



Effectiveness of gamification strategies that incorporate video games to improve language  
learning in a private school

Santiago Aguja Arévalo

Corporación Universitaria Minuto de Dios

Bogotá Region Rector's Office (Bogotá)

Norwest University Center Bogotá (Engativá)

Bachelor's Degree Program in Foreign Languages with an Emphasis in English

May 2025



Efectividad de las estrategias de gamificación que incorporan videojuegos para mejorar el aprendizaje de idiomas en un colegio privado

Santiago Aguja Arevalo

Asesor:

Luis Eduardo Buitrago Rojas

Docente en Educación

Monografía presentada como requisito para optar al título de Licenciado en Lenguas Extranjeras con Énfasis en Inglés

Corporación Universitaria Minuto de Dios

Rectoría Bogotá Región (Bogotá)

Centro Universitario Noroccidente Bogotá (Engativá)

Programa Licenciatura en Lenguas Extranjeras con Énfasis en Inglés

mayo de 2025

**CORPORACIÓN UNIVERSITARIA MINUTO DE DIOS - UNIMINUTO**  
**FACULTAD DE EDUCACIÓN**  
**PROGRAMAS DE PREGRADO**  
**ACTA DE SUSTENTACIÓN**

**El examinado:**

1. Santiago Aguja Arévalo

**Del programa:** Licenciatura en Idioma Extranjero Inglés

**Presentó sustentación del Proyecto de Grado titulado:**

**“ Effectiveness of gamification strategies that incorporate videogames to improve language learning in a private school”.**

**Ante el jurado:**

Claudia Yanive Prieto Castillo

**Obtuvo el concepto:**

**APROBADO**

**REPROBADO**

**Observaciones:** \_\_\_\_\_

Para constancia se firma en Bogotá, D.C., el día 27 del mes de Mayo de 2025

**FIRMA DEL JURADO:**

*Santiago Aguja Arévalo*

*Andrea EH*

**VoBo. Andrea Alexandra Bernal Hernández**

Coordinadora LLEI

## **Acknowledgment**

To begin, I would like to express gratitude to my family since they helped me to shape my ideas, and they gave me the idea for the topic of this research. I owe special recognition to Leonardo, who were there at any time I needed a hand, a Word a support to keep going with the document.

I thank professor Carolina Arévalo and Claudia Yanive Prieto Castillo, both were great aid to form and correct the research, and they were always available for me during the process of the making.

Last but not least, I must thank my tutor Luis Eduardo Buitrago Rojas, he was a great anchor and support, being wise and teaching me on the way of shaping and finalizing my research.

To conclude, final thanks to the participants who made this project come to life, without you this would not have been possible, I am in debt with you.

## **Dedication**

This research is dedicated to my family, teachers, classmates, and everyone who contributed to its development. Your unwavering support, insightful ideas, and encouragement have been instrumental in bringing this project to life.

A special acknowledgement goes to the participants who took the time to share their thoughts and experiences, allowing for a deeper exploration of video games as a learning tool. To my teachers, who provided guidance and constructive feedback throughout this journey, thank you for your patience and expertise. To my classmates and peers, your discussions and shared enthusiasm have been invaluable in shaping this research.

Writing a monograph on a globally recognized trend like video games has been both a challenge and an exciting opportunity. Without the support and contributions of each of you, this project would not have been possible.

## Index table

Abstract -----	10
Resumen -----	11
Introduction -----	12
Chapter 1: Contextualization -----	14
1.1 Macro context -----	14
1.2 Micro context -----	15
Chapter 2: Problems -----	17
2.1 Description of the problem -----	17
2.2 Formulation of the problem -----	17
2.2.1 The Importance of Video Games in Society -----	18
2.2.2 The Keys to Game-Based Learning -----	18
2.3 Justification -----	19
2.4 Objectives -----	22
2.4.1 General Objective -----	22
2.4.2 Specific Objectives -----	22
Chapter 3. Referential Framework -----	24
3.1 Background Framework -----	24
3.1.1 Research about video games in Colombia -----	24
3.1.2 Videogames and their social perception -----	26
3.1.3 Video Games in educational environment -----	27
3.1.4 Types of learning to be developed from video games -----	28
3.1.5 Learning as a context -----	29

3.1.6 Immersive learning -----	29
3.1.7 Development of soft skills -----	31
3.2 Theoretical Framework -----	33
3.2.1 Video Games, what are they? -----	33
3.2.2 Video Games and Language Learning -----	34
3.2.3 Constructivist Learning Theory -----	35
3.2.4 Experiential Learning Theory -----	35
3.2.5 Motivation and Self-Determination Theory -----	36
3.2.6 Key Gamification Elements -----	37
3.2.7 The Effectiveness of Game-Based Learning -----	38
3.3 Legal Framework -----	38
3.3.1 General Considerations on the Legal Classification of Video Games -----	39
3.3.2 International Treatment -----	39
3.3.3 Legal Framework in Colombia -----	39
3.3.4. Intellectual Property Regulation -----	40
3.3.5 Challenges in Video Game Classification in Colombia -----	41
3.3.6 Conclusion on legal framework -----	41
Chapter 4: Methodological Design -----	42
4.1 Type of investigation -----	42
4.2 Method of investigation -----	42
4.3 Stage of investigation -----	43
4.4 Population and Sample -----	45
Image 1 -----	46

4.4.1 Strengths -----	46
4.4.2 Weakness -----	48
4.4.3 Opportunities -----	49.
4.4 Threats -----	49
4.5 Data Collections Instruments -----	50
Chapter 5. Results -----	52
5.1 Analysis of Results and Methods -----	52
Figure 1. Diagram -----	52
Figure 2. Diagram -----	52
Figure 3. Diagram -----	53
Figure 4. Diagram -----	54
Figure 5. Diagram -----	54
Figure 6. Diagram -----	55
Figure 7. Diagram -----	55
Figure 8. Diagram -----	56
Figure 9. Diagram -----	57
Figure 10. Diagram -----	57
Figure 11. Diagram -----	58
5.2 Interpretation of Results -----	60
Chapter 6. Conclusions -----	62
Chapter 7. Prospective -----	64
References -----	67
Annexes -----	73

Project's Timeline -----	74
Intervention proposal -----	75
Designed Instruments -----	76
Informed Consent and Approval -----	77

### **Abstract**

The present study aimed to propose gamification strategies through the incorporation of video games to strengthen second language acquisition in students from cycles 3 and 4 at a private school. A qualitative methodology with an ethnographic approach was employed, using instruments such as surveys, observations, and interviews to analyze the impact of video games on English learning. The results showed that participants perceived the use of video games in the classroom positively, highlighting an increase in motivation, vocabulary acquisition, and improvement in pronunciation. However, challenges were identified, such as the appropriate selection of video game genres and the management of classroom time. In conclusion, it was demonstrated that video games, when strategically applied, support language learning through immersive and motivating environments, representing a valid alternative to traditional methodologies

**Keywords:** Video games, education, strategy, implementation, student.

## **Resumen**

Este estudio tuvo como objetivo proponer estrategias de gamificación mediante el uso de videojuegos para fortalecer la adquisición del inglés en estudiantes de 3.º y 4.º ciclo de un colegio privado. Se adoptó un enfoque cualitativo etnográfico, utilizando encuestas, observaciones y entrevistas. Los resultados evidenciaron una percepción positiva hacia los videojuegos, destacando mejoras en motivación, vocabulario y pronunciación. No obstante, surgieron desafíos como la selección del tipo de videojuego y la gestión del tiempo en clase. Se concluye que los videojuegos, aplicados estratégicamente, pueden ser una alternativa eficaz a los métodos tradicionales.

Palabras clave: Videojuegos, educación, estrategia, implementación, estudiante.

## **Introduction**

The advancement of technology and the transformation of entertainment media have driven new forms of learning in contemporary educational settings. Among them, the use of video games emerges as an innovative strategy for teaching foreign languages. Despite their traditional negative perception associated with violence or social isolation, recent research highlights the educational potential of video games, particularly in strengthening linguistic and cognitive skills. Considering this evolution, the present study aimed to propose gamification strategies that incorporate video games to improve second language acquisition in students from cycles 3 and 4 at a private institution in Bogotá.

The project employed a qualitative methodology with an ethnographic approach, using instruments such as surveys, observations, and interviews to gather information about students' interaction with video games in the classroom. Through this methodology, the study sought to analyze how these digital environments can support the learning of new words, improve pronunciation, and motivate students in their English learning process. The results revealed that the use of video games significantly increased participants' motivation and facilitated vocabulary acquisition and communication skills in immersive and meaningful contexts.

Based on these findings, it is recognized that the appropriate integration of video games in the classroom, accompanied by well-structured gamification strategies, can transform the way foreign language teaching is approached. Moreover, the advantages are many that can be explored in future research or in a more scientific approach.

Finally, challenges related to the choice of video game type and the management of pedagogical time were also identified, suggesting the need for careful and planned implementation. Altogether, this research contributes evidence on the effectiveness of video

games as pedagogical tools and paves the way for future explorations in the field of technology-mediated education.

## Chapter 1: Contextualization

### 1.1 Macro Context

The macro context where our project is located is the video games that the institutions use to teach education in Colombia. According to Galindo, J (2022):

Video games are part of the world of entertainment for all ages, but in their history, they have not been able to have as much relevance as they have at this moment. We could say that this kind of game managed to enchant the world, and today Colombia is part of those countries that are positioned in the industry.

In terms of video games Colombia has managed to position itself for two reasons, the first: the talent and human quality that make up its work teams, and the second for the combination of two factors: its empathetic character typical of Latin American culture and the entrepreneurship that has been cultivated in the midst of the era of consoles, devices and the so-called productive leisure.

A few years ago, young people would find a group of friends a few blocks from their homes or schools with whom they would go out to play games ranging from five-hole, Tapita, or Tintin run-run, to Mortal Kombat, Pong, Donkey Kong or the all-time favourite Super Mario Bros/Kart. Well, those who are now recognized as "adult-contemporaries" invest part of their time and money in equipment, devices and routes to be able to continue building around that hobby. For some, seeing their parents with that fascination (or the parents themselves) has promoted by prohibition or by osmosis the creation of communities and groups that are now part of this universe, of this movement.

In Colombia, the adoption of video games in the context of secondary education has been a subject of academic interest, although its implementation remains incipient and faces structural challenges. A study conducted in the municipality of La Estrella, Antioquia,

showed that although there is no significant relationship between video game use and academic performance, factors such as playing time, location, and student age can influence school performance (Restrepo et al., 2019). Additionally, it has been identified that the main barrier to effectively integrating video games in the classroom is the lack of specific teacher training in the design and implementation of pedagogical strategies based on these resources (Ortiz & Cardona, 2022).

Regarding their use for language teaching, evidence indicates that although video games can be effective tools for improving linguistic skills such as reading comprehension and vocabulary, their application in Colombia remains limited and isolated, without educational policies that systematically promote their inclusion in foreign language teaching programs. This situation presents an opportunity for the development of innovative educational projects that leverage the potential of video games as didactic resources.

## **1.2 Micro Context**

In the micro context, the most important scenario is Vida Nueva Christian High School because it has a lot of things to offer as an institution to promote new learners that can contribute to society. We are an educational institution that implements its Christ-centred project that is characterized by the identity with Jesus Christ and his word, which is the integral factor that makes it possible not only to understand the truth, but to apply it to life and relationships, morality, ethics, politics, and all kinds of knowledge sciences; with a significant pedagogical model, thus achieving that girls, young people and community are vital actors of change for society.

In the year 2028 our students will be recognized for the quality of their education, explicit in values, principles and Christian doctrine, their excellent coexistence and academic training, being professionals with a culture of continuous improvement, capable

of positively affecting their environment with social responsibility.

## Chapter 2: Problems

### 2.1 Description of the problem

Despite the widespread popularity of video games, they have historically been overlooked as educational tools, particularly in the field of language acquisition. Video games have long been subject to negative stereotypes, often being associated with violence, social isolation, and unhealthy lifestyles. Scholes & Johnson (2015) note that “videogamers are often portrayed as adolescent overweight males eating fast food in their bedroom, and videogames often blamed in the media for violent crime, obesity, social isolation and depression. Although, video gaming is a mainstream activity.”. This prevailing perception has made it difficult for video games to be seriously considered as viable educational tools.

However, video games have demonstrated their potential to engage learners in immersive and interactive environments. Iconic characters such as Lara Croft from *Tomb Raider* have arguably contributed more to popular interest in archaeology than traditional textbooks. Similarly, many video games expose players to history, geography, mathematics, and even linguistic structures, suggesting that their integration into educational contexts could be beneficial. This raises the question of whether video games could be effectively used to support foreign language learning, particularly through English Medium Instruction (EMI).

### 2.2 Formulation of the problem

The core research problem emerged from the realization that video games, despite their negative reputation, could be integrated into classroom environments to enhance language learning. One of the key challenges in education today is maintaining student motivation and engagement, particularly when learning a foreign language such as English. Traditional methods of language instruction often fail to captivate students, leading to a lack of interest

and suboptimal learning outcomes.

Given this context, this study seeks to explore the following research question:

What is the effectiveness of applying gamification strategies that incorporate video games in students from cycles 3 and 4 at a private school to improve language acquisition in 2025?

By addressing this question, the research aims to determine whether video games can serve as effective tools for language acquisition, identifying the key components that contribute to their pedagogical potential while also examining the challenges associated with their implementation in formal educational settings.

### **2.2.1 The importance of video games in society**

The video game industry has evolved into a dominant force in the global entertainment landscape, generating over \$150 billion in revenue in 2019 and showing consistent annual growth (Newzoo, 2019). With an estimated 2.5 billion players worldwide, video games have become a mainstream form of entertainment, surpassing traditional media such as music and cinema. Titles like *Fortnite*, which boasts over 139 million active players, demonstrate the massive reach and influence of video games.

Now, given their ubiquity and ability to captivate audiences across age groups and cultural backgrounds, video games hold immense potential as educational tools. If leveraged effectively, they could revolutionize traditional teaching methodologies, making learning more engaging and relevant to modern students.

### **2.2.2 The keys to game-based learning**

Game-based learning (GBL) is an instructional method that incorporates video games to enhance the educational experience. This approach is built on three fundamental principles:

### 1. **Transforming learning into an engaging experience**

- Unlike conventional lessons, which may feel monotonous, video games introduce an element of excitement and immersion. Students become active participants in their own learning process, acquiring new knowledge in a way that feels natural and enjoyable.

### 2. **Enhancing motivation and engagement**

- Video games inherently incorporate reward systems—points, medals, achievements, and progression mechanics—that sustain players' interest. By integrating these mechanics into language learning, students can remain motivated to improve their skills.

### 3. **Providing opportunities for active practice**

- Many video games require players to apply problem-solving skills, critical thinking, and language comprehension in real-time. Simulations, interactive dialogues, and contextualized language use allow students to practice language in meaningful ways without fear of failure.

Despite long-standing misconceptions about video games, they offer promising opportunities for enhancing language acquisition. Through game-based learning, educators can create immersive, interactive, and motivational learning environments that align with modern students' interests and cognitive engagement. However, for video games to be fully embraced in educational settings, further research is needed to analyze their effectiveness, identify best practices for their implementation, and address potential challenges.

This study aims to fill this gap by exploring the integration of video games as a methodological tool for language acquisition. By doing so, it seeks to contribute valuable insights to the fields of educational research, digital pedagogy, and language instruction,

ultimately paving the way for innovative teaching strategies that bridge traditional and modern learning approaches.

### **2.3 Justification**

Educational research is a dynamic field that extends beyond constructivist principles, linking knowledge formation to real-world contexts and social interactions. According to Calvo, Camargo, & Pineda (2008), educational research involves “a process of construction, explanation, and understanding of the educational phenomenon, in which the production of knowledge linked to social life is presented” (p. 12) (par.1). As such, it serves not only to study education, but also to propose innovative pedagogical and disciplinary approaches.

Traditionally, video games have been perceived primarily as entertainment, often criticized for their potential negative effects on children and adolescents. Garcia (2019) argues that “for decades, video games have been considered a bad influence for children and young people, associated with increased aggressive behavior, exposure to violence, and disconnection from reality” (p. 45) (par.1). However, recent advancements in technology and pedagogy suggest that video games can serve as valuable educational tools, particularly in language learning. Research by Gee (2003) highlights how video games create situated learning environments where players acquire knowledge through immersive and interactive experiences.

The integration of video games into education has the potential to enhance student engagement and motivation by aligning learning experiences with students' interests. Unlike traditional teaching methods, video games foster active participation, deeper knowledge retention, and problem-solving skills (Prensky, 2001). This approach is particularly relevant in language acquisition, where authentic interactions, contextualized vocabulary use, and narrative-driven scenarios contribute to meaningful learning (Reinders & Wattana, 2015).

Moreover, video games facilitate second-language acquisition by providing a low-stress environment where learners can practice communication without fear of failure (Peterson, 2010).

From a theoretical perspective, this research contributes to the growing body of literature on game-based learning by exploring its alignment with constructivism (Piaget, 1950) and experiential learning theories (Kolb, 1984). It also provides insights into how digital tools can bridge the gap between formal education and informal learning environments.

Methodologically, this study aims to assess the pedagogical effectiveness of video games in a private school setting, offering empirical evidence on their impact on student performance and engagement. By analyzing student interactions, learning outcomes, and teacher perceptions, the research seeks to establish best practices for integrating video games as a language teaching strategy (Connolly, Boyle, MacArthur, Hailey, & Boyle, 2012).

This study has significant socio-educational relevance, as it promotes the integration of emerging technologies in the Colombian school context, specifically through the use of video games as a strategy for foreign language learning. In an increasingly digitalized educational environment, implementing video games in the classroom not only responds to students' interests and habits but also helps bridge the gap between traditional methods and new learning dynamics based on interaction and immersion (Paul, 2003). Likewise, this proposal fosters the development of communicative competencies in English within a low-anxiety environment, which facilitates a more natural and effective language acquisition process (Reinders & Wattana, 2015).

From a theoretical standpoint, the study contributes to the field of language teaching by validating approaches based on experiential learning and constructivist theory,

demonstrating that the playful context of video games facilitates meaningful learning. As noted by Deci & Ryan (1985), incorporating elements of gamification stimulates students' intrinsic motivation, a fundamental aspect for success in second language acquisition. In this way, the research not only offers innovative pedagogical alternatives but also invites a rethinking of current teaching methodologies towards more interactive, dynamic, and student-centered models.

In conclusion, this project aims to develop innovative educational strategies by leveraging video games as effective tools for language learning. By demonstrating their feasibility and benefits, the study seeks to make language education more dynamic, engaging, and aligned with modern students' learning preference.

## **2.4 Objectives**

To answer the question, how can video games be used as a methodology for acquiring a language?

### **2.4.1 General objective**

To propose gamification strategies incorporating video games to enhance language acquisition among high school students in cycles 3 and 4 at a private school.

To determine the effectiveness of applying gamification strategies that incorporate video games in students from cycles 3 and 4 at a private school to improve language acquisition

### **2.4.2 Specific objectives**

- To analyze the key components of video games that contribute to the development of cognitive learning skills.
- To explain the advantages and challenges of using video games as educational tools in language learning.

- To assess the effectiveness of video game-based strategies in improving students' motivation and learning outcomes

## **Chapter 3: Referential Framework**

### **3.1 Background framework**

According to the research carried out by the International Journal of Medicine and Sciences of Physical Activity and Sport directed by (Beltrán et al., 2010) Beltrán et al (2010). Which consisted of a review of studies related to active video games and the health of young people. Video games represent a new alternative for maintaining an active lifestyle, fun, and learning. Because many of these are related to history like 7 wonders which is about Greek history, the first European invasions, geography, and the option of learning a new language indirectly like English.

On the other hand, its use can negatively influence the health of young people because they sometimes use it excessively and do nothing else. After the review, the need for sociological and epidemiological studies that offer information on the real impact that this new phenomenon can have on the levels of physical activity and the prevalence of injuries in the young population is observed. A moderate evaluation and use of video games is required for their impact on the well-being and health of the young population to be positive (Beltrán et al., 2010).

#### **3.1.1 Research about video games in Colombia**

The first research that was done was made by Medina (2019):

The use of educational video games, as a pedagogical strategy to develop basic EFL reading skills in a group of 8th graders at Guillermo Cano Isaza School: Now, the project describes an action research proposal, which studies the influence of educational video games as a main tool and strategy in the learning of English, taking into account the development of reading skills at a basic level. The research was conducted with eighth grade students from Cedit Guillermo Cano Isaza School (p. 15) (par.1).

Something that thankfully supports the progress of this project through good writing and an actual trial that was done, not that long ago.

Additionally, this document provides a clear description of the pedagogical strategy that was used for the development of this proposal. This research arose as a result of an observation made to a group of students, which showed that their reading competence in the English language was quite limited. Among the difficulties that the students presented it was possible to find that they did not understand texts and basic conversations written in English, which made it difficult for them to interpret, understand and communicate their ideas correctly through this foreign language. The results of this study seek to contribute to the field of foreign language teaching, as well as to students and the educational community in general.

Secondly, Galvis (2011):

This small-scale action-research study examines the perceptions of four students in a military academy in Colombia undergoing the process of using a mainstream video game in their EFL classes instead of classic forms of instruction. The video game used to approach EFL by means of language exploratory activities designed according to the context present in the video game and the course's linguistic objectives. This study was conducted on the grounds that computer technology offers the possibility of enhancing EFL instruction by means of simulating and augmenting the target language context (p. 54) (par.1).

The researcher's belief is that video games offer a learning environment closely related to students' experiences and preferences. Results from this study suggest that students were more entertained and attentive and demonstrated more engagement and disposition towards their English classes. Students also learned about matters related to the

target language and culture and were not only circumscribed to linguistic ones. Similarly, results from this study shed some light on the importance of offering access to technology to students before they advance to higher education that supports video-gaming practices in the classroom.

Lastly, Egenfeldt (2006):

This paper overviews research on the educational use of video games by examining the viability of different learning theories in the field, namely behaviorism, cognitivism, constructionism and the sociocultural approach.

In addition, five key tensions that emerge from the current research are examined: 1) Learning vs. playing, 2) freedom vs. control, 3) drill-and-practice games vs. microworlds, 4) transmission vs. construction, 5) teacher intervention vs. no teacher intervention (p. 184) (par.1).

Something which makes visible that video games have been already considered as a source to teach and learn information and even develop skills in the brain and new abilities that might be useful during the life of the player.

### **3.1.2 Videogames and their social perception**

Video games have been perceived as a bad influence for those who consume them, from the most minimal aspects of behaviors as affectations in their reality "(..) video games are bad for the physical and emotional health of players and in many occasions have devastating side effects such as convulsions, insomnia, addiction, and even death" (Briseño, 2019), and in certain cases these can influence such aspects but not entirely. Also, video games have been labelled as inciting violence and vandalism by youth APA (2015):

A comprehensive review of research on violent interactive video games suggests that such exposure: (a) increases aggressive behaviours (b) increases aggressive thoughts (c) increases feelings of anger (d) decreases

helpful behaviors and, (e) increases physiological arousal. The characteristics of violence in interactive video games appear to have similar detrimental effects to viewing violence on television; however, based on learning theory (Bandura, 1977; Berkowitz), practice, repetition, and rewards for acts of violence may be more conducive to increasing aggressive behaviors in children and youth than passively watching violence on TV and in movies (Translated by the undersigned. APA, 2005) (par.1).

Unfortunately, this position is still held by many people, and this does not allow the conception of these as a healthy tool. In addition, video games are seen as an enabler of violent behavior in those who play them, according to Now (2003) violence is shown without consequences for the perpetrator or the victim, sending the message that violence is an acceptable way to achieve goals, fun and harmless, and that players can be heroes if they use it. This allows us to interpret that if children have access to violent content through an entertainment system such as a video game, it will only cause him to project such actions in the context in which he lives.

Finally, considering how people and society perceive video games, it is important to acknowledge their impact. This is especially relevant when introducing video games as a tool and methodology in education. Recognizing these factors helps ensure a smooth transition during the initial trials and implementation.

### **3.1.3 Video games in educational environment**

Now, video games, apart from being seen as a harm to people, there are those who see them as educational tools with a high level of impact for the new generations of this society, "The current culture has integrated video games as a privileged means of

expression and communication. The educational potential they represent has aroused the interest of researchers, pedagogues, and video game developers forming an exchange collective (...)" (Esnaola & Sanchez, 2014, p. 21) with this modern type of entertainment, there are new horizons that can be explored to leave behind this perception.

Currently, there is truth in the educational capacity of video games: the development of soft-skills. Traditionally, education was focused primarily on the acquisition of content; the paradigm of education has evolved to a teaching-learning by competencies. Through the use of video games can develop different types of skills such as problem-solving and overcoming challenges (Gómez & Rodriguez, 2016) among other cognitive skills; these are an educational potential mainly for the youth population, allowing teachers to expand their methodological repertoire and thus give an opportunity to the use of modern entertainment for cognitive conception.

In the perspective that, it can be affirmed that for the correct video game training in the classroom according to (Sandford et al., 2006) Sandford et al. (2006):

Successful use of the video game in the classroom is much more due to the teacher's ability to integrate new knowledge into the curriculum than to the ability to use the video game. In all cases, it is evident that the teacher plays a central role in supporting student learning, beyond the operational elements of using the game (p. 4). (par.1)

This allows through the mechanism of these to conceive the desired learning, bringing together technological modernity, all of this resulting in the possibility of implementing them in the classroom.

Lastly, this is relevant in the way that helps to support the construction of the paper, due there have been trials to use video games and put them into academic spaces where students can be taught with these entertainment tools.

### **3.1.4 Types of learning to be developed from video games**

Consequently, video games can have three different uses for learning according to Gros (2009) “The use of video games as a medium for education is based on different approaches that we have categorized as: the use of the video game as a context, immersive learning, the development of soft-skills and complex learning” (p. 6) (par.1). This opens the possibility of developing these four types of learning simultaneously as well as separately. Seen in this way, it will define the consistency of the possible types of learning to be developed through the use of video to be developed through the use of video games as an educational tool will be defined in the following paragraphs.

### **3.1.5 Learning as a context:**

Learning as context then arises, Gee (2003):

The learner must learn not only the meanings of a particular domain of knowledge but must also think about the domain at a 'meta' level, with this the student is able to understand a specific context and how to use it to their advantage to continue their educational process successfully, players have to understand the meaning of the internal grammar of the design and social practice that determines the game activity (p. 23) (par.1).

Most certainly, video games provide diverse contexts for learning, as they "make possible the creation of virtual worlds and, because players act in those worlds, the development of situated arrangements based on social practices, far-reaching identities, shared values, and ways of thinking important in communities of practice becomes possible" (Clinton and Shaffer, 2005, p. 7) (par.1).

### **3.1.6 Immersive learning**

On the other hand, in video games, an important factor is the immersion they give to the player, as if giving him the leading role where he embodies the character, decides and

acts as he sees fit, "learning through play, with games and with simulation, is a part of the more general process of learning in immersive worlds" (De Freitas & Oliver, 2006, p. 11) (par.1).

Nowadays, students must be aware of the learning that they are planned to receive during their game Gros (2009) "In this sense, if we want to use video games with an educational objective, we must make the player aware of the learning they are acquiring through the game" (p. 7) (par.1). This simple act makes each player become immersed in the world they will be playing and as a result they will be aware of the knowledge previously planned to be acquired.

### **Development of soft skills**

By continuing, soft-skills can be developed through video game implementation into the academic environment, James & James (2004) agree that "soft-skills" are a set of personal qualities such as: communication, leadership, customer service, problem-solving, teamwork. Then, the video game being an interactive component is able to build such skills "video games can provide opportunities for students to develop these types of competencies and therefore, teachers can take advantage of learning that informally are already being developed through gaming experiences" (Gros, 2009, p.257) (par.1).

### **Complex learning**

It should be noted that according to Gros (2009) "In most video games the player has to control many different variables, make decisions, establish strategies and constantly compare the effects of his actions on the system" (p.7) (par.1) this leads to complex learning, which includes very linear and late aspects of a context or situation; it is extensive and dense to build, as it can take years, but video games adapt it to a much shorter time and with a dynamic methodology.

Thus, the basic ways of understanding a video game reaching complex learning

consists of three levels: The first is the basic and pillar of all, consisting of the interaction of the player and the game world; the second is the learning of the rules, what is allowed and what is not allowed within the game world and finally is why it is done or reaches a certain point within the same (Gros, 2009) all this can be assimilated to the theoretical learning of certain context cause and effect, order and chaos, second order consequences, behaviours of complex systems, the value of perseverance, and so on. So much for the tip of the iceberg of this learning being useful and accurate.

Lastly, having in mind these stages or types of learning is amazing for the research, due is a huge development of diverse knowledge that comes to students during playing games and now aiming to an academic population which allows to get or earn huge benefits from this implementation.

### **3.1.7 Effects of video games on the learning process**

Green & Bavelier (2003) says that the games have some cognitive benefits, such as better attention control and improved spatial reasoning, though it's not entirely clear how much these benefits extend outside of the real world of video games. It also helps improve your thinking skills or train surgeons on how to perform technically complicated operations.

In summary, as evidenced by the previous arguments, video games can have educational benefits and foster types of learning that are often overlooked in traditional school contexts. Furthermore, as time goes on, more research and even teaching methodologies are likely to emerge in which video games play a fundamental role.

### **The benefits of playing video games.**

Now, the impact of video games on society has been the subject of numerous studies. For example, in 2014, Andrew Przybylski, a psychologist at the Internet Institute at Oxford University, published a study in the journal *Paediatrics* establishing how long

children should be allowed to devote to video gaming. He concluded that those who played less than an hour were more emotionally stable, while those who played for around three hours a day developed social problems. Therefore, when it comes to video games, moderation is key, because as well as improving learning abilities, there are other benefits. Let's take a look at some of them:

- **They speed up response time**

“Researchers at Rochester University have found that they improve troubleshooting skills by posing problems that must be solved in a set time” (Przybylski, 2014).

- **They encourage teamwork**

“According to Californian organisation, the Institute for the Future (IFTF), multiplayer games boost teamwork in problem solving” (Przybylski, 2014).

- **They stimulate creativity, focus and visual memory**

“The University of California has found that they stimulate these aspects by setting goals that require concentration, imagination and remembering details to achieve them” (Przybylski, 2014).

- **They improve strategy and leadership**

“Video games put players in command, honing their abilities to resolve disputes, interact with other players and make decisions, found Pittsburgh University” (Przybylski, 2014).

- **They teach languages**

“Helsinki University found that they are useful for learning other languages through on-screen instructions, chats for communicating with other players or the narration of the story itself” (Przybylski, 2014).

- **Critical thinking**

“Monterrey Institute of Technology published an article underlining the underlying

ethical, philosophical and social basis of these games, and their ability to make players think and improve their critical thinking” (Przybylski, 2014).

Having in mind these benefits, it is perfect to affirm that videogames has proposed a huge opportunity for developing skills and learning languages of all kinds, something that is perfectly fittable into the research that has been done until this point.

### **3.2 Theoretical framework**

The integration of digital tools into education has been a growing area of research, with video games emerging as a promising pedagogical resource. Traditionally, video games were perceived solely as entertainment, yet recent studies highlight their educational potential, particularly in cognitive development, motivation, and skill acquisition (Gee, 2003; Prensky, 2001). In the context of language learning, video games create immersive, interactive environments where students actively engage with the target language, reinforcing their comprehension, vocabulary acquisition, and communicative competence (Peterson, 2010).

The purpose of this theoretical framework is to establish an academic foundation for the integration of video games as an educational strategy in language acquisition. This section will explore key learning theories, the principles of gamification, and empirical evidence supporting the effectiveness of video games in education.

#### **3.2.1 Video games, what are they?**

Video games are interactive digital systems designed for entertainment, training, or education. Frasca (2001) defines them as “any form of computer entertainment software, using any electronic platform and the participation of one or more players in a physical or networked environment” (p. 3) (par.1). Way more than just a form of virtual entertainment,

On the other hand, Aarseth (2007) highlights how video games consist of “non-ephemeral artistic content (stored words, sounds, and images), making them closely aligned with the Humanities and artistic expression” (p. 130) (par.1) which of course contributes once more to the good content that they might offer to people who plays them.

Now, given their interactive nature, video games require players to make decisions, solve problems, and engage with content in dynamic ways. This interactivity stimulates cognitive learning processes, making video games a valuable tool for language learning, problem-solving, and critical thinking (Gee, 2003).

### **3.2.2 Video games and language learning**

Language acquisition requires active engagement, exposure to authentic linguistic input, and opportunities for real-time interaction (Reinders & Wattana, 2015). Unlike traditional language instruction, which is often passive, video games provide an immersive environment where learners interact with the language in meaningful ways. Peterson (2010) notes that multiplayer online games allow learners to practice communication skills in social, low-anxiety environments, fostering both fluency and confidence.

Studies on game-based learning suggest that video games contribute to language development by:

- Enhancing vocabulary acquisition through contextual learning (Gee, 2003).
- Improving listening and reading comprehension via story-driven narratives.
- Encouraging oral communication in online multiplayer settings (Peterson, 2010).
- Increasing intrinsic motivation by providing a reward-based learning system (Hamari, Koivisto, & Sarsa, 2014).

These findings indicate that video games provide an authentic, engaging platform for

second-language acquisition, bridging the gap between formal education and real-world language use.

### **3.2.3 Constructivist learning theory**

The constructivist approach to learning emphasizes that knowledge is constructed through experience and interaction (Piaget, 1950). In video games, players actively engage in problem-solving, critical thinking, and decision-making, all of which support cognitive skill development.

Constructivist principles in video games include:

- Learning through interaction: Video games encourage active participation rather than passive memorization.
- Scaffolded challenges: Players progress through levels, similar to Vygotsky's Zone of Proximal Development (1978), where learning occurs just beyond their current skill level.
- Real-world application: Many language-learning games simulate real-life conversations and scenarios, making language use contextual and relevant.

### **3.2.4 Experiential learning theory**

Kolb's Experiential Learning Theory (1984) posits that effective learning occurs through a cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. Video games naturally align with this model:

1. Concrete Experience – Players engage in immersive game worlds.
2. Reflective Observation – They analyze their successes and mistakes.
3. Abstract Conceptualization – They learn patterns, strategies, and language structures.

4. Active Experimentation – They apply their knowledge in new situations, reinforcing learning.

Experiential learning through video games allows students to experiment with language in low-risk environments, enhancing both comprehension and production skills (Gee, 2003).

### **3.2.5 Motivation and self-determination theory**

To begin, motivation plays a crucial role in learning. Deci and Ryan's Self-Determination Theory (1985) emphasizes three key components that foster intrinsic motivation:

Firstly, the autonomy by players making decisions within the game, taking control of their learning process. Then, competence, with games providing instant feedback, allowing learners to see their progress and build confidence. Lastly, relatedness in multiplayer games, by promoting social interaction, which reinforces language learning through authentic communication (p. 45) (par.1).

Buitrago (2023) argues that modern education in Colombia must go beyond traditional academic content to develop key competencies such as digital literacy and an entrepreneurial mindset. He found that while many university students are familiar with basic digital tools, their ability to use technology creatively and independently is still limited . These findings highlight the urgent need for educational strategies that encourage initiative, innovation, and meaningful engagement with technology. This study uses of gamification and video games to improve English learning responds directly to this need. Video games are not only effective for language acquisition, they also promote critical thinking, motivation, and technological skills. When students interact with immersive game environments, they are

actively developing many of the competencies described by Buitrago (2023), including digital fluency, self-directed learning, and problem-solving abilities. Therefore, incorporating gamified tools in the language classroom aligns with Buitrago's call for a more dynamic and future-oriented education that prepares students to face the digital and entrepreneurial challenges of today's society.

Also, these psychological factors make video games highly engaging in learning environments, reducing anxiety and encouraging sustained practice, both of which are essential for language acquisition.

### **3.2.6 Key gamification elements**

Here, gamification applies game mechanics to non-game contexts, such as education, to enhance engagement and motivation. (Deterding et al., 2011) describe gamification as the use of points, levels, leaderboards, challenges, and rewards to improve user experience and motivation. In language learning, effective gamification strategies include:

1. **Narrative-Based Learning** – Games with strong storylines provide contextualized language exposure, helping learners acquire new vocabulary naturally (Gee, 2003).
2. **Progression and Rewards** – Badges, experience points, and level-ups reinforce motivation and encourage consistent practice (Hamari et al., 2014)
3. **Social Interaction and Collaboration** – Multiplayer games allow for peer-to-peer communication, aligning with Vygotsky's (1978) Social Learning Theory

Prieto (2022) examined the digital competence of university professors, revealing that many teachers struggle with effectively integrating technology into their teaching practices due to limited training, low confidence, and inconsistent use of digital tools. This gap in digital readiness reflects a broader issue within the Colombian educational system, where

innovation is often slowed by a lack of structured support for technology use. This research responds to this challenge from a student-centered perspective, showing that when digital tools like video games are applied with pedagogical intention, they can enhance second language acquisition while also fostering students' comfort and skills in digital environments.

This project demonstrates how gamification not only supports language learning goals—such as improving motivation, vocabulary, and pronunciation—but also contributes to building a digitally competent generation of learners.

### **3.2.7 The effectiveness of game-based learning**

Now, empirical studies support the effectiveness of gamification in education. Reinders & Wattana (2015) found that students using game-based learning environments exhibited greater willingness to communicate in a second language. Similarly, Connolly, Boyle, MacArthur, Hainey, & Boyle (2012) conducted a meta-analysis demonstrating that game-based learning enhances engagement, motivation, and retention across disciplines.

To conclude here, this study is rooted in constructivist, experiential, and motivational learning theories, demonstrating that video games can be powerful tools for language acquisition. The combination of interactive environments, gamification strategies, and intrinsic motivation provides a compelling case for integrating video games into modern language education. This research will contribute to the academic discourse on game-based learning, offering empirical evidence on the effectiveness of gamification in language acquisition.

### **3.3 Legal framework**

The study of video games from a legal perspective requires an analysis of their classification within the framework of copyright law and their treatment in various

jurisdictions. Internationally, video games have been recognized as works protected by copyright, combining audiovisual, narrative, and software elements. This recognition entails the application of regulations regarding reproduction, distribution, transformation, and authorized use.

### **3.3.1 General considerations on the legal classification of video games**

Video games are complex products that integrate multiple creative expressions, such as graphics, music, source code, and interactive narrative. The World Intellectual Property Organization (WIPO) and various national laws have recognized them as works protected by copyright. However, their classification varies depending on the emphasis placed on their components.

### **3.3.2 International treatment**

Various jurisdictions have addressed the legal nature of video games in different ways:

United States: US jurisprudence has considered them to be audiovisual works protected under the Digital Millennium Copyright Act (DMCA), in addition to being subject to software legislation.

European Union: The Court of Justice of the European Union has ruled that video games should be considered complex works that cannot be reduced to a simple category of software. Also, in other countries: In nations such as Japan and Canada, they are recognized as hybrid products with protection under both software and audiovisual content regulations.

### **3.3.3 Legal framework in Colombia**

In the Colombian context, intellectual property legislation protects video games as works of the spirit within the framework of Law 23 of 1982 and Andean Decision 351 of

1993. These regulatory frameworks establish the economic and moral rights of creators, regulating the use and exploitation of video games within the country.

The use of video games in educational settings in Colombia is indirectly supported by various regulations that govern access to information technologies and pedagogical innovation. Law 1341 of 2009, modified by Law 1978 of 2019, promotes the access, use, and appropriation of Information and Communication Technologies (ICT) as tools to improve the quality of education, recognizing their role in the social and economic development of the country (Congreso de Colombia, 2019). In this same vein, Decree 1075 of 2015, known as the Single Regulatory Decree of the Education Sector, establishes that educational institutions must promote the use of digital media to support teaching and learning processes, thus allowing the inclusion of resources such as video games in school environments.

Additionally, the General Education Law (Law 115 of 1994) stipulates that the educational system must promote the creative use of new technologies to strengthen communicative competencies in foreign languages, which supports the focus of this study regarding the implementation of video games as a didactic tool for second language acquisition. These regulations provide a legal framework that legitimizes pedagogical innovation through digital media, opening up the possibility of incorporating gamification strategies in the classroom in a formal and structured manner.

#### **3.3.4. Intellectual property regulation**

To continue, the Law 23 of 1982; defines copyright in Colombia and establishes that creative works, including digital works, are protected against unauthorized reproduction. Which means that anybody could be given rights over others' jobs. Also, Andean Decision 351 of 1993; is part of the Andean Community regime, which provides guidelines on the protection of works and related rights in member states.

Lastly, Law 1450 of 2011. Introduces provisions on software and digital rights, impacting on the way video games are marketed and protected. This caused video games to get taken seriously, not only as intellectual property but also as part of a large market in the Colombian territory.

### **3.3.5 Challenges in video game classification in Colombia**

Despite the existence of these regulations, the classification of video games in Colombia continues to present challenges, such as the difficulties in legal categorization. It means that there are no specific regulations that distinguish them from audiovisual works, software, or interactive products.

Additionally, the lack of specific regulations for licensing and digital distribution Colombian legislation is still being updated to address digital business models, such as video game streaming. Without mentioning the insufficient protection for national developers: While regulations protect copyright, the legal ecosystem is not designed to foster the local video game development industry.

### **3.3.6 Conclusion on legal framework**

Now, to wrap up this section, the connection to the research is that with this legal analysis is essential to understanding how video games are regulated in Colombia and how this affects their commercialization, copyright protection, and local development. By evaluating the legal classification of video games, opportunities can be identified to improve the regulatory framework, providing greater legal certainty to creators and companies in the sector.

## **Chapter 4: Methodological design**

### **4.1 Type of investigation**

This study follows a qualitative research approach, which aims to provide an in-depth understanding of the phenomenon under study (Streubert Speziale & Carpenter, 2003). A qualitative approach is appropriate because it allows for a comprehensive exploration of the feasibility of integrating video games into educational environments. This research seeks to demonstrate how modern education can incorporate technological tools, such as video games, to enhance students' learning experiences, particularly in language acquisition.

### **4.2 Method of investigation**

The research employs an ethnographic approach, which involves direct observation and participation to explore behaviors, interactions, and perceptions within a natural educational setting (Hammersley & Atkinson, 2007). Ethnography is particularly suitable for this study because it enables a rich, detailed understanding of how students experience the integration of video games into language learning. Unlike other qualitative methods, ethnography emphasizes immersion in the environment, allowing the researcher to interpret participants' actions and meanings from their own perspectives (Fetterman, 2010).

Through this method, the study investigates the impact of video games on language learning by observing students in a classroom setting, analyzing their reactions to video game-based lessons, and interpreting their progress in vocabulary acquisition and pronunciation skills. While this approach provides rich qualitative insights, it is acknowledged that certain limitations exist, such as the lack of statistical verification and generalizability beyond the studied population.

Moreover, time constraints may hinder the depth of observation typically expected in

classical ethnographic studies. Prolonged engagement is crucial to identify patterns and gain trust within the group; however, in educational research with defined academic calendars, extended immersion may not be fully achievable.

In the context of education, ethnographic methods are valuable for capturing the complexity of classroom dynamics and the nuanced ways in which students engage with new technologies (Mills & Morton, 2013). By observing students' reactions, language use, and interactions during the implementation of video game-based lessons, the research seeks to generate insights into both cognitive and affective aspects of learning. This approach aligns with the objective of understanding not just the outcomes of using video games, but also the processes and experiences that shape language acquisition.

Furthermore, the ethnographic approach allows for the collection of rich, contextualized data that can inform future educational practices. Through prolonged engagement and reflective observation, the researcher can identify patterns of behavior, motivational factors, and potential challenges in the use of video games as educational tools (Emerson et al., 2011). Thus, ethnography provides a comprehensive framework to analyze the impact of video games on students' motivation, engagement, and linguistic development in a real-world educational environment.

### **4.3 Stages of investigation**

The study follows a purposive sampling method, selecting participants who meet specific criteria to ensure the relevance of the research findings. The sample consists of:

- High school students in cycles 3 and 4 at a private school (target population).
- Students with basic or intermediate English proficiency to assess language acquisition improvement.

- Students who have some level of familiarity with video games, ensuring that the focus remains on educational rather than technical gaming skills.

Additionally, teachers and educational professionals are included to provide expert insights on the feasibility and challenges of implementing video games in formal education. Now then, the research follows a structured process consisting of three main phases:

### 1. Preliminary phase: data collection y preparation

- **Surveys:** Conducted to assess students' prior exposure to video games and their perceptions of using them for learning.
- **Selection of video game:** A qualitative analysis is conducted to choose an appropriate game (*Amnesia: The Dark Descent*), considering factors like vocabulary exposure, interactive storytelling, and engagement.
- **The validation of the data collection instruments:** namely the survey, participant observation, and interview, were carried out as follows: first, the instruments were designed; then, they were sent to three language professionals for feedback. Based on their suggestions, the necessary adjustments were made to the instruments.

### 2. Implementation phase: Classroom experiment

- **Pilot teaching session:** Students engage with the selected game during a structured lesson focused on vocabulary acquisition and pronunciation.
- **Observation:** Researchers take field notes on students' interactions, engagement levels, and learning progress.
- **Teacher-student interaction analysis:** Evaluates the effectiveness of teacher guidance in integrating gaming elements into the learning process.

### 3. Analysis and interpretation phase

- **Qualitative data analysis:** Thematic analysis is used to identify recurring patterns in student engagement, motivation, and learning outcomes.
- **Interviews with Participants:** Conducted to gain deeper insights into students' experiences and perceptions of video game-based learning.
- **Final Assessment:** Findings are compared to traditional teaching methods to evaluate the effectiveness of video games in language acquisition.

### Data analysis approach

The study employs qualitative content analysis, focusing on three key areas:

1. **Student engagement and motivation:** Examining how video games impact students' willingness to participate in learning activities.
2. **Language acquisition:** Assessing improvements in vocabulary retention and pronunciation through students' verbal and written responses.
3. **Pedagogical feasibility:** Evaluating how easily video games can be integrated into formal classroom settings.

By following this structured methodology, the study aims to provide a comprehensive understanding of the educational value of video games and contribute to the development of gamification strategies for language learning.

### 4.4 Population sample

In this section it will be noted the context in which the primary implementation of video games in an educational context will be raised, to understand has been made based on the SWOT matrix Chapman (2020) "is a useful tool for understanding and making decisions in all kinds of situations" (p. 1) (par.1) which allows the analysis of variables in a

specific context for the application of a product, research and other areas that require contextual research.

Now, a graphic will be introduced, which represents the context of the school, and it will be noticeable in each local place, store, common centre of meeting, parks and more.

### Image 1.

#### *Context of the school*



Source: own elaboration

Considering the above, SWOT is the acronym for Weaknesses, Opportunities, Strengths and Threats, in this case, the green coloured icons are the strengths, the blue coloured icons are the opportunities, the yellow danger symbol are the threats and the black coloured X's are the weaknesses. The following are essential characteristics of the analysis.

#### 4.4.1 Strengths

So, in this section, some of the specific places which allow a proper stage for the proposal will be explored. First, In the school, 48-to-52-inch plasma TV's can be found in

all classrooms allowing easy and timely access for teachers to expose their classes and embrace new assessment strategies for students.

Now, the school has two floors, allowing a more than appropriate distribution for the students and avoiding an excessive agglomeration of students in a single classroom.

Continuing, the school has a laboratory and its respective clothing for the satisfactory development of practical or experimental activities required in subjects such as physics or chemistry.

The school has its own auditorium, which allows meetings, conferences and other activities that require multimedia so that students can enjoy more academic diversity and the opportunity to carry out exhibition projects for a specific audience.

The school has two playgrounds, one located on the second floor and the other located on the top floor of the facilities, which allows students to recreate cycles without generating a large occupation and thus students have more space to enjoy.

The school has offices for their respective high positions (coordinators, vice rector, Rector, counselor, chaplain) this allows a great order at the time of directions and privacy for the treatment of situations that require the attention of a certain position.

The school has its own restaurant, thus allowing teachers and students who must stay after school or who are at home during the school day without having eaten at home, not to have to leave the facilities and to be safer while having their meals.

The school has its own convenience store, this allows students who do not have their work material or teacher who require copies or something specific to be easily obtained, this reduces the probability of leaving the facilities making everything more practical.

The school's teachers are professionals and to be teaching in the institution they

must have at least 1 year of teaching experience. They are usually graduates of recognized universities such as the pedagogical, national, district, EAN, Santo Thomas and others.

The school has a camera security system both inside and outside the institution, which has been useful when wrongful situations or thefts occur both inside and outside the institution.

The school has 5 committees, yellow, red, green, blue and white, each one is responsible for academic, artistic, spiritual, environmental, ethical and sports areas, students decide which one to belong to during the school year, this allows recreation and development of interests of students making it more dynamic student stay during the school year.

#### **4.4.2 Weakness:**

The majority of classrooms in the school are in gray construction and sometimes this can be uncomfortable for the environment or even dangerous as it can make it easier for students to get hurt easily with the cement or brick prominent from the walls and so on.

Although the school is large, it did not have a library when it had one year ago. The removal of the library is a disadvantage because it could be a tool to increase voluntary reading by students, or it could simply be a perfect environment for those who wish to stay and study on their own.

The school does not have timely evacuation exits since the only exits are on the primary floor, which in case of needing to evacuate the students and other student body would be crowded and could worsen the situation

Despite the fact that teachers are experts, in the middle of the year many leave due to the school's delay in salary payments. This is also related to the parents' failure to pay their children's pension.

Sometimes, the school has so many extracurricular activities that for their proper

development they take hours of classes during the school day, causing students to lose training time during their academic process.

#### **4.4.3 Opportunities:**

The Parques del Sol and Anda Lucia (Calle 21a and Calle 20) are opportunities for school recreation, development of recreational activities or presentations by the school, it is a space that allows the development of recreational and pedagogical activities for students near the school facilities and also Droguerías Fer Drogas located on Carrera 3 and Droguería El Sol located on Calle 22 are opportunities for the medical staff or any student who requires medication or cure to get it on time.

MCI, located on the south highway, is a nearby opportunity for the institution to be used as an auditorium for the development of the school's spiritual activities when the school's own church is occupied or under repair and also for it to be used as a huge opportunity to show gameplay in the school.

The Santander convenience store located on Carrera 3 is a good opportunity and a more complete alternative where students can acquire more academic and necessary material for the development of a class or even for the colour printing of files, something that the same stationery store of the high school does not have.

#### **4.4.4 Threats:**

Although the Parque del Sol is an environment where students recreate and have their recreational activities, it is also a place where drugs are sold and where some criminal gangs come to watch the students and see what they can steal from them.

Along Carrera 3 and 4, there are more assaults on students and teachers, as they are unsafe areas where children and teachers frequently go to church and to the Parque del Sol, this may affect the implementation due to the high requirement of electronic devices.

#### 4.5 Data collection instruments

Before to explain which instruments of data collection were used during the making of the project, is relevant to say what they are, based on U.S. Department of Health and Human Services (2023), Data-collection instruments” means tests, questionnaires, inventories, interview schedules or guides, rating scales, and survey plans or any other forms which are used to collect information on substantially identical items from 10 or more respondents. something that allows researchers to gain information that may be important or deciding during their project making.

Moving on, in order for the good building of the research, only 2 instruments were used to get the information in the best way and only the necessary part of it for each objective that was explained at the beginning of the document.

The first one, was a survey, with only 3 questions, Scheuren, F. (2004) “Today the word “survey” is used most often to describe a method of gathering information from a sample of individuals.” (p. 9) which allowed researchers to gather information regarding the amount of people that wanted video games in their classes, something really useful because the whole research wants to make visible why these entertainment engagements can be used during the acquisition of a language, such as English.

Secondly, strengths, weaknesses, opportunities and threats (SWOT) is used to analyse the context in which the project is developed, due to the nature of “Ethnography Research”. First things first, Von Kodolitsch & others (2015) “SWOT analysis regards as “internal capabilities” all those factors that a strategic planner contributes himself to reaching a goal.” (p. 98 - 107) (par.1) which allowed the scanning of the whole context in search of the best points on which this can be applied.

Continuing, Interviews are set to take place after the observation in which the

researchers will be able to check the opportunities in the application of the proposal and how the individuals had taken it.

| As a last part, one more tool for data collection was a test of the proposal of this document, something that was used during a class of B1 students, taking into consideration the ages and levels of them, some video footage was used as a resource for teaching transport vocabulary.

Concluding, expectations are high regarding the manner in which the students will be analysed and how the results will be put out of the box. It will be interesting to see how everything came out and specifically how appropriate the instruments were for the development of the main idea of the project

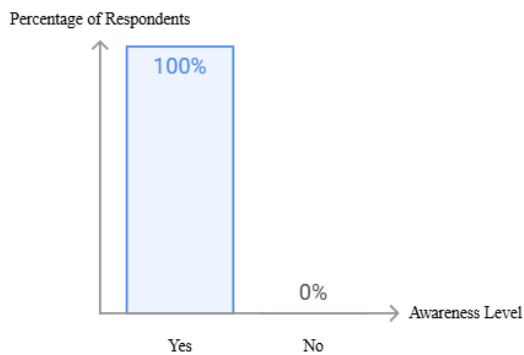
## Chapter 5: Results

### 5.1 Analysis of Results and Methods

Here it will be shown the results of the questionnaire and later on it will be reviewed to determine if it was worth it.

#### Figure 1.

*Do you know what a videogame is?*

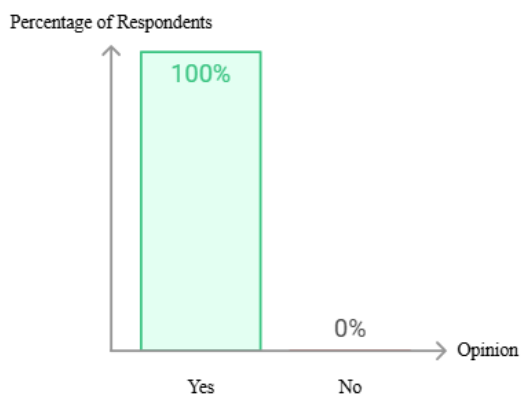


Source: own elaboration

It was shown that the totality of participants knew or at least conceive what a videogame is, allowing researchers to get a better understanding in which the background knowledge is in there.

#### Figure 2.

*From your perspective, videogames are good for teaching a language or any other topic?*

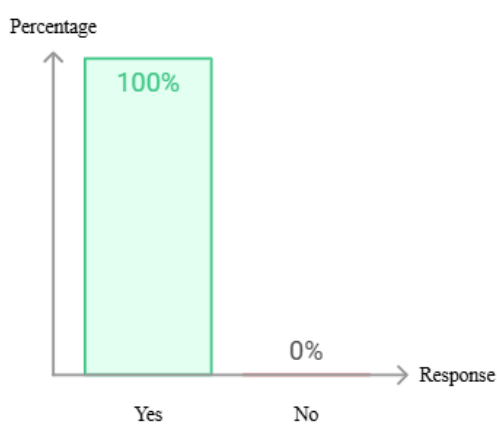


Source: own elaboration

In this question it was seen that the participants were pretty in common agreement that video games are a good strategy or tool in which teaching can be integrated and be used during teaching lessons of languages or even for topics that are not related directly to language learning.

**Figure 3.**

*Will you be willing to be taught with videogames in your daily classes?*



Source: own elaboration

In this last question proposed in the questionnaire, participants show an alignment regarding the willingness of being taught with video games, something pertinent for the project per se, since its a breakpoint, without the enough interest of students and participants this would not be a reliable option to research.

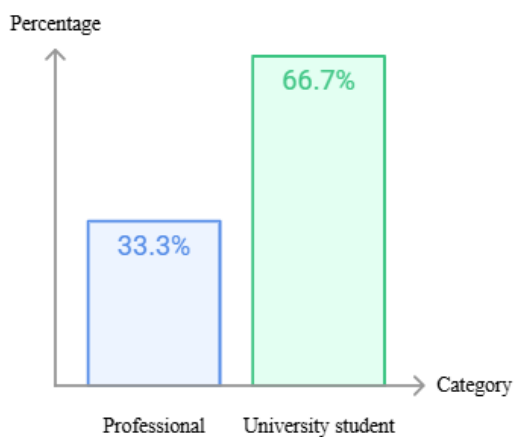
Concluding, there was an interesting result, since each question was responded with positive thinking regarding background knowledge of videogames and them into the educational field. Something that allows the researchers to keep improving and adding more probing questions to see if they fit in with the context of education.

Moving forward, here will be attached the questions proposed and designed in the survey, which was applied after the pilot of the project. It goes in order from the 1st to the

8th.

**Figure 4.**

*Grade*

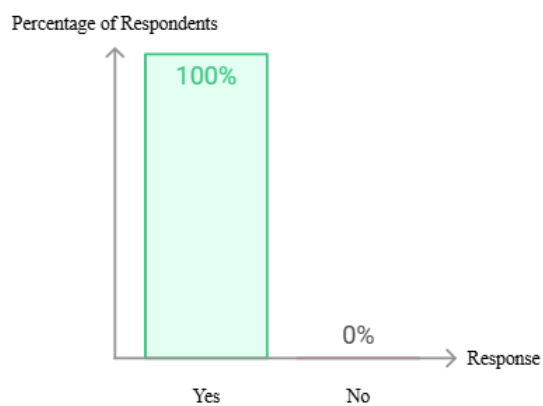


Source: own elaboration

Here, there is a difference between the charges or roles of the participants, being a professional and two of them students of university level. Not a decisive point, yet since there might be a difference of ages, likewise there might be a difference of perspective, at least quite notorious.

**Figure 5.**

*Did you recognize the use of videogames during the lesson?*

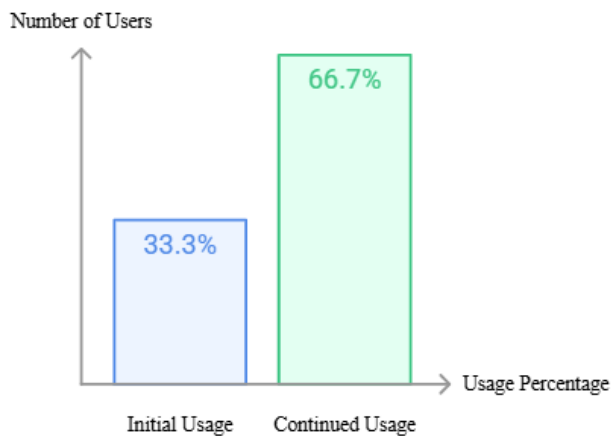


Source: own elaboration

Now, it can be marked that participants really did note the usage of video games during the teaching lesson. There is not much to say here, since it is a question to prove if the recognized through the class.

### Figure 6.

*If the answer was affirmative, write which game was used*

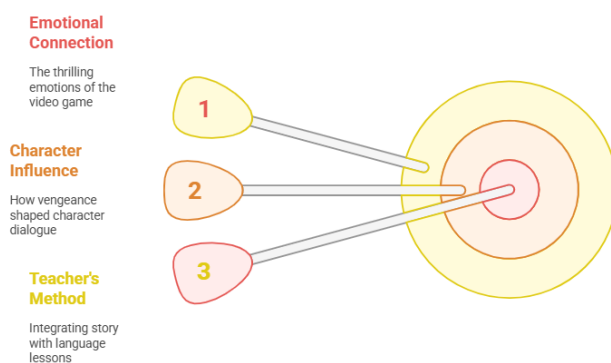


Source: own elaboration

Continuing, here there is an opportunity for participants to show if they really were paying enough attention to the lesson itself, and the video game used is a relevant matter, since it is the base for the entire class.

### Figure 7.

*Which was the best moment during the class?*



Source: own elaboration

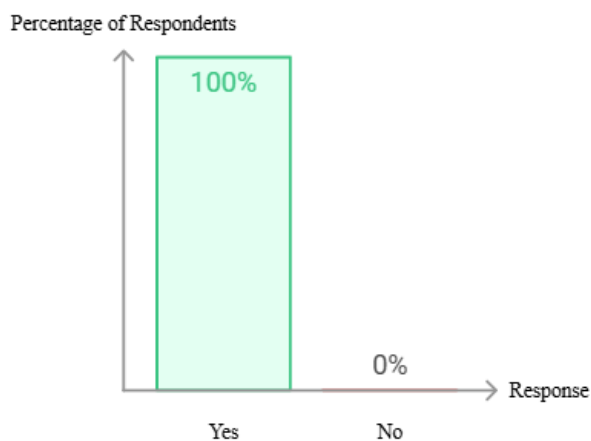
Which was the best moment during the class?

- Character influence: How the character was really into vengeance and how that influenced they say he spek
- Emotional connection: The ending of the video games was thrilling and full of emotions, and that was reflected into the way Daniel spoke to himself.
- Teacher´s method: I think about how the teacher handled the topic, relating certain stages of the story to grammatical and vocabulary aspects of language use.

Moving on, in this question can be seen interesting data, is an interpretation of the story of the game in short words. Something compelling is that each participant remarked on a part that highlighted the video game and its characters, or the lesson. A thing that is a point to have a relook in.

**Figure 8.**

*Were you able to understand the topic easier than in a normal lesson? If the answer is negative, explain why.*

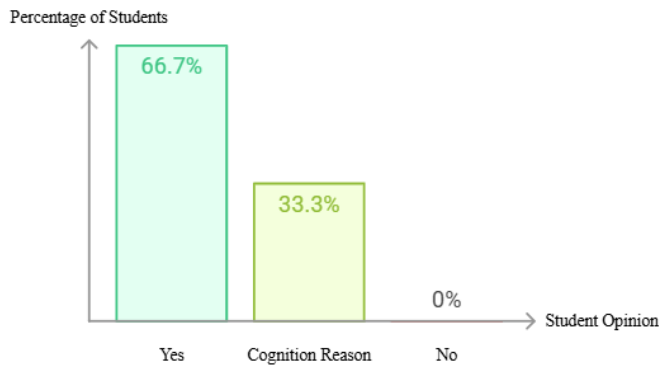


Source: own elaboration

As well as, participants agreed in a common understanding of the topic during the lesson, which is not mentioned, but it was regarding vocabulary and the pronunciation of it in the britain accent.

**Figure 9.**

*From what you saw during the lesson, do you agree that videogames are appropriate for learning English or any other language? If yes, why?*

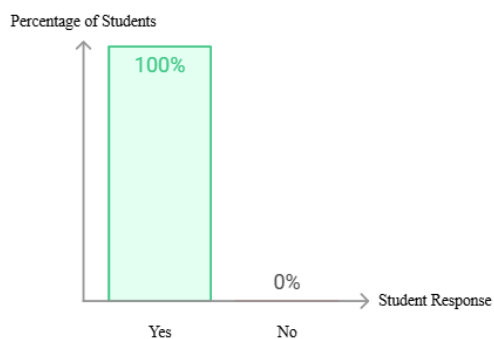


Source: own elaboration

Well, probably an amazing thing to see, is how participants said that video games can be an appropriate tool for the learning of a language such as English, because it gets to a line in which the project can keep growing up and be another point of start for others who might want to research for these topics or methods.

**Figure 10.**

*Are you looking forward to be taught again with videogames in the classroom?*



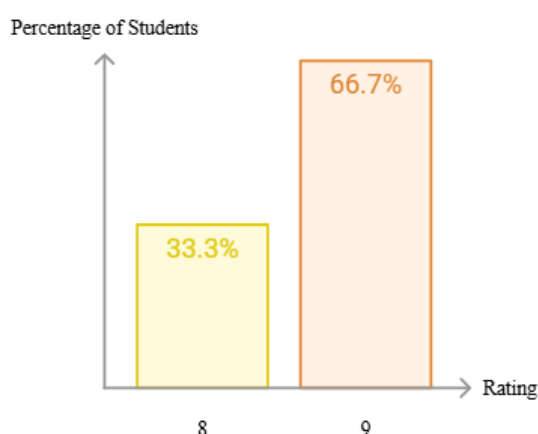
Source: own elaboration

Furthermore, it is pretty unique that these participants want to be taught again with

the same methodology of video games in a class, but the project wants to aim; to see that these media of interactive entertainment could be managed in classrooms and that a bad perception that stills around society could be left aside

**Figure 11.**

*From 1 to 10, how would you rate the lesson of English, 1 being absolutely awful and 10 amazing?*



Source: own elaboration

Lastly, it is stated with these results that participants enjoyed the class almost totally, yet it is a good start to be the first time, it will be a stage where there will be more opportunities to explore moreover this topic

Concluding, here has been seen, the answer provided by participants who experienced this project. Mainly, all of the feedback was positive and allowed a better understanding of the application and how it can still be better. Yet, one of the questions in which it was seen as inequity, was the first one, regarding the grade in which there was a person who is a professional and 2 others who are studying at the university; so, it can be suppressed. Since it is relevant to prove the application with students, not with professionals, since it is just in the classroom for the moment.

Lastly, the observation form used during the application will be shared with the

participants and filled out.

### **Development of the class:**

Everything was pretty solid and understandable for the 3 people who participated, since everyone was busy to certain hours, it was decided to teach everything one by one, at first, two of the participants were a bit confused when playing the game, yet, through the gameplay and with trial and error, they were able to master the mechanics of the game and to start down and immersion into the story and the game per se.

There are many things to keep working on, such as the game and genre chosen, or how the management of the class would be if there were a large group of students.

### **Conclusions**

It seems promising that the way in which these participants were able to learn at least new vocabulary and pronunciation through playing a Walk Simulator as Amnesia: The Dark Descent, but, maybe due to the genre of the game, students were more focused on surviving in the game, instead of paying the attention required to grammar and syntax implicit in the game.

Opportunities in which the implementation can be better:

- Time management
- Video game genre
- Length of video game
- Interaction Teacher - Student.

This instrument will not be changed, yet a few more aspects can be added to evaluate when applying with larger groups, from the behaviour students might have or even their first impressions.

As a conclusion, this application was successfully done, yet during future applications, there will be some improvements or modifications in order to gather more

information regarding their perspectives and thoughts of these kinds of tools and methods.

## **5.2 Interpretation of results**

The results indicate that a considerable percentage of participants are open to the implementation of video games in their language learning process. This aligns with the proposal of gamification strategies incorporating video games for language acquisition. The findings provide a foundation for refining such strategies and ensuring their effectiveness.

Moving on, the study revealed that participants not only engaged with the video game but also demonstrated a level of comprehension regarding its narrative and vocabulary. This is fascinating and suggests that video games have key cognitive components, such as interactive storytelling, problem-solving, and contextualized language exposure. That facilitates learning. Further research can focus on identifying which specific elements contribute most effectively to language acquisition.

Continuing, the findings highlight both the enthusiasm of students and the challenges of using video games in an educational context. While students found the experience engaging and beneficial for vocabulary acquisition and pronunciation, some difficulties emerged, such as the complexity of the game mechanics and distractions from the core learning objectives. These insights underscore the need to carefully select game genres and ensure a balanced integration between entertainment and educational outcomes.

Coming to a closure, the data suggest that video game-based teaching strategies positively impact student motivation, as all participants expressed willingness to repeat the experience. This finding supports the notion that video games can enhance engagement in language learning. However, further assessments with larger groups and controlled variables are necessary to measure their long-term impact on language acquisition and academic performance.

Finally, the results reinforce the potential of video games as a language-learning tool but also highlight the need for further trials to refine the methodology. By systematically integrating video games into lesson plans and addressing challenges related to game selection and classroom management, educators can optimize this approach. This research serves as a steppingstone for future investigations and the development of structured gamification strategies in education.

## Chapter 6: Conclusions

This research has demonstrated that video games can be effectively used as a methodology for acquiring a language by providing immersive, interactive, and engaging experiences that facilitate language learning in meaningful contexts. The findings align with the research objectives, reinforcing the potential of gamification strategies in enhancing language acquisition among high school students.

The study supports the general objective by using video games to create an engaging environment that promotes language learning. Through gameplay, students interact with linguistic elements in real-time, improving their vocabulary, pronunciation, and overall comprehension skills. Additionally, video games present a shift in perception, transforming English from a perceived obligation into an opportunity to explore new cultures and knowledge.

In relation to the specific objectives, this research has:

1. Analyzed key cognitive components: Video games enhance cognitive learning skills such as problem-solving, decision-making, and contextual language understanding. The interactive nature of video games supports active learning, where students engage with new vocabulary and sentence structures in authentic situations.
2. Explained the advantages and challenges: The study has identified that while video games can significantly enhance motivation and learning engagement, their implementation must be carefully managed to avoid potential distractions or overuse. Furthermore, the stigma surrounding video games in education needs to be addressed to ensure their acceptance as a legitimate learning tool.
3. Assessed the effectiveness of video game-based strategies: The results indicate that students are willing to adopt video games as part of their learning process. The

research has shown positive learning outcomes, particularly in vocabulary acquisition and pronunciation. However, further studies are required to refine the methodology and optimize the integration of video games in classroom settings

Now, in answering the research question, *How can video games be used as a methodology for acquiring a language?* This research has confirmed that video games, when integrated in a control environment, they provide an innovative and effective approach to language learning. They foster engagement, enhance cognitive skills, and create meaningful learning experiences that align with modern educational needs. However, to maximize their benefits, educators must develop structured gamification strategies that balance entertainment with educational objectives.

Concluding, future research should explore different video game genres, classroom integration methods, and long-term effects on language acquisition. By continuing to investigate and refine video game-based learning, this study serves as a foundation for advancing the role of interactive digital media in education.

## Chapter 7: Prospective

One of the topics that will be able to originate from our research is virtual reality. However, what is virtual reality? According to (Kinza Yasar & Sheldon, 2024) “Virtual reality is a simulated 3D environment that enables users to explore and interact with a virtual surrounding in a way that approximates reality, as it is perceived through the users' senses. The environment is created with computer hardware and software, although users might also need to wear devices such as helmets or goggles to interact with the environment. The more deeply users can immerse themselves in a VR environment -- and block out their physical surroundings -- the more they are able to suspend their belief and accept it as real, even if it is fantastical in nature”.

In education, VR allows students to experience destinations from across the world without ever having to leave the classroom. Imagine students being able to explore the pyramids of Giza while sitting at their desks. This is what virtual reality education allows.

These are some Examples of Virtual Reality for Students of All Ages According to ClassVR (2022):

“Introducing a whole new concept in educational technology: a ‘standalone’ Virtual Reality headset complete with a unique student-friendly interface, gesture controls, embedded educational resources and simple-to-use teacher controls. ClassVR is a groundbreaking new technology designed to help raise engagement and increase knowledge retention for students of all ages.” (par.1).

### - **Preschool / Infant / Kindergarten**

Early education is all about learning through experience. Find out how youngest students can benefit from VR environments, used to enhance, impact and complement the real-world exploration and play that builds a solid foundation in the

pre-school years.

- **Primary School / Elementary School**

There's so much potential for bringing the curriculum to life using virtual and augmented reality experiences, from visiting far-flung corners of the world to holding the human heart in your hands.

- **Secondary School / Middle School**

Entering the next phase of education, students aged 11-14 can use virtual reality in education to build emotional intelligence, creative thinking and further develop a secure foundation of knowledge for a more engaging and effective learning condition than just textbooks and videos alone.as of learning.

- **Secondary School / High School**

Ensuring students are engaged, motivated and challenged throughout their school career is a key priority for teachers. See how virtual and augmented reality can impact students by unlocking potential, providing new ways to experience learning, and even opportunities to create their own media.

- **Higher or Further Education**

Universities and colleges have always been at the cutting edge of new technologies, driving development, impacting industries and creating the next generation of scientists, developers and entrepreneurs. Virtual and augmented reality technologies are at the frontier of development right now, and change is happening at a frenetic pace.

The integration of virtual reality (VR) into educational research represents a significant innovation, offering immersive and interactive learning environments that closely simulate real-world experiences (Radianti et al., 2020). Unlike traditional instructional methods, VR enables students to engage in experiential learning by navigating

and interacting within three-dimensional spaces, thereby enhancing cognitive engagement and retention (Freina & Ott, 2015). As such, proposing VR as a future line of research is not only innovative but also aligns with the evolving technological landscape of education.

Moreover, the relevance of VR lies in its potential to transform language learning experiences. Through VR, learners can immerse themselves in authentic linguistic environments, practicing real-time communication, cultural understanding, and contextualized language use (Chen & Hsu, 2020). This level of immersion fosters deeper engagement and reduces language anxiety, two critical factors for successful second language acquisition. Therefore, VR offers fertile ground for future studies seeking to explore more effective, motivating, and interactive methodologies for language teaching.

In this sense, incorporating VR into future research aligns with the current educational shift towards student-centered, technology-enhanced learning. As VR technology becomes increasingly accessible and sophisticated, it is crucial to investigate its pedagogical applications systematically. Future research can thus contribute valuable insights into optimizing VR-based interventions, ensuring their educational value, and addressing potential challenges such as accessibility, cognitive load, and technological barriers (Radianti et al., 2020).

## References

- Aarseth, E. (2007). “Investigación sobre juegos: aproximaciones metodológicas al análisis de juegos”. En: Artnodes, Vol 7, Barcelona, p. 4-14.
- Andean Community of Nations. (1993, December 17). *Decision 351: Common regime on copyright and related rights*. *Official Gazette of the Andean Community*, (145), December 21, 1999.
- Briseño, R. (2019) ¡Los videojuegos son dañinos para la salud!. La covanCHA. <https://lacovacha.mx/video-juegos/los-videojuegos-son-daninos-para-la-salud/>
- Buitrago, L. (2023). *Evaluación de las competencias digital y emprendedora en estudiantes de una universidad colombiana* [Doctoral dissertation, Nova Southeastern University]. NSUWorks. [https://nsuworks.nova.edu/fse\\_etd/485](https://nsuworks.nova.edu/fse_etd/485)
- Calvo, G., Camargo-Abello, M., & Pineda-Báez, C. (2008). ¿Investigación educativa o investigación pedagógica? El caso de la investigación en el Distrito Capital. *Magis. Revista Internacional de Investigación en Educación*, 1(1), 163-174.
- Center for Arbitration and Conciliation-Chamber of Commerce of Bogotá, Award of the Arbitration Court of AS Colombia LTDA c. Informática y Gestión S.A. of October 17, 2006.
- Chapman (2020) Analisis DOFA y PET. eduardo leyton.  
[https://d1wqtxts1xzle7.cloudfront.net/45320229/AnalisisFODAyPEST.pdf?1462300257=yre sponse-content-disposition=inline%3B+filename%3DAnalisis\\_DOFA\\_y\\_analisis\\_PEST.pdf](https://d1wqtxts1xzle7.cloudfront.net/45320229/AnalisisFODAyPEST.pdf?1462300257=yre sponse-content-disposition=inline%3B+filename%3DAnalisis_DOFA_y_analisis_PEST.pdf)
- Chen, C., & Hsu, S. (2020). Personalized intelligent mobile learning system for supporting effective English learning. *Educational Technology y Society*, 23(2), 16–30.

ClassVR, (2022): Virtual Reality in Education. <https://www.classvr.com/virtual-reality-in-education/>

Congreso de Colombia. (1994). *Ley 115 de 1994. Ley General de Educación*. Diario Oficial No. 41.214.

Congreso de Colombia. (2019). *Ley 1978 de 2019. Por la cual se moderniza el sector de Tecnologías de la Información y las Comunicaciones – TIC*. Diario Oficial No. 51.018.

Connolly, T. M., Boyle, E. A., MacArthur, E., Hainey, T., & Boyle, J. M. (2012). A systematic literature review of empirical evidence on computer games and serious games. *Computers y Education*, 59(2), 661–686.

De Freitas. S, Savill. S, Carol & Attewell (2006): *Educational games and simulations: Case Studies from Adult Learning Practice*. Londres: Learning and Skills Research Centre. p.11.

Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). *From game design elements to gamefulness: Defining "gamification"*. In *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments* (pp. 9-15). ACM.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing ethnographic fieldnotes* (2nd ed.). <https://doi.org/10.7208/chicago/9780226206868.001.0001>

Fetterman, D. M. (2010). *Ethnography: Step-by-step* (3rd ed.). Sage Publications.

Frasca, G. (2001). *Videogames of the Oppressed: Videogames as a Means for Critical Thinking and Debate*. Georgia: Institute of Technology

Freina, L., & Ott, M. (2015). A literature review on immersive virtual reality in education:

- State of the art and perspectives. *The International Scientific Conference eLearning and Software for Education, 1*, 133–141.
- Galindo, J. (2022). Colombia se posiciona en el mundo de los videojuegos.  
<https://www.lasalle.edu.co/es/noticias/colombia-se-posiciona-en-el-mundo-de-los-videojuegos>
- Galvis G, (2011). Using video game-based instruction in an EFL program: understanding the power of video games in education. *Colombian Applied Linguistics Journal*, 13(1), 54–70. <https://doi.org/10.14483/22487085.2931>
- Garcia, P. (2019). *The impact of video games on youth behavior: A critical analysis*. Madrid: Ediciones Educativas. P.45. <https://observatorio.tec.mx/edu-news/juegos-y-educacion>
- Gee, P. (2003): *What video games have to teach us about learning and literacy*, Nueva York, MacMillan
- Gómez, S. & Rodríguez, J.(2016). *Experiencias didácticas con videojuegos comerciales en las aulas españolas*. Didáctica, innovación y multimedia, 33, p.8.
- Green, C. S., & Bavelier, D. (2003). Action video game modifies visual selective attention. *Nature*, 423, 534-537. <https://www.nature.com/articles/nature01647>
- Gros. B. (2009). *Certezas e interrogantes acerca del uso de los videojuegos para el aprendizaje*. Universitat Oberta de Catalunya. p. 256 - 259.
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). *Does gamification work? A literature review of empirical studies on gamification*. In *Proceedings of the 47th Hawaii International Conference on System Sciences* (pp. 3025-3034). IEEE.
- Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in practice* (3rd ed.). Routledge.

James, R. F., & James, M. L. (2004). *Teaching career and technical skills in a “mini” business world*. Business Education Forum, 59(2), p. 39-41.

Kinza Yasar, & Sheldon, R. (2024). *What is virtual reality? How it's used and how it will evolve*. WhatIs; TechTarget. <https://www.techtarget.com/whatis/definition/virtual-reality>

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.

Liceo Cristiano Vida Nueva, (2019), Vision. Liceo Cristiano, Vida Nueva.  
<https://vidanueva.edu.co/nuestro-liceo/vision/>

Medina , I.A. (2019). The use of educational videogames, as a Pedagogical strategy to develop basic EFL reading skills in a group of 8th graders at Guillermo Cano Isaza School. (Bachelor's thesis, Universidad Pedagógica Nacional).  
<http://repository.pedagogica.edu.co/bitstream/handle/20.500.12209/11800/TE-23902.pdf?sequence=1&isAllowed=y>

Mills, D., & Morton, M. (2013). *Ethnography in education*. Sage Publications.

Ministerio de Educación Nacional. (2015). *Decreto 1075 de 2015. Decreto Único Reglamentario del Sector Educación*.

Newzoo. (2019). Global games market report. <https://newzoo.com/insights/articles/the-global-games-market-will-generate-152-1-billion-in-2019-as-the-u-s-overtakes-china-as-the-biggest-market>

Ortiz-Clavijo, L. F., & Cardona-Valencia, D. (2022). Tendencias y desafíos de los videojuegos como herramienta educativa. *Revista Colombiana de Educación*, (84), 1–17. <https://doi.org/10.17227/rce.num84-12761>

- Paul, J. G. (2003). *What video games have to teach us about learning and literacy*. Palgrave Macmillan.
- Peterson, M. (2010). Massively multiplayer online role-playing games as arenas for second language learning. *Computer Assisted Language Learning*, 23(5), 429–439.
- Piaget, J. (1950). *The psychology of intelligence*. London: Routledge y Kegan Paul.
- Prensky, M. (2001). *Digital game-based learning*. New York: McGraw-Hill.
- Prieto, C. (2022). Competencia digital de profesores universitarios: Evaluación de actitudes hacia la tecnología, conocimiento de las TIC y uso de tecnologías en una universidad privada de Colombia (Tesis doctoral, Nova Southeastern University). Nova Southeastern University Institutional Repository.  
[https://nsuworks.nova.edu/fse\\_etd/478/](https://nsuworks.nova.edu/fse_etd/478/)
- Przybylski, A. (2014). The benefits of videogames in learning. Why your children really should play videogames. <https://www.iberdrola.com/talent/benefits-video-games-learning>
- Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda. *Computers y Education*, 147, 103778.  
<https://doi.org/10.1016/j.compedu.2019.103778>
- Reinders, H., & Wattana, S. (2015). Affect and willingness to communicate in digital game-based learning. *ReCALL*, 27(1), 38–57.
- Restrepo Escobar, S. M., Arroyave Taborda, L. M., & Arboleda Sierra, W. (2019). El rendimiento escolar y el uso de videojuegos en estudiantes de básica secundaria del municipio de La Estrella-Antioquia. *Revista Educación*, 43(2), 1–19.

<https://doi.org/10.15517/revedu.v43i2.30564>

Sanchez, J. & Esnaola, G. (2014). *Los videojuegos en la educación*. Argentina. Aularia.

Volumen 1., p. 21

Scheuren, F. (2004). What is a Survey?. Alexandria: American Statistical Association. p. 9

Scholes, L & Jhonson, D (2015). Videogames: Dispelling myths and tabloid headlines that videogames are bad. United Kingdom. British Computer Society Learning and Development Ltd.

Shaffer, David W. et al. (2005): *Video Games and the Future of Learning*. University of Wisconsin-Madison, Working Paper, 2005. p, 7.

Streubert Speziale, HJ., & Carpenter, D. R. (2003). Qualitative research in nursing: Advancing the humanistic imperative (3rd ed.). New York: Eippincott, Williams, and Wilkins.

U.S. Department of Health and Human Services. (2023). 45 C.F.R. § 63.32 – Data collection instruments. Code of Federal Regulations.

<https://www.law.cornell.edu/cfr/text/45/63.32>

Von Kodolitsch, Y., Bernhardt, A. M., Robinson, P. N., Kölbel, T., Reichensperner, H.,

Debus, S., & Detter, C. (2015). Analysis of strengths, weaknesses, opportunities, and threats as a tool for translating evidence into individualised medical strategies (I-SWOT). *Aorta*, 3(03), 98-107.

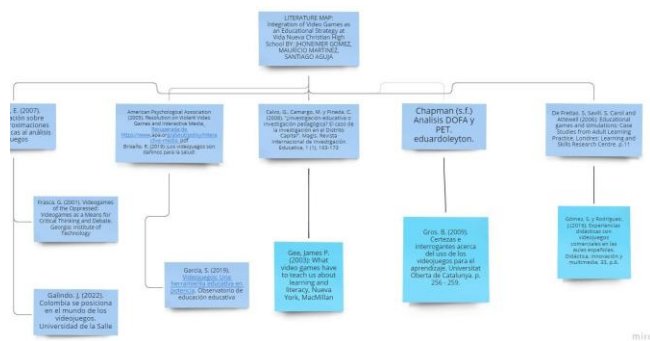
Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

## Annexes

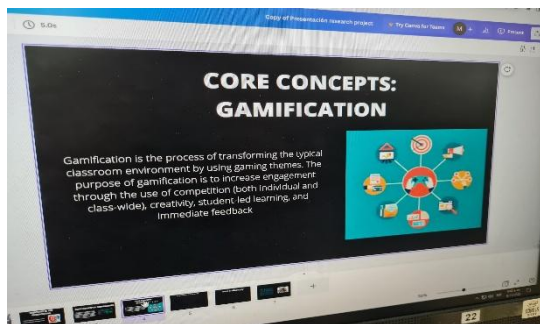
The project is focused on the students of cycle 2 that are students of 14 years old from 16 years old. Cycle 3 are the learners of secondary high school of ninth and eleventh grade.

### Pictures of survey

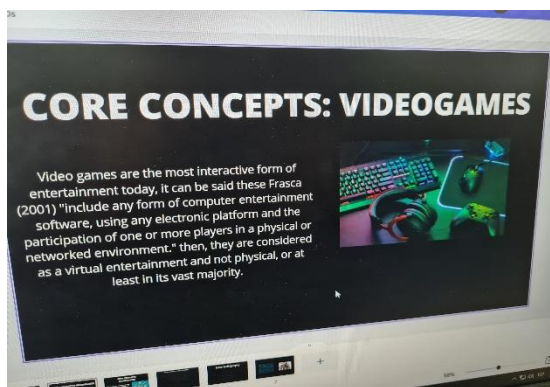
*Literature review done in class to identify the most important authors for video games taking into consideration the recent authors.*



### Core concepts: gamification



### Core concepts: video games.



### **Project's Timeline**

Continuing, the main idea of this project is to go through tons of filters in which it can be perfectionated and improved in each one of those, from now on the timelines proposed is until 2025, where until that point in time, changes and adjustments will be made for the researchers and outside people of the project can consider this one as a base for the future applications of it.

In conclusion, this project will still be improved to the point where it is effective and unimproved, not for the sake of the writers of it, but for the sake of education and students who will be taught through this project.

### **Intervention proposal**

The proposal of the project are the many possibilities that are offered by digital tools of video games and the intervention in learning disabilities, like the difficulties that the students have with a specific topic in the school. Most recent studies have found that these video game tools can have positive effects on diverse aspects of learning, such as the acquisition of reading, writing, vocabulary and mathematics, as well as improvement of executive functioning and behavioral control skills.

Despite the results showing the positive effects of using digital tools for students with learning disabilities, it remains necessary to widen their use in areas such as identification, assessment and intervention as early as possible. Within the current chapter, the application of the conceptual framework of multiple intelligences to the design of educational video games is proposed to facilitate diagnosis and improve intervention success in cases of learning disability. In this regard, a proposed novel tool is presented that may be used for the evaluation and intervention for students with learning disabilities.

## **Designed Instruments**

The instruments of the game refer to the different elements that contribute to the player's experience and learning process. These include game mechanics, which engage the learner by creating interactive and immersive sensations while playing.

Additionally, the genre of the game plays an important role by incorporating technical and artistic aspects, such as mapping designs, game art, and avatar creation, ensuring consistency with the game's world. The sound design also enhances immersion through special effects, background music, and character dubbing, making the experience more realistic.

To conclude, all these elements work together to create a rich and engaging environment, which can improve learning by increasing motivation, encouraging exploration, and reinforcing language acquisition in an interactive way.

## **Informed Consent and Approval**

### **Ethical approval**

Ethical approval is necessary for this project to ensure that all research follows ethical standards. It is important to include clear ethical statements to protect participants' rights and well-being.

Additionally, the study must explain to students the purpose of the research and how their participation will be used. This transparency ensures that they understand the study and can give informed consent.

Following the **Helsinki Declaration (1975, revised in 2013)**, the research must meet ethical guidelines for studies involving human participants. For example, a statement such as: "This study was approved by the Institutional Review Board of Baskent University and was conducted according to the principles of the Declaration of Helsinki." ensures compliance with ethical research practices.