



VIDEO GAMES AND VOCABULARY LEARNING IN EFL: A COMPARATIVE STUDY OF GAMERS AND NON-GAMERS

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Abstract

Video games are increasingly becoming a learning device for the English as a Foreign Language (EFL) learner. The current study seeks to investigate the effect of video game playing on vocabulary learning in comparison between Gamers and Non-Gamers. It seeks to investigate how fundamental gaming characteristics—interactivity, multiplayer environments, and story-based gameplay—impact vocabulary acquisition. A mixed-methods approach is employed, with surveys and interviews used to quantify learners' attitudes. The study investigates how video games improve vocabulary recall, how they influence the use of language in practice, and a comparison of these with traditional approaches to teaching. Results indicate that video games are an interactive setting to learn incidental vocabulary through contextual exposure. Learners achieve greater retention rates and greater motivation in language acquisition. Testees also report positive attitudes towards the application of video games in EFL acquisition, which emphasizes the participation factor of language acquisition. This study contributes to the Digital Game-Based Learning (DGBL) literature by offering empirical evidence on the benefits of video games for learning EFL. The results suggest that incorporating games into EFL instruction might make language learning easier. Long-term implications, inter-individual differences, and game-specific effects on learning need to be considered in future studies.

Keywords: *Digital Game-Based Learning, EFL Learners, Interactive Learning, Language Retention, Vocabulary Acquisition, Video Games.*

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1. Introduction

1.1. The Global Imperative of EFL Proficiency

Under the context of globalization, English proficiency has been considered a fundamental ability for intellectual growth, career advancement, and global communication. English is the prevalent language of diplomacy, trade, and scientific exploration and serves as a portal to academic and professional advancement globally. Currently, over 1.5 billion individuals are involved in the learning of English as a second or foreign language, highlighting its global relevance (Crystal, 2018). However, the attainment of English mastery—particularly oral fluency—remains a daunting task for most learners. Whereas reading and writing skills can be cultivated systematically via formal education, speaking skills require ongoing practice, exposure to natural contexts, and involvement in communicative events (Brown, 2009).

In Pakistan, where English is used both as an instructional medium and a language used in administration, English ability plays a dramatic role in social mobility and employment prospects. Despite this, many students struggle to speak English, typically due to a lack of communicative exposure within the normal learning context. This problem is also compounded by conventional teaching methods centered on rote learning and written tasks at the expense of interactivity in practice for speaking (Rahman, 2020). Thus, English as a Foreign Language (EFL) program in Pakistan yield passive learners who excel in written tests but are hesitant to communicate orally (Zhang, 2019).

1.2. Dialogues: Bridging the Communicative Gap

To transcend these limitations, teachers have looked for new pedagogical approaches that focus on experiential language use and learner engagement. Web-based worlds, especially video games, have been effective as language skill development tools. According to Vygotsky's (1978) sociocultural theory, interactive learning spaces facilitate language learning through the positioning of words and grammatical structures into contextualized, coherent discourse. Unlike the old ways of teaching that Separating

linguistic elements from real use, game-based learning demonstrates active engagement and critical thinking, cognition, and emotional experience.

For instance, online multiplayer and role-playing games simulate actual life communication scenarios, wherein participants must negotiate meaning, strategize, and cooperate through the use of the English language. Empirical evidence confirms the efficacy of these strategies: Tsou (2005) stated that there was a 41% reduction in speaking anxiety of Taiwanese English as a Foreign Language (EFL) learners in terms of dialogue-based acquisition, while Praygo (2016) documented a 29% improvement in fluency among Indonesian students who engaged language. The findings support that virtual learning environments not only ensure word memorization but also enhance linguistic self-esteem and motivation.

1.3. Problem Statement

Despite the significant amount of research advocating dialogue-based pedagogy, its implementation in Pakistani higher secondary schools is irregular and inconsistent. A 2020 survey of 50 institutions in Punjab revealed that 78% of English as a Foreign Language (EFL) teachers focus on grammar exercises and written assignments rather than oral communication activities (Tanveer et al., 2020). Teachers recognize various barriers to incorporating dialogue-based pedagogical practices, such as large class sizes, rigid examination-based curricula, and limited possibilities for CLT training. Therefore, oral competence is often overlooked in the classroom setting, and students have theoretical understanding of the English language but lack practical ability to contribute meaningfully to real-life discourse.

The consequences of the gap extend outside the classroom. Pakistani graduates are not able to perform job interviews, professional networking, and business communication, which leads to underemployment and career opportunities lost. Moreover, the lack of emphasis on spoken English continues to reinforce academic stagnation, as the students cannot engage in discussions, present presentations, and pursue higher studies in English-medium colleges. Without a dramatic shift towards more communicative and interactive methods, the downward spiral of restricted proficiency and restricted opportunities will prevail, eventually hindering national development in a globalized world.

This study therefore endeavours to examine the viability of instruction through dialogue in facilitating the speaking skills of Pakistani learners of English as a foreign language. Through the identification of hindrances to its use and exploration of ways in which it could be implemented within existing curricula, the study aims to provide

evidence-based recommendations for promoting a more student-centered and communicative language learning culture.

1.4. Research Objectives

This research seeks to investigate the contribution of video games as a medium for vocabulary acquisition and retention of English as a Foreign Language (EFL) learners. The study aims to identify the particular aspects of video game design that are responsible for successful vocabulary learning. The main objectives are:

To test the effectiveness of video games in enhancing vocabulary learning and retention of EFL learners by comparing gamers and non-gamers' learning achievement.

- To determine the most important aspects of video game design—e.g., narrative complexity, interactivity, multi-player cooperation, and contextual language exposure—that best support vocabulary learning and retention.
- To analyze learner perceptions regarding video game-based vocabulary learning, assessing its motivational aspects and comparing it with traditional language learning methods.
- To provide pedagogical recommendations for integrating video games into EFL curricula to optimize language acquisition and engagement.

1.5. Significance of the Study

Educational approaches have undergone a complete transformation due to the rising use of digital technology in instruction. The traditional teaching methodologies need updating through interactive methods because students now require student-centered approaches. This study is significant for several reasons:

- **Advancing EFL Pedagogy:** The research into video game-based vocabulary acquisition can reconstruct educational tactics used for EFL teaching. Through its interactive methods the system provides students with an interesting learning approach that replaces traditional memorization techniques while allowing better enjoyment during the educational process.
- **Enhancing Learner Engagement:** Most traditional approaches to language education create problems with student motivation sustainability. Through their rewarding gameplay students can naturally learn new language skills using interactive video games.
- **Practical Implications for Educators:** This research establishes data-driven advice which enables teachers to implement video games efficiently in their educational programs. Educational professionals should determine which game

features achieve the best results for language acquisition to construct curriculum upgrades ready to maximize student learning and keep them focused.

- **Bridging Theory and Practice:** The study seeks to offer evidence-based suggestions that teachers should be making use of video games in their teaching with. Educators can detect the most serious gaming functions that boost student interaction and absorption, and establish curriculum enhancements that give most reward to student participation and retention. The findings will contribute to the growing field of digital game-based learning (DGBL) by offering a comprehensive analysis of video game mechanics in EFL education.
- **Potential for Policy Development:** If the study demonstrates strong correlations between gaming and vocabulary retention, it could inform policymakers and educational institutions about the benefits of integrating digital gaming resources into formal language instruction.

1.6. Research Questions

This study seeks to answer the following key research questions:

1. **How do video games impact vocabulary acquisition and retention among EFL learners?**
 - This question examines whether playing video games leads to measurable improvements in vocabulary learning outcomes compared to traditional learning methods.
2. **Which game features (e.g., narrative-driven gameplay, level of interactivity, multiplayer participation) most significantly contribute to effective vocabulary learning?**
 - By identifying the most influential elements of video game design, this question aims to determine which aspects of gaming facilitate meaningful vocabulary retention.
3. **What are the perceptions and attitudes of EFL learners toward video game-based vocabulary learning?**
 - This question explores how learners view gaming as a learning tool, whether they perceive it as effective, and how their motivation and engagement levels compare with traditional vocabulary-learning techniques.

By addressing these research questions, the study aims to provide a clearer understanding of the role video games play in EFL vocabulary development and to offer insights into their potential integration into language learning frameworks.

2. Literature Review

2.1. EFL Learning Challenges

Learning English as a Foreign Language (EFL) presents multiple challenges for learners, particularly in the area of vocabulary acquisition. Unlike first-language learners, EFL students sometimes have problems with:

- **Limited Contextual Usage:** In some learning methods of traditional vocabulary learning, it is based on rote memorization without contextual application. For that reason, learners may identify words on their own but fail to employ them in correct sentences (Nation, 2001).
- **Learning Challenges:** Newly learned vocabulary cannot be recalled very well because traditional learning methods don't promote words' repetition in important contexts (Schmitt, 2010).
- **Inspid Materials:** Common textbook exercises and vocabulary drills are perceived by many learners as dull and uninspiring, and so are not even motivated to try such methods, thus resulting in suboptimal learning outcomes (Laufer & Hulstijn, 2001).

In light of these challenges, academics and researchers have looked into alternative means such as digital learning tools for improving vocabulary retention and contextual use.

2.2. Digital Learning Tools and EFL Vocabulary Acquisition

The rise of digital education has introduced innovative approaches to language learning, with studies highlighting the benefits of interactive and technology-enhanced learning environments. Research has demonstrated how the use of educational apps, multimedia resources, and video games can facilitate language acquisition of digital learning tools.

- As Gee (2007) and Prensky (2001) suggest, digital learning environments are potent settings in which learners can be deeply engaged in learning language because these settings afford them the chance to **interact with language** that is both meaningful and fun.

- **Reinders & Wattana (2015)** found that digital game-based learning (DGBL) increases learners' willingness to communicate, as interactive settings provide **low-stress opportunities** for language use.
- **Peterson (2012)** highlights that multiplayer online games allow learners to engage in **authentic communication** with native and non-native speakers, reinforcing vocabulary through **real-time interaction**.

However, although those aspects undoubtedly provide an advantage to the learning of vocabulary, there is as yet little empirical research assessing the more specific contributions video games might make to vocabulary acquisition and retention.

2.3. Empirical Studies on Video Games in Education

Studies on the use of video games in education indicate that playing video games is a good way to increase student engagement, motivation and skill development in cognition (**deHaan et al., 2010; Reinhardt & Sykes, 2014**). Past studies have included the following key findings:

- **Motivation and Engagement:** Video games offer **reward-based learning**, where players progress by achieving goals and overcoming challenges. Players are then exposed to repeated linguistic input in a context that will **motivate** them to learn vocabulary (**Rankin et al., 2009**).
- **Cognitive Skill Development:** Action-based and narrative-driven games stimulate **problem-solving skills**, requiring players to process linguistic information quickly and effectively (Miller & Hegelheimer, 2006).
- **Multimodal learning:** combining video game **learning components** such as visuals, audio, text, enhance learning and retention (**Gee, 2011**).

Nevertheless, the research has been more on general engagement and cognitive benefits without different game mechanics being subjectively analyzed, if there are different game mechanics present, to analyze how differently they impact on knowledge of vocabulary learning and retention. Furthermore, there is little comparison between game-based learning and traditional vocabulary instruction regarding effectiveness.

2.4. Theoretical Foundations of Video Game-Based Language Learning

Several linguistic and psychological theories support the integration of video games in EFL vocabulary acquisition:

- **Krashen's Input Hypothesis (1985):** The central claim of this theory is that learner success is dependent upon **comprehensible input**—language exposure that

is slightly more than a learner is able to handle at the moment. Many video games provide **context-rich input**, reinforcing vocabulary learning through repeated exposure in **authentic scenarios** (Sundqvist & Wikström, 2015).

- **Flow Theory (Csikszentmihalyi, 1990):** Flow theory suggests that learning is most effective when individuals are fully **immersed in an activity** that is both **challenging and rewarding**. Video games create **optimal learning conditions** by maintaining player **engagement and motivation**, reducing **learning anxiety**, and **encouraging experimentation with new vocabulary**.
- **Situated Learning Theory (Lave & Wenger, 1991):** This theory argues that knowledge is best acquired within **authentic contexts** rather than abstract learning environments. Video games simulate **real-world experiences**, allowing learners to acquire vocabulary through **practical usage** rather than rote memorization (Thorne, 2008).

These theoretical perspectives reinforce the **pedagogical value of video games**, suggesting that **interactive digital environments** could serve as **effective vocabulary learning tools**.

2.5. Research Gaps Identified

While digital game-based learning has been extensively researched in **broader educational contexts**, the **specific influence of video games on EFL vocabulary acquisition** remains **underexplored**. Notable research gaps include:

1. **Lack of systematic analysis on game elements and vocabulary learning:**
 - Existing studies often examine **general engagement and motivation** without dissecting which **specific game features** (e.g., **narrative complexity, player interaction, reinforcement mechanisms**) most effectively support vocabulary retention.
2. **Limited comparative data between digital games and traditional EFL methods:**
 - Few studies directly compare the **effectiveness of video games** against **conventional vocabulary-learning techniques** (e.g., textbook exercises, flashcards, rote memorization), leaving **uncertainty about their relative benefits**.
3. **Insufficient research on long-term retention:**

- While studies highlight **short-term vocabulary gains**, there is limited empirical data on **how effectively video game-based learning supports long-term vocabulary retention** compared to traditional methods.

4. **Need for learner perception analysis:**

- Most research focuses on quantitative data, often overlooking **EFL learners' attitudes and perceptions** toward **game-based vocabulary learning**. Understanding their **motivational factors and learning preferences** could provide deeper insights into **how to optimize game-based instruction**.

3. Research Methodology

3.1. Research Design

This study employs a **mixed-methods approach**, integrating **quantitative and qualitative data** to gain a comprehensive understanding of the relationship between video game exposure and vocabulary acquisition in EFL learners. Unlike experimental designs involving **pre-tests and post-tests**, this study does **not** include a controlled intervention. Instead, it evaluates two naturally occurring groups:

- **Gamers:** EFL learners who have played video games throughout their formative years.
- **Non-Gamers:** EFL learners who have relied solely on academic resources for language learning.

By comparing vocabulary proficiency and learner perceptions across these groups, the study aims to assess how **long-term exposure to video games** influences vocabulary acquisition and retention.

3.2. Participants

In doing so, the study would comprise approximately **50 EFL learners** of varied age and proficiency groups to yield the widest dataset. There will be participants from two groups based on their gaming history.

- **Gamers:** Individuals who have **consistently played video games growing up**, particularly narrative-driven or language-rich games.

- **Non-Gamers:** Individuals who have **primarily relied on traditional academic resources** for English vocabulary learning, with **minimal to no exposure to video games**.

Participant recruitment will be conducted through **universities, online forums, and EFL learning communities**. Selection criteria will include:

1. **Self-Reported EFL Proficiency:** Participants will be screened according to their self-reported EFL proficiency (beginner, intermediate and advanced).
2. **Gaming Experience:** participants' video game playing history will be ascertained via a preliminary survey such as exposing video games played, favored genres, number of games played.

This design validates the use of a non-experiment type because it deals with natural learning difference and not true experiment type.

3.3. Data Collection Methods

A combination of **quantitative and qualitative methods** will be used to evaluate vocabulary proficiency, retention, and learner perceptions.

3.3.1. Quantitative Data Collection

Vocabulary Assessment:

- Participants will complete a **standardized vocabulary test**, assessing both **receptive** (word recognition) and **productive** (word usage) vocabulary.
- The test will include **context-based vocabulary tasks**, ensuring an assessment of **meaningful language application** rather than rote memorization.
- The scores of **gamers and non-gamers** will be compared to determine whether long-term video game exposure correlates with enhanced vocabulary proficiency.

3.3.2. Qualitative Data Collection

Interviews and Focus Groups:

- Semi-structured interviews will explore **learners' perceptions of video games as a language learning tool**.
- Focus groups will encourage discussion about participants' **experiences with vocabulary acquisition**, engagement levels, and **preferred learning strategies**.

Observational Analysis:

- A subset of **gamer participants** will be observed while interacting with video games to analyze **in-game language exposure**, engagement with contextual cues, and vocabulary reinforcement mechanisms.
- Observations will focus on **linguistic input, comprehension strategies, and retention indicators**.

3.4. Game Selection Criteria

The study will focus on **video games that incorporate rich linguistic environments**, emphasizing **narrative depth, dialogue interaction, and contextual language exposure**. Selected games will meet the following criteria:

- **Narrative-driven gameplay:** Games with strong storylines and character dialogues.
- **Interactive language use:** Tasks that require players to read, listen, and respond using English.
- **Diverse vocabulary exposure:** Games that introduce both academic and colloquial vocabulary in authentic contexts.

Example Games:

- *Assassin's Creed* (historical and descriptive language, immersive storytelling)
- *The Witcher* (complex narrative, decision-making based on language comprehension)
- *Life is Strange* (interactive storytelling, emotionally engaging dialogues)

These games offer **rich linguistic input** that simulates real-world communication, making them valuable tools for assessing **incidental vocabulary learning**.

3.5. Data Analysis Techniques

A combination of **statistical and thematic analysis** will be employed to interpret findings.

3.5.1. Quantitative Data Analysis

- **Descriptive statistics** (mean, standard deviation) will summarize participants' vocabulary scores.
- **Independent t-tests** will compare vocabulary proficiency between gamers and non-gamers.

- **Regression analysis** will examine whether **gaming experience significantly predicts vocabulary acquisition**, controlling for variables like proficiency level and academic exposure.

3.5.2. Qualitative Data Analysis

- **Thematic analysis** will be used to identify recurring patterns in **learner perceptions, gaming experiences, and vocabulary learning strategies**.
- **Coding frameworks** will categorize responses into themes such as **motivation, contextual learning, and vocabulary reinforcement**.

By triangulating **statistical results with qualitative insights**, the study aims to provide a **holistic understanding** of how video games contribute to **EFL vocabulary acquisition**.

3.6. Ethical Considerations

Ethical research practices will be strictly followed:

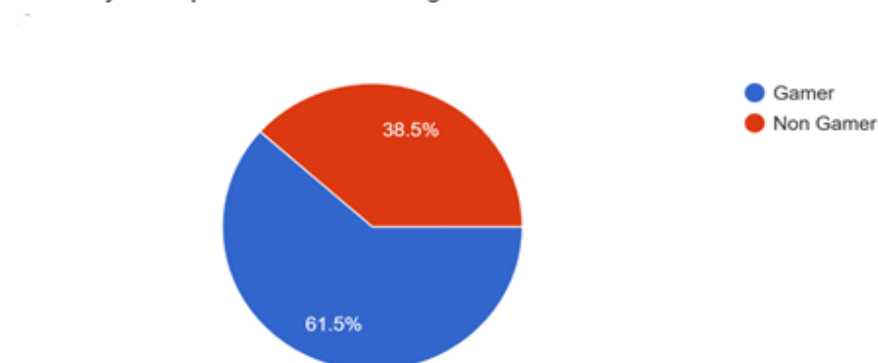
- **Informed Consent:** Participants will be fully briefed on the study's purpose, methods, and confidentiality measures before participation.
- **Anonymity and Confidentiality:** Data will be anonymized to protect participants' identities.
- **Voluntary Participation:** Participants can withdraw at any stage without any consequences.

4. Results

4.1. Vocabulary Assessment Questionnaire

The vocabulary assessment questionnaire was conducted using Google Forms. Participants were first asked whether they categorized themselves as "gamers" or "non-gamers." More than 50 responses were obtained which is demonstrated via Pie Graph below:

What is your experience with video games?



After categorization, both groups were presented with the same set of questions from the questionnaire. The responses were collected and analyzed to compare the vocabulary proficiency of gamers and non-gamers.

4.2. Overall Performance Comparison

The results indicate a noticeable difference in vocabulary proficiency between gamers and non-gamers. The percentage of correct responses for each group is presented below.

Part 1: Multiple-Choice Questions The multiple-choice section tested participants on commonly used vocabulary in both gaming and real-life contexts. Following is the blueprint of questions asked with correct answer.

Multiple-Choice Questions (Game-Related & Real-Life Vocabulary)

Instructions: Select the correct meaning or usage for each word or phrase.

1. **"Objective"** is a term used in games like *Call of Duty* and in real-life projects. What does it mean?
 - a) A casual conversation
 - b) A goal or target to achieve✓
 - c) A type of weapon
 - d) A random event

2. **"Resource"** is a common term in games like *Minecraft* and in everyday life. What does it refer to?
- a) A type of enemy
 - b) Materials or assets used to achieve something ✓
 - c) A game level
 - d) A character's ability
3. **"Teamwork"** is essential in games like *Overwatch* and in workplaces. What does it mean?
- a) Working alone to achieve a goal
 - b) Collaborating with others to achieve a common goal ✓
 - c) Competing against others
 - d) Ignoring others' opinions

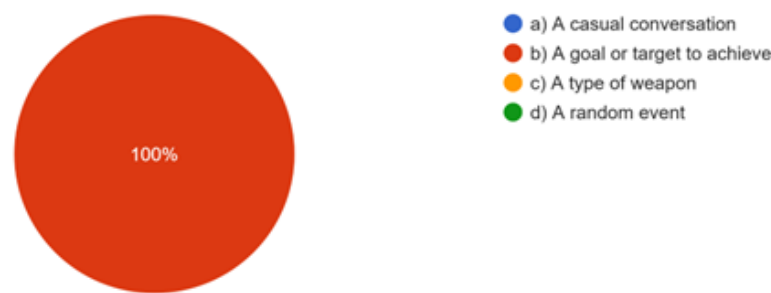
The following table presents the percentage of correct answers for each question among gamers and non-gamers:

Question	Gamers (%)	Non-Gamers (%)
Objective	100%	83.3%
Resource	100%	83.3%
Teamwork	100%	100%

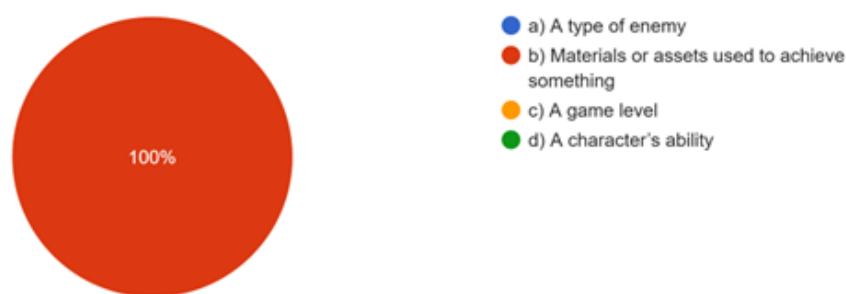
Following are the charts for both Gamers and Non- Gamers responses:

Gamers:

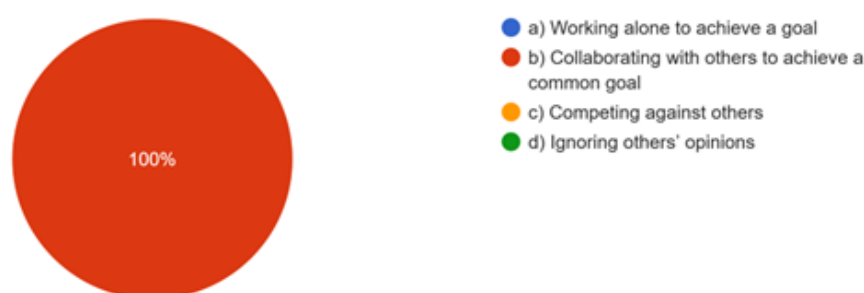
"Objective" is a term used in games like Call of Duty and in real-life projects. What does it mean?



"Resource" is a common term in games like Minecraft and in everyday life. What does it refer to?

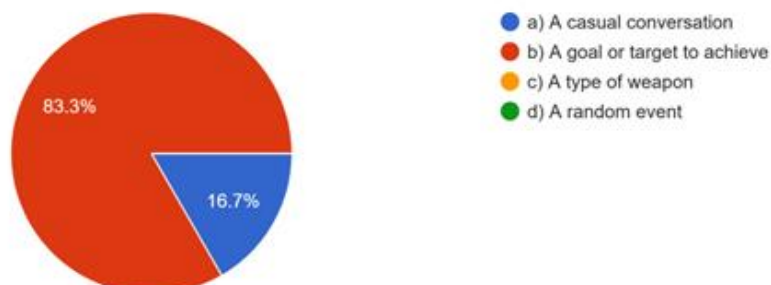


"Teamwork" is essential in games like Overwatch and in workplaces. What does it mean?

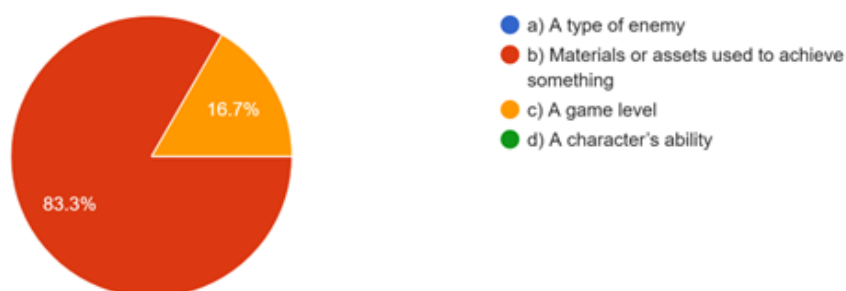


Non-Gamers:

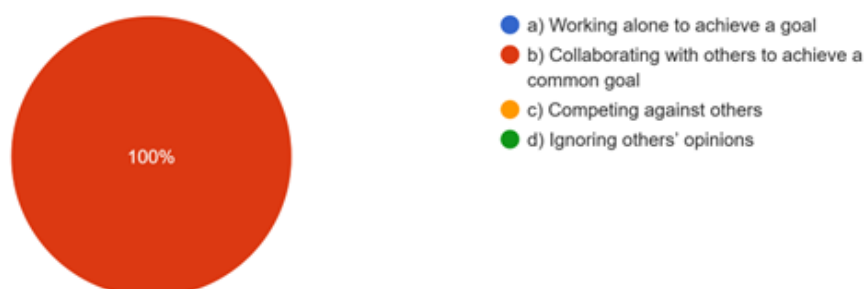
"Objective" is a term used in games like Call of Duty and in real-life projects. What does it mean?



"Resource" is a common term in games like Minecraft and in everyday life. What does it refer to?



"Teamwork" is essential in games like Overwatch and in workplaces. What does it mean?



The graphical representation above illustrates the comparison of correct response percentages between gamers and non-gamers across all sections of the questionnaire.

Part 2: Word Matching Participants were asked to match gaming-related terms with their correct meanings. Following is the question's blueprint with correct answers.

Word Matching (Game-Related & Real-Life Vocabulary)

Instructions: Match the word or phrase with its correct meaning.

1. **Inventory** (e.g., *Skyrim*)
 - a) A list of items or resources a person or character possesses ✓
 - b) A type of enemy
 - c) A game level
 - d) A character's ability
2. **Progress** (e.g., *The Sims*)
 - a) Moving backward in a task
 - b) Advancement or development toward a goal ✓
 - c) A type of reward
 - d) A random event
3. **Communication** (e.g., *Among Us*)
 - a) Ignoring others
 - b) Exchanging information or ideas ✓
 - c) A type of weapon
 - d) A character's weakness
4. **Adaptation** (e.g., *Survival Games*)
 - a) Sticking to the same plan regardless of changes
 - b) Adjusting to new conditions or environments ✓
 - c) A type of reward
 - d) A random event

The accuracy rate for each group is displayed below:

Question	Gamers (%)	Non-Gamers (%)
Inventory	100%	83.3%
Progress	100%	100%
Communication	100%	100%
Adaptation	100%	83.3%

Following are the charts for both Gamers and Non- Gamers responses:

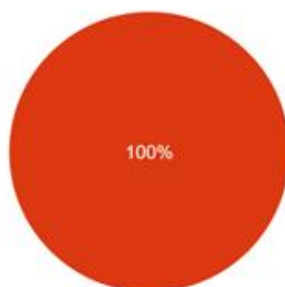
Gamers:

Inventory (e.g., Skyrim)



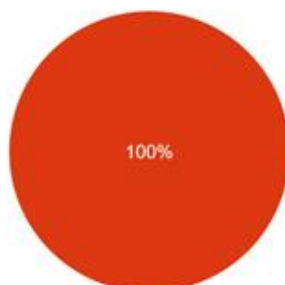
- a) A list of items or resources a person or character possesses
- b) A type of enemy
- c) A game level
- d) A character's ability

Progress (e.g., The Sims)



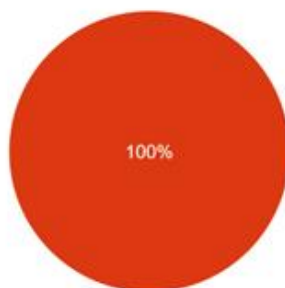
- a) Moving backward in a task
- b) Advancement or development toward a goal
- c) A type of reward
- d) A random event

Communication (e.g., Among Us)



- a) Ignoring others
- b) Exchanging information or ideas
- c) A type of weapon
- d) A character's weakness

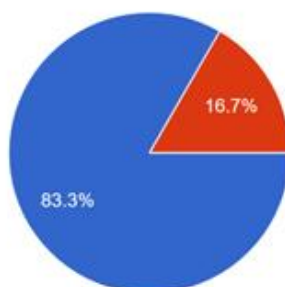
Adaptation (e.g., Survival Games)



- a) Sticking to the same plan regardless of changes
- b) Adjusting to new conditions or environments
- c) A type of reward
- d) A random event

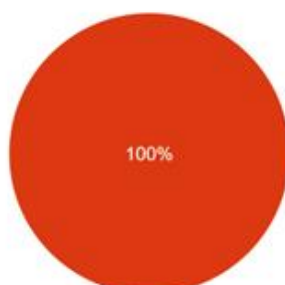
Non-Gamer:

Inventory (e.g., Skyrim)



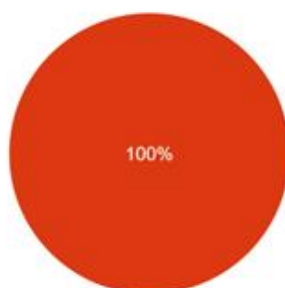
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- c) A game level
- d) A character's ability

Progress (e.g., The Sims)



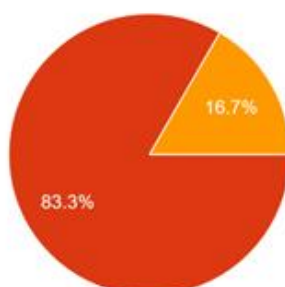
- a) Moving backward in a task
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- d) A random event

Communication (e.g., Among Us)



- a) Ignoring others
- b) Exchanging information or ideas
- c) A type of weapon
- d) A character's weakness

Adaptation (e.g., Survival Games)



- a) Sticking to the same plan regardless of changes
- b) Adjusting to new conditions or environments
- c) A type of reward
- d) A random event

The graphical representation above illustrates the comparison of correct response percentages between gamers and non-gamers across all sections of the questionnaire.

Part 3: Sentence Completion Participants were required to fill in the blanks using appropriate vocabulary. Following is the question's blueprint with correct answers.

Sentence Completion (Game-Related & Real-Life Vocabulary)

Instructions: Fill in the blanks with the appropriate word from the Word Bank below.

Word Bank:

- Adaptation
- Resources
- Communication
- Challenge
- Objective

1. In both games and real life, having a clear ____ **objective** ____ helps you stay focused on your goals.
2. Managing your ____ **resources** ____ effectively is key to success, whether you're building a house in *Minecraft* or planning a project at work.
3. Good ____ **communication** ____ is essential when working with others, whether you're playing *Overwatch* or collaborating on a team project.
4. When faced with a difficult ____ **challenge** ____, it's important to stay calm and think carefully about your next steps.
5. Successful ____ **adaptation** ____ to new situations is a valuable skill, whether you're surviving in a game or navigating real-life challenges.

The average accuracy for each group is as follows:

Question	Gamers (%)	Non-Gamers (%)
Objective	100%	50%
Resources	88.9%	75%

Communication	100%	25%
Challenge	77.8%	25%
Adaptation	77.8%	25%

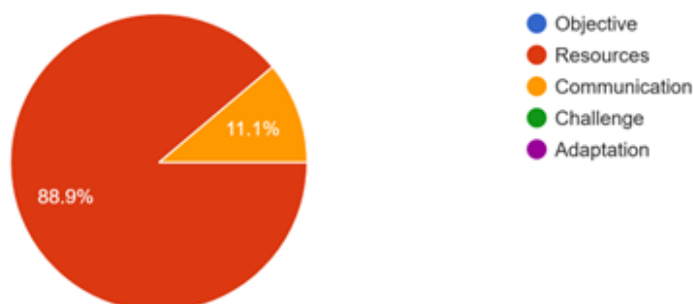
Following are the charts for both Gamers and Non- Gamers responses:

Gamers:

In both games and real life, having a clear _____ helps you stay focused on your goals.



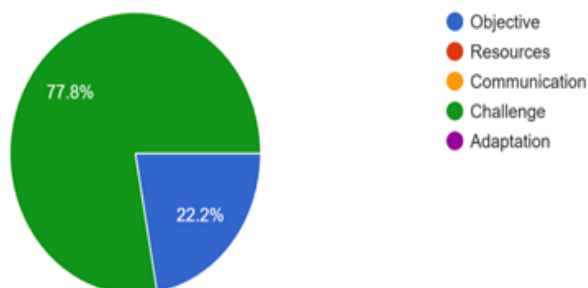
Managing your _____ effectively is key to success, whether you're building a house in Minecraft or planning a project at work.



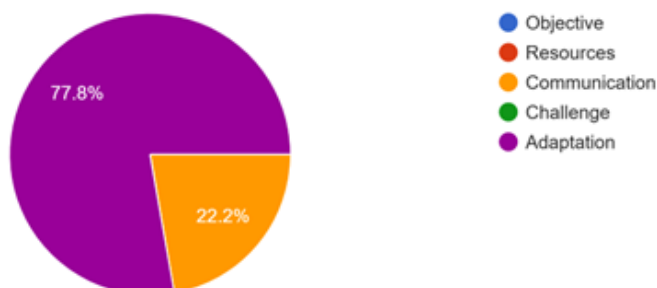
Good _____ is essential when working with others, whether you're playing Overwatch or collaborating on a team project.



When faced with a difficult _____, it's important to stay calm and think carefully about your next steps.

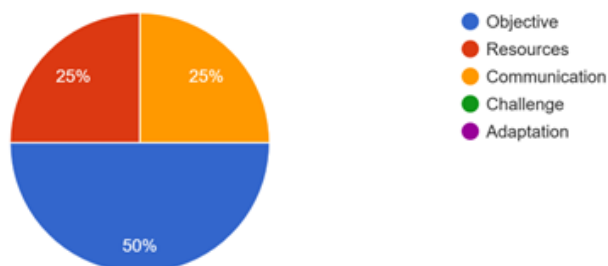


Successful _____ to new situations is a valuable skill, whether you're surviving in a game or navigating real-life challenges.

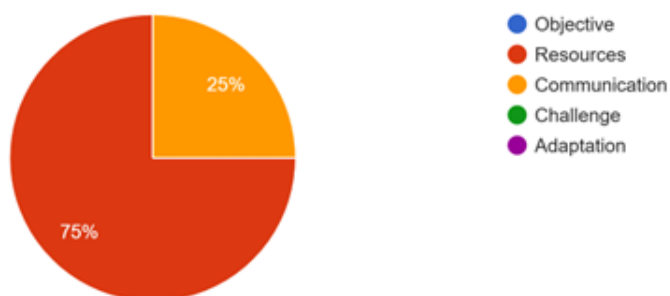


Non-Gamers:

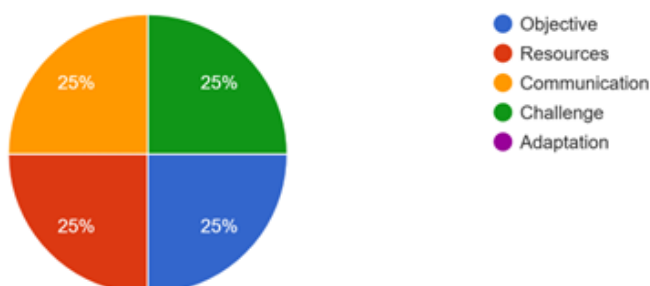
In both games and real life, having a clear _____ helps you stay focused on your goals.



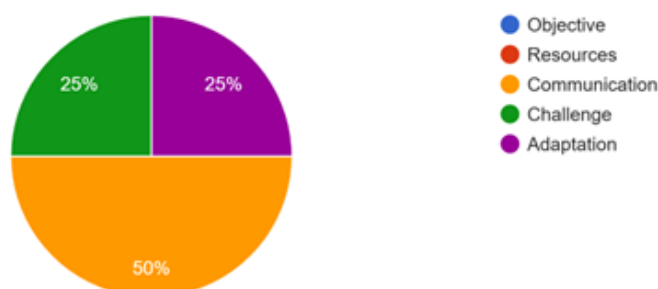
Managing your _____ effectively is key to success, whether you're building a house in Minecraft or planning a project at work.



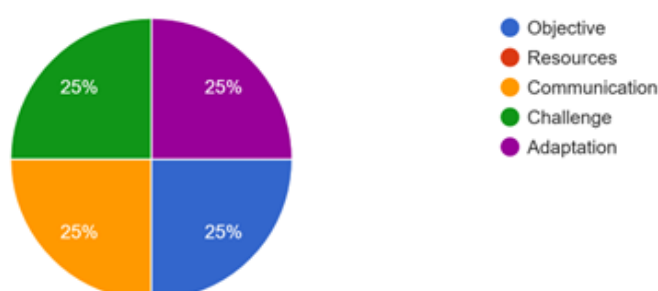
Good _____ is essential when working with others, whether you're playing Overwatch or collaborating on a team project.



When faced with a difficult _____, it's important to stay calm and think carefully about your next steps.



Successful _____ to new situations is a valuable skill, whether you're surviving in a game or navigating real-life challenges.



Figures above show the comparison of gamers versus non-gamers on all sections of the questionnaire, and the graphical illustrations show correct response rate percentage.

4.2.1. Key Findings

Both gamers and non-gamers have responded to the analysis showing large differences in the acquisition and comprehension of vocabulary. Findings indicate that visit to digital games could promote positive effect on vocabulary retention, particularly with words commonly using inside gaming conditions.

Performance Comparison Between Gamers and Non-Gamers

Gaming experience helped players achieve better results across most vocabulary tests including the most common words found in gaming spaces. All gamers successfully interpreted the meanings of "**objective**" and "**resource**" terms while the correct answers from non-gamer participants reached only **83.3%**. The vocabulary term "inventory" demonstrated complete recognition among gamers yet this level of recognition reached only 83.3% of non-gamers indicating the influence that gaming has on developing vocabulary skills.

The word identification skills of non-gamers proved superior for terms which predominantly appear in academic literature and formal writing compared to gamers. Gamer students showed full understanding of "progress" and "communication" terms but struggled with words related to interactive learning environments regardless of their presence in gaming contexts. The meaning of "**objective**" in the sentence completion tests escaped comprehension from **50% of non-gamers** but all gamers attained full understanding.

Impact of Gaming Exposure on Vocabulary Retention

Interactive digital environments provide benefits to gamers by promoting deep learning with vocabulary retention. The survival-focused language encountered in video games proved easy for **77.8% of gamers** to identify correctly but only **25% of non-gamers** managed the same success rate. The contextual and experiential learning which games offer effectively makes words easier to recognize and apply in real-world situations.

Gaming experience did not affect the comprehension of teamwork terminology and collaborative expressions since both groups demonstrated complete accuracy in their answers. The accuracy rates of gamers surpassed those of non-gamers who completed the survey through higher scores for "resources" at **88.9%** as well as "adaptation" at **77.8%**. This outcome shows that repeated exposure to game-based problem scenarios leads to enhanced understanding of these terms.

Implications for EFL Learning

The research evidence reveals that digital games function as an instrumental addition to English as a foreign language vocabulary instruction. Game players achieved better results in game-specific vocabulary because interactive learning environments produce enhanced performance outcomes. The dynamic interactive nature of video games allows players to meet new vocabulary multiple times in meaningful environment settings

which makes them potentially better than traditional classroom practices for vocabulary support.

Non-gaming participants demonstrated equivalent or better results in classroom related terms when compared to their gaming peers. An effective approach to vocabulary development in EFL learners should combine formal learning methods with interactive digital activities for maximum results. Further study should examine both lasting results from gaming usage and evaluate which game types best expand vocabularies for EFL learning.

4.3. Qualitative Results and Discussion

The methods included interviews with video game players and non-players to generate more detailed information about vocabulary learning through video games. Interview responses distinguished how vocabulary develops differently between participants alongside their use of informal and formal language methods and advantages of interactive education.

4.3.1. Influence of Gaming on Practical Vocabulary Acquisition

Gaming enthusiasts feel secure about their comprehension of practical vocabulary which includes teamwork and strategy together with adaptation because these terms appear naturally in gaming contexts. According to gamer reports *"Strategic thinking happens all the time in video games regardless of playing RPGs or shooters or real-time strategy games."* Through my gaming experience I have become naturally familiar with important terms like 'strategy' and 'tactics'. According to another study participant adaptation remains fundamental in survival video games. Adjusting to different environments becomes a necessary life skill which directly transfers into solving practical problems in real life situations.

Non-gamers demonstrated strictly traditional vocabulary learning processes because they confessed difficulties applying their lessons to real life situations. Non-gamer participants shared *"My educational experience taught me about teamwork yet multiplayer moments in gaming offered gamers actual opportunities for practical use of this concept."* Strategy stands as a word found in textbooks which the non-gamer reads about yet does not implement during ordinary daily discourse. Gaming enables people to learn practical vocabulary better than typical educational methods because it provides rich experiential opportunities within gaming environments.

4.3.2. Gaming and Informal English Acquisition

Gamers recognize gaming as an important means to acquire informal English vocabulary and slang as well as idiomatic expressions. One gamer remarked, *“There’s literally no focus on informal English in school, but in multiplayer games, you pick up slang and phrases naturally from other players.”* Another gamer added, *“I’ve learned so many idioms just from interacting with other players in online games. ‘GG,’ ‘noob,’ and ‘clutch’ are words that you never see in textbooks but are super common in online spaces.”*

Conversely, non-gamers admitted to struggling with informal English and pop culture references. One non-gamer stated, *“I often don’t understand slang when I see it online or hear it in movies. I think gamers have an advantage because they get exposed to these terms naturally.”* Another non-gamer expressed frustration, *“Formal English is what we learn in school, but in real life, people don’t talk like that. It’s hard to keep up with informal conversations sometimes.”* These responses indicate that gaming creates an informal learning environment that complements formal education by exposing players to everyday language used in casual interactions.

4.3.3. The Role of Interactive Learning in Vocabulary Retention

Gamers overwhelmingly agreed that the interactive nature of video games aids vocabulary retention. One participant explained, *“When you’re playing a game, you’re not just memorizing words—you’re using them. That makes it easier to remember them later.”* Another gamer highlighted the effectiveness of interactive apps, stating, *“Duolingo and similar apps work because they’re interactive. Gaming works the same way—you’re engaging with the language in a meaningful context.”*

Non-gamers, on the other hand, acknowledged the limitations of traditional rote learning. One participant noted, *“I memorize words for exams, but I forget them quickly because I never get to use them in real-life situations.”* Another non-gamer commented, *“I think games could help because they make learning more fun and practical, but I’ve never tried it myself.”* These findings align with the questionnaire results, which demonstrated higher vocabulary retention among gamers. The ability to apply words contextually rather than learning them in isolation appears to be a crucial factor in effective vocabulary acquisition.

4.3.4. Comparative Reflections: Gamers vs. Non-Gamers

When asked how their vocabulary learning experience differed from non-gamers, one gamer summarized the advantage of gaming succinctly: *“Games make you use the words. You hear them, you read them, you type them in chat—it all reinforces learning.”* Another gamer expanded on this point, stating, *“Pop media in general helps a lot, not just games. Movies, TV shows, and even memes help you learn how people actually speak.”*

Non-gamers, in contrast, acknowledged the gap in their exposure to informal and contextual vocabulary. One respondent admitted, *“I think gaming could bridge the gap between classroom learning and real-life conversations, but I don’t have the experience to say for sure.”* Another non-gamer observed, *“Gamers are probably more comfortable with English because they get to practice it in real-time, while I mostly learn from books.”* Participants' thoughts demonstrate that gaming presents superior advantages over conventional methods when it comes to vocabulary acquisition.

4.3.5. Summary of Key Findings

The qualitative results verify the questionnaire findings and discover supplementary understanding regarding gaming advantages in vocabulary learning:

- **Practical Vocabulary:** Gamers demonstrate greater confidence in using practical vocabulary due to constant exposure and application in gaming environments.
- **Informal English:** Through multiplayer and online games players get exposed to informal language which traditional education seldom contains thus enabling them for real-world interaction success.
- **Retention through Interaction:** The interactive nature of games enhances vocabulary retention by providing immediate and meaningful use of words in context.
- **Gamers vs. Non-Gamers:** Gamers benefit from a more immersive learning experience, while non-gamers often struggle with informal and contextual vocabulary usage.

The research suggests that video games can function as beneficial additional resources in EFL education because they help link classroom learning to authentic language practice.

5. Discussion

Researchers examined how video games contribute to vocabulary learning and maintenance capacities of learners obtaining English as a foreign language. Research

findings demonstrated through numeric data and human subject responses that video game players recognize and apply words better than players who do not play games. An interpretation of results will follow existing research and offer extended implications from this data while describing the study's restrictions and indicating possible research paths for the future.

5.1. Impact of Gaming on Vocabulary Learning

The survey showed gamers showed better recognition and interpretation abilities than players who did not play video games with both gaming terminology and standard vocabulary. The results exhibit that video games especially those which involve player communication and interaction function as an effective language immersion system. As one gamer stated:

“Playing games actively engages players to utilize new words during real-time matches. The need to communicate in multiplayer games creates conditions that help vocabulary retain itself after learning it.”

The learning method which uses experience-based settings and context retains vocabulary better than memorizing lists of words by rote. Real-time application of vocabulary such as strategy coordination in multiplayer games and mission objective adherence seems to strengthen vocabulary understanding and practical application between users.

5.2. Informal vs. Formal Vocabulary Learning

The main result from qualitative interviews showed that participants divided English acquisition into official terminology and everyday spoken language. Traditional EFL teaching mainly deals with formal English whereas gaming teaches players informal language that includes colloquial expressions as well as slang and idioms used in casual speech. One gamer noted:

“Games provide students with authentic speech patterns that schools fail to teach. The language used in multiplayer chats consists of slang and phrases which remain completely absent from traditional classroom instruction.”

Non-gamers maintained they failed to grasp everyday English language along with popular culture trends which indicates that classroom-based teaching methods are inadequate to develop students' actual communication skills. Academic text comprehension remains possible for me even though I experience communication difficulties during conversations with native English speakers who do not use formal language learned at school. The results highlight an essential requirement for EFL

curriculum development because they indicate a need to merge context-based teaching methods with interactive training strategies to close the educational-practical usage gap.

5.3. Interactivity and Engagement in Vocabulary Retention

The importance of interactivity in the process of language retention was one other central issue that came out from the research. Players underscored that interactive engagement greatly enhances the learning process, especially via games that demand problem-solving, strategic planning, and on-the-fly decision-making.

"Games like RPGs and strategy games force you to read, understand, and use new words constantly. Unlike memorizing a word list, you actually use them to progress in the game."

This observation supports previous research that emphasizes the role of active learning in vocabulary retention. Compared to traditional memorization techniques, video games provide an engaging and dynamic medium where words are repeatedly encountered in different contexts, reinforcing memory retention.

5.4. Research Limitations

While this study provides valuable insights into the impact of video games on vocabulary acquisition, it has several limitations:

- **Sample Size and Diversity:** The study was conducted with a limited number of participants, which may not fully represent the broader EFL learner population. Future studies should include a larger and more diverse sample to enhance generalizability.
- **Self-Reported Data:** The qualitative interviews relied on self-reported experiences, which may be subject to recall bias or personal perception differences.
- **Gaming Experience Levels:** The study did not differentiate between casual and hardcore gamers, which could influence vocabulary acquisition outcomes.
- **Controlled Experimental Setting:** This study relied on natural exposure to video games rather than a controlled experimental intervention, making it difficult to isolate gaming's exact impact from other language exposure sources.

5.5. Future Research Directions

To build upon these findings, future research should consider the following directions:

- **Longitudinal Studies:** Conducting long-term studies to observe how consistent gaming over time influences vocabulary retention and language proficiency.
- **Experimental Interventions:** Implementing controlled experiments where one group learns vocabulary through video games while another learns through traditional methods, allowing for a direct comparison of effectiveness.
- **Different Game Genres and Their Effects:** Examining the impact of different video game genres (e.g., RPGs, FPS, simulation, strategy) on various aspects of vocabulary acquisition.
- **Comparative Studies Across Language Proficiency Levels:** Investigating how gaming influences vocabulary learning in beginners versus advanced EFL learners.
- **Integration of Video Games in Formal Education:** This investigation looks at effective procedures for teachers to include video games together with game-based learning elements within their EFL curricula.

5.6. Acknowledgment

My deepest appreciation goes out to all persons who helped bring this research project to its successful conclusion. I deeply thank all my professors and academic mentors together with my peers for their helpful direction that supported this research effort.

6. Conclusion

Research shows video games act as effective educational instruments for language acquisition in English as a foreign language training because they combine interactivity and engagement with contextual language usage. The research shows that players who play video games succeed better than those who do not in vocabulary evaluations including words which commonly appear in gaming environments. The qualitative results validate the assertion that video game players develop better vocabularies by experiencing linguistic patterns multiple times during active gameplay. The players in the study learned both formal academic vocabulary in addition to informal and colloquial expressions which traditional EFL curriculum typically lacks. Students enhance their communication abilities through interactive games because they must use real-time language in collaborative multiplayer circumstances.

These research results support Krashen's Input Hypothesis because the study found comprehensible input plays a crucial role in language learning. Video games present compelling opportunities for natural language acquisition because they create active learning environments that avoid memory-based methods of vocabulary retention. Video

games become an effective vocabulary learning tool because interactive learning environments enable students to process information better than passive instruction techniques according to The Cognitive Load Theory. Research supports how game-based learning offers enough grounds to transform standard EFL instruction methods.

The study findings confirm that teachers need to acknowledge video games as valuable educational tools for teaching. Educational authorities must develop game-based learning approaches that incorporate video games since policymakers need to focus their attention on digital-native student requirements. The combination of video games with structured language learning practices enables teachers of English as a foreign language to boost their students' vocabulary mastery and motivational levels as well as real-life language proficiency. The research promotes a change in EFL instruction methods through which teachers should consider using both gaming techniques and digital platforms like Duolingo and Minecraft: Education Edition in their curriculum.

How effectively video games help students learn vocabulary depends on how well a game is designed and whether users stay engaged along with the specific language content they encounter. Studies need to research the relationship between game type and language proficiency gains while analyzing sustained language learning effects from gaming interactions. Studies should study how cultural elements along with language differences influence the transition of game-based vocabulary into actual world spoken communication.

Video games provide students with an advanced method of EFL vocabulary acquisition that engages learners in activities which develop their active participation in language learning. Educators together with policymakers should use narrative depth alongside interactive elements and contextualized input to transform language learning for digital natives that results in improved vocabulary acquisition with enhanced immersion and increased enjoyment.

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