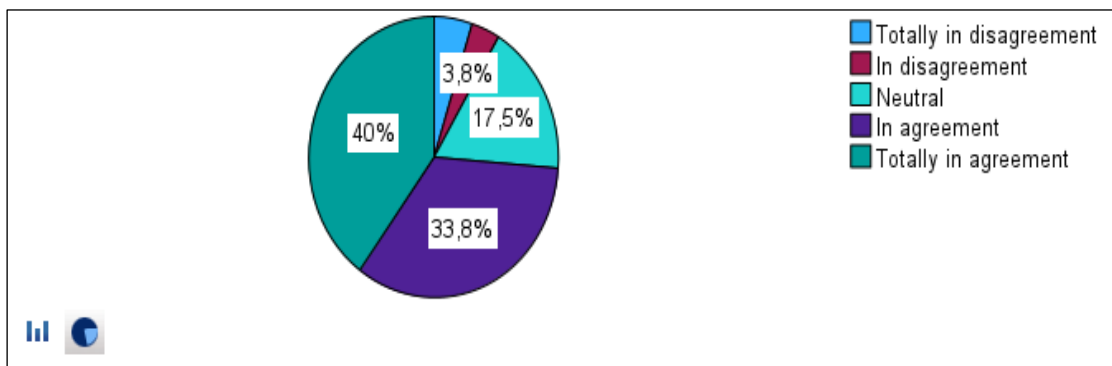
Table 10

Sound bites, pictures, and graphics helped me to get the meaning better.

	No. of answers	Percentage
Totally in Agreement	32	40,00%
In Agreement	27	33,75%
Neutral	14	17,50%
In Disagreement	3	3,75%
Totally in Disagreement	4	5,00%
Total	80	

Source: Surveys

Elaborated by: Researchers.

Graphic 10

Source: Surveys

Elaborated by: Researchers.

As seen in Figure 10, the implemented video games allowed the participants to relate both the graphic images and sounds to understand the meaning of the target language better. 40% (32) of the participants agreed that these elements helped them to acquire vocabulary more easily, the same case as 33,8% (27) of the participants who agreed. 17,5% of the participants felt neutral towards this statement. Finally, 3,8% (3) of the participants disagreed that the elements of the video games helped them to get the meaning of words better and 5% (4) of the participants totally disagreed with this statement.

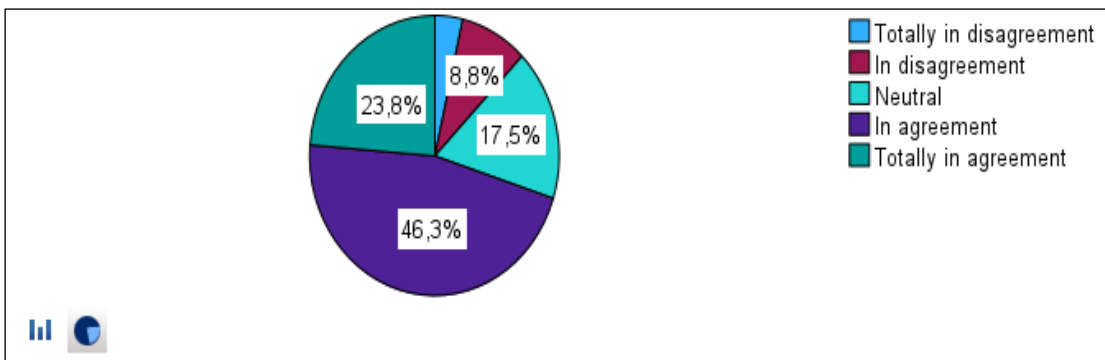
Table 11

The video game provided opportunities for deepening my word knowledge.

	No. of answers	Porcentage
Totally in Agreement	19	23,75%
In Agreement	37	46,25%
Neutral	14	17,50%
In Disagreement	7	8,75%
Totally in Disagreement	3	3,75%
Total	80	

Source: Surveys

Elaborated by: Researchers.

Graphic 11

Source: Surveys

Elaborated by: Researchers.

Figure 11 shows that many participants saw many chances to augment their knowledge over the English language. 23,8% (19) of the participants totally agreed with this statement, while 46,3% (37) of the participants agreed that they had the opportunity to acquire more knowledge about English by using video games. 17,5% (14) of the participants felt neutral. In contrast, 8,8% (7) of the participants disagreed that video games provided opportunities to make their knowledge deeper over English, a similar case is seen with 3,8% (3) of the participants who totally disagreed.

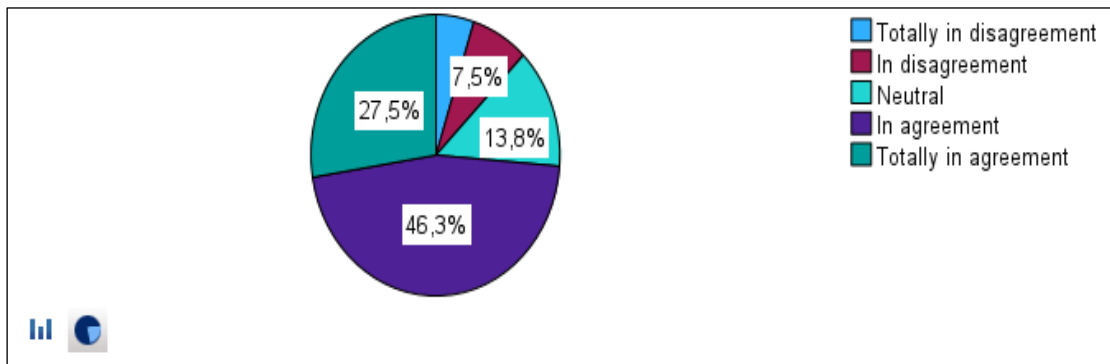
Table 12

Video games provide opportunities for developing fluency with known vocabulary.

	No. of answers	Percentage
Totally in Agreement	22	27,50%
In Agreement	37	46,25%
Neutral	11	13,75%
In Disagreement	6	7,50%
Totally in Disagreement	4	5,00%
Total	80	

Source: Surveys

Elaborated by: Researchers.

Graphic 12

Source: Surveys

Elaborated by: Researchers.

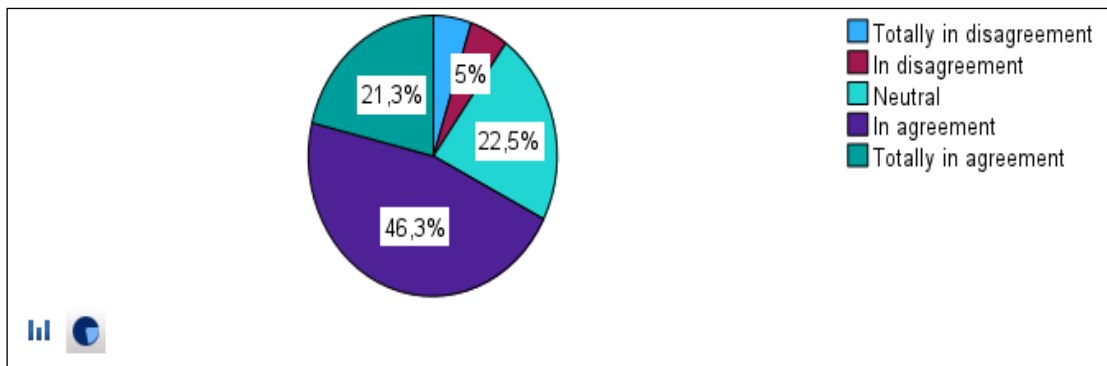
It can be seen from Figure 12 that the majority of the answers said that video games allowed them to be more fluent with the vocabulary that they already knew. 27,5% (22) of the participants totally agreed while 46,3% (37) of the participants agreed that video games allowed them to be more fluent over the knowledge that they know. 13,8% (11) of the participants did not agree nor disagree. Finally, 7,5% (6) of the participants disagreed and 5% (4) totally disagreed that video games provided them opportunities to develop their fluency over known vocabulary.

Table 13

Video games help me to learn word features, like collocation.

	No. of answers	Percentage
Totally in Agreement	17	21,25%
In Agreement	37	46,25%
Neutral	18	22,50%
In Disagreement	4	5,00%
Totally in Disagreement	4	5,00%
Total	80	

Source: Surveys
Elaborated by: Researchers.

Graphic 13

Source: Surveys
Elaborated by: Researchers.

Referring to features from vocabulary, in Figure 13 it can be seen that 21,3% (17) of the participants totally agreed that video games helped them to understand these features as well as 46,3% (37) of the participants who agreed with this statement. 22,5% (18) of participants did not seem to perceive that help, answering neutral. Finally, 5% (4) of the participants disagreed and totally disagreed, stating that video games did not help them to understand the features of the vocabulary they were learning.

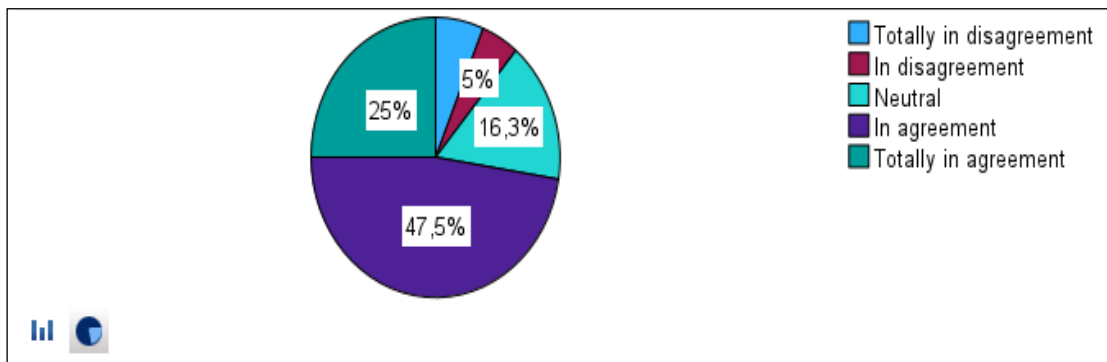
Table 14

Video games made learning engaging.

	No. of answers	Percentage
Totally in Agreement	20	25,00%
In Agreement	38	47,50%
Neutral	13	16,25%
In Disagreement	4	5,00%
Totally in Disagreement	5	6,25%
Total	80	

Source: Surveys

Elaborated by: Researchers.

Graphic 14

Source: Surveys

Elaborated by: Researchers.

As shown from Figure 14, most of the participants agreed that the implementation of video games as part of the class activities helps them to engage more in the process of learning. 25% (20) of the participants totally agreed with this statement, in the same lines 47,5% (38) of the learners agreed that video games made learning engaging. 16,3% (13) of the participants felt neutral towards this statement. Lastly, 5% (4) of the participants disagreed that video games made learning engaging while 6,2% (5) totally disagreed.

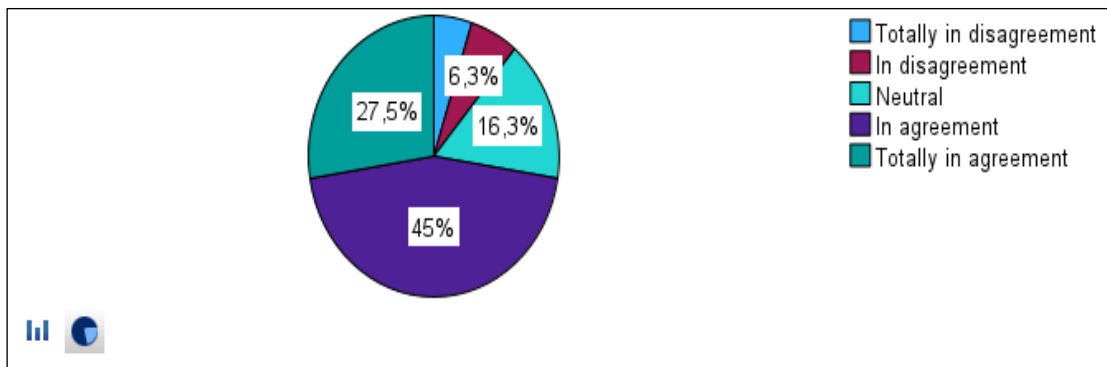
Table 15

I think video games make language learning more interesting.

	No. of answers	Percentage
Totally in Agreement	22	27,50%
In Agreement	36	45,00%
Neutral	13	16,25%
In Disagreement	5	6,25%
Totally in Disagreement	4	5,00%
Total	80	

Source: Surveys

Elaborated by: Researchers.

Graphic 15

Source: Surveys

Elaborated by: Researchers.

As shown from Figure 15, most of the participants consider that video games make language learning more interesting as 27,5% (22) of the participants totally agree while 45% (36) of the participants agreed with this statement. 16,3% (13) of the participants felt neutral. In contrast, 6,3% (5) disagreed that video games make language learning more interesting while, in the same line, 5% (4) of the participants totally disagreed.

Analysis and discussion

After analyzing the collected data, the results were discussed by using the most relevant items to show the experience the students had while they underwent the special classes with video games incorporated to deepen the reasoning in the answers. The results are shown as follows:

Item 1: I'm motivated when I try to learn English via video games.

For the first item, the participants believed that the implementation of video games can help students to be more engaged in class. Regardless, there were responses that this method isn't as effective signaling that not all students can benefit from this addition in the lesson plan. This could be because of a difference in each of the student's preferences and what could help them motivate into engaging more in class (Barreto et al., 2017)

Item 5: Encountering new words in English incidentally helped me to get them better.

Many of the answers from item 5 showed their optimistic opinion regarding learning new vocabulary to understand them better while using video games as means for that as they were actively involved in the game's mission and objectives (Qasim, 2021). While some of them believed that it does not help to learn words outside the lesson plan.

Item 8: Having fun didn't lessen my learning.

A big majority of the participants did not think that the experience of the video games while acquiring new vocabulary could affect their learning process, meaning that they did not have any complication in keeping their focus on the main goal of the lesson while playing the game. As for the minority, who did not agree with this statement, they may present problems with concentrating on several activities at the time, ignoring the language elements from the game to concentrate on finishing a level or a mission as suggested by Tisza & Markopoulos (2021).

Item 10: Sound bites, pictures, and graphics helped me to get the meaning better.

For the answers of item 10, participants answered positively about using the elements of the video games such as graphic design, picture representation and audios as cues to understand and

remember more effectively the new words. With the minority having the problem of not engaging in class using video games as means for the activities.

Item 13: Video games help me to learn word features, like collocation.

The majority of the students opted to be able to comprehend more about word collocations using video games as learning tools as long as they can enjoy what the game has to offer for them (Gee, 2006), while a considerable amount of learners who did not find this kind of help from video games may need explicit instruction about word features.

The findings of this research show that learners' perceptions over using video games as learning tools for vocabulary acquisition are positive. The results show that a big majority of the group of participants find video games useful, helping them to engage in the lesson that they are receiving and helping them to acquire knowledge more effectively while they have fun. This is aligned with the findings and results from the study carried out by Ramadhan (2016) who found out that 37% of the learners who responded to a similar questionnaire agreed that they acquired vocabulary by using video games. In this same study 34.8% of the learners responded neutral and 28.2% disagreed. Something that is worth mentioning is that in Ramadhan's study a lesson plan with video games involved was not implemented, this can be a factor that influences the differences in the percentages. In contrast, in the study made by Vásquez and Ovalle (2019) the use of video games was interspersed resulting in students being more participative and motivated to learn. Similar results were obtained by Kiling, Tuerah & Posumah (2024) who concluded that video games have a positive influence towards vocabulary teaching and learning as the participants of that study agreed on 39% and strongly agreed on 45% that video games are effective to learn vocabulary making it fun in the process.

On a similar note, in the study made by Vahdat & Behbahani (2013), which questionnaire was used in this study as well, the results were similar, concluding that most learners feel motivated to learn when video games are used, similar results were obtained regarding vocabulary acquisition as in Vahdat & Behbahani study, the participants agreed that video games helped them to retain information and to acquire vocabulary more easily. These findings go in accordance with the results

obtained by Katemba (2021) who concluded that video games show more advantages to retain knowledge when compared to other types of learning tools.

Finally, the results of this study show that if video games are aligned with topics and vocabulary from a regular class, they could increase the interest of learners in the topic that they are learning as well as support their acquiring process allowing learners to remember words and their meaning. In the study carried out by Aglhara and Tamjid (2011) a similar conclusion was drawn, reporting that video games are a good alternative to teach and learn vocabulary providing learners with an environment in which they do not feel stressed while learning just as well or better as in a class with regular material. according to students' perception, and what was observed during the lessons given, video games show more effectivity if they are used as a complementary tool for learning that backs up what was previously checked, in Winaldo & Oktaviani (2022) study, this is recommended as well suggesting using video games to achieve mastery over the vocabulary learnt. These conclusions are supported by Clausen (2023) who concluded that video games can assist learners to use vocabulary actively if they are used alongside other strategies for learning.

9. RESEARCH IMPACTS

This research has an educational impact. Since we had in mind to provide help for the educators to teach and students to learn, it can help as an innovative learning tool for the vocabulary acquisition process to be conducted smoothly, motivational and engaging. Additionally, it contributes with information about how one can use video games in learning which is a topic that has not been so explored specially in Ecuador, thus giving a first glance into the potential of investigating more about this topic in future studies.

10. CONCLUSIONS AND RECOMMENDATIONS

Conclusion

The objective of this study was to explore the perceptions of pre-intermediate students over using video games as a supporting tool during lessons, as such, by going through many research projects from authors who conducted a similar study around the globe, we came to the first conclusion that

as of late, many of them sought to investigate the impact that video games had with the learner's acquisition process without any subjective outlook on the present time.

- The results showed that students' perceptions are fairly positive towards the use of video games as learning tools for vocabulary acquisition. These positive outcomes are also backed up by several studies, in which it was found out that video games should be implemented in education. For example, in Ebrahimzadeh & Alavi's (2016) study it is shown that learners feel more motivated when video games are involved in the class. Also, Piirainen–Marsh & Tainio (2009) found out that as learners can interact and use the language in context, video games show advantages in memorization and acquisition of small chunks of language.
- The results obtained after the application of the questionnaire were that the big majority of the participants agreed that video games not only helped them to use the vocabulary that they learned in context, but also that video games are useful to keep them engaged during the lessons and to help them remember the meaning of the words, going in accordance with what was previously found out after the literature review. It must be mentioned that, even though most of the participants found the implementation of video games suitable for learning vocabulary, this response was not unanimous. This must be considered as the use of video games may not be suitable for all learners as some of them may find them difficult or may need explicit instruction to learn.
- Finally, regarding guidelines to implement video games, it was concluded that video games should be used as an extra tool to learn. According to Watson & Mong (2016) the use of video games may not result effectively if they are not correctly implemented in a lesson plan with a previous approach to the topic that will be learnt. To ensure vocabulary acquisition, there must be a previous encounter with the vocabulary before using video games as they are more useful as a medium to practice with language in context and to remember content. Something that must be considered as well is that, to implement video games in a lesson plan, the teacher must be sure that the learners will have access to technological devices that allow them to use those video games; not only that, but the

teacher must be sure that there is flexibility towards using new technologies as part of the lesson planning (Baek, 2008).

Recommendations

- This study had limitations regarding the number of participants and the number of lessons in which video games were implemented. Even though the results showed that learners have positive perceptions regarding using video games as learning tools, the number of results was too small, so in studies with a larger number of learners these results may differ. The same case applies if in future studies there is a larger period of lesson implementation with video games involved.
- It is also recommended to dig deeper into the perceptions that learners have regarding using video games by using other instruments that can get specific information, for example using interviews. This can help to understand why some learners may not find the use of video games as helpful or engaging.
- It is recommended that teachers and investigators look deeper on the benefits of video games as learning tools by implementing them in future lesson plans with more preparation at hand in order to successfully gather a larger amount of data to further contribute to this line of study.
- During the study there were also problems with the technological devices in which the video games were played, mainly connection problems, this could have made students not enjoy the process of learning with video games as much as they would in more stable instances. It is recommended to implement similar lesson plans in an environment with stable internet connection and with devices that can run the video games without problems.

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