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Gamification and English vocabulary learning among superior basic education students at a public institution in Loja, school year 2023-2024

Gamificación y aprendizaje de vocabulario en inglés en estudiantes de educación básica superior de una institución pública de Loja, año lectivo 2023-2024

> **Trabajo de Integración Curricular, previo a la obtención del título de Licenciado en Pedagogía del Idioma Inglés.**

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Dedication

First of all, to my beloved father, Luis Alberto Tene, for being my source of inspiration and giving me his unconditional support despite the distance. I know that this moment would have been as special for you as it is for me. To my dear mother Rosa Delia Tene, for being the most important pillar in my life and for always showing me her love, her patience, for giving me her advice, and also for her unconditional support, everything I am today is thanks to them. Likewise, to my brothers Geovanny, Franklin, and Taiwan, who, more than brothers, are my true friends, who always gave me the strength and support to not give up and to be able to finish this stage of my life. In addition, I want to dedicate this work to my classmates, Clara, Talia, Thaily, Maria Fernanda, and Richard, because they were with me through thick and thin, giving me advice and the necessary support to carry out this investigation.

Estheisy Gabriela Tene Tene

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Estheisy Gabriela Tene Tene

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1. Title

Gamification and English vocabulary learning among superior basic education students at public institution in Loja, school year 2023-2024

2. Resumen

El aprendizaje del vocabulario en inglés se ha convertido en un aspecto crucial para los estudiantes. Por ello, es primordial aplicar estrategias que ayuden a los estudiantes a aprender vocabulario de manera efectiva y atractiva. Por este motivo, el objetivo principal de la presente investigación es determinar la mejora en el aprendizaje de vocabulario en inglés mediante el uso de gamificación en estudiantes de educación básica superior de una institución pública de Loja, durante el año lectivo 2023 - 2024. La metodología empleada para el estudio fue a través de un enfoque mixto. Se emplearon instrumentos de una prueba previa y una prueba posterior, para recopilar las puntuaciones y medir el nivel de vocabulario. Además, se utilizó un cuestionario para recopilar datos cuantitativos y cualitativos sobre las percepciones de los estudiantes sobre el uso de gamificación para mejorar el aprendizaje de vocabulario, por último, las notas de campo. Los resultados indicaron que los estudiantes mejoraron de una forma significativa en cuanto a los indicadores del vocabulario tales como: ortografía, significado, asociación, colocación y función gramatical después de la aplicación de gamificación. Por otro lado, los hallazgos mostraron que los estudiantes tuvieron una percepción positiva al aprender vocabulario mediante juegos, tales como: bingo, juegos de mesa y aplicaciones en línea como Baamboozle y Wordwall, que en sí demostraron ser efectivos, manteniendo a los estudiantes motivados y comprometidos. En conclusión, la implementación de gamificación señala que los estudiantes percibieron positivamente el uso de la gamificación para el aprendizaje de vocabulario en inglés. En fin, este enfoque innovador tuvo un impacto notable y no solo mejoró el rendimiento académico, sino que también aumentó la motivación y el compromiso de los estudiantes con el aprendizaje del idioma.

Palabras Clave: *Gamificación, aprendizaje del vocabulario, estrategias, percepciones.*

Abstract

Learning English vocabulary has become a crucial aspect for students. Therefore, it is paramount to apply strategies that help students learn vocabulary in an effective and engaging way. For this reason, the main objective of this research is to determine the improvement in English vocabulary learning by using gamification among superior basic education students at a public institution in Loja, during the school year 2023–2024. The methodology employed for the study was a mixed approach. Instruments from a pre-test and a post-test were used to collect scores and measure vocabulary level. In addition, a questionnaire was used to collect quantitative and qualitative data on students' perceptions of the use of gamification to improve vocabulary learning and, finally, field notes. The results indicated that students improved significantly in terms of vocabulary indicators such as spelling, meaning, association, collocation, and grammatical function after the application of gamification. On the other hand, the findings showed that students had a positive perception when learning vocabulary through games such as bingo, board games, and online applications such as Baamboozle and Wordwall, which in themselves proved to be effective in keeping students motivated and engaged. In conclusion, the implementation of gamification indicates that students positively perceived the use of gamification for English vocabulary learning. In short, this innovative approach had a notable impact and not only improved academic performance but also increased students' motivation and commitment to language learning.

Keywords: Gamification, vocabulary learning, strategies, perceptions.

3. Introduction

In the process of learning a language, vocabulary plays a crucial role and represents a significant challenge, as it can hinder effective communication and comprehension. According to Setiawan and Wiedarti (2020), "Vocabulary can be defined as many words used to communicate with other people. Many words also have special connotations which provide different meanings" (p.85). This means that vocabulary is not only related to words but also to their meanings, which are considered essential and important elements for understanding the general content of spoken or written texts. For this reason, the Ministry of Education of Ecuador has created the National Curriculum for English as a Foreign Language, as it aims for students to reach an A1.1 level of English vocabulary proficiency according to the Common European Framework of Reference for Languages (CEFR) at the end of the superior basic education level which was the grade of the population.

However, most of the students have not improved their English language proficiency, and this is affected by various factors that limit learning and do not complete the required level in the English language, including vocabulary. As a matter, through teaching practice in a public school, the researcher detected that most students have problems understanding or expressing their own ideas, and this is due to a lack of vocabulary. That is, they have serious difficulties using the right words in certain contexts because they do not know the meaning, form, and use of words, which was supported by other researchers who also found that their students were not able to understand or express (Elyas & Alfaki, 2014; Wilkins, 1972; Mutalid et al., 2014).

In the context of the aforementioned problem, the researcher set out to determine vocabulary improvement through the application of new strategies. One of the strategies considered important and appropriate by the researcher is the application of gamification techniques, as it encourages constant practice and positive reinforcement, which can improve long-term vocabulary retention and mastery. This choice motivated the researcher to formulate the following research questions: how does gamification improve the English vocabulary learning among superior basic education students at a public institution in Loja, during the school year 2023 - 2024? To address this problem, it has been divided into two sub-questions: First, what is the effectiveness of gamification in English vocabulary learning among superior basic education students at a public institution in Loja? Second, what are students' perceptions about

the use of gamification on the development of English vocabulary learning among superior basic education students at a public institution in Loja?

Consequently, the integration of gamification techniques for English vocabulary learning is of significant importance. In fact, previous studies have identified that the incorporation of gamification strategies not only facilitates the creation of diverse vocabulary-oriented games, but also enriches the educational environment, thus enhancing the overall English language learning experience. In addition to this, it is worth noting that "Gamification or gamified learning has paved its way and gained proliferating popularity in EFL education, particularly in the context of vocabulary learning, which is perceived to have a pivotal role in language learning" (Fithriani, 2021, p. 146).

Due to the aforementioned, then general objective that was established to carry out this research work was to improve English vocabulary learning by using gamification among superior basic education students at a public institution in Loja, during the school year 2023 – 2024. From this aim, the researcher included two specific objectives which were to validate the effectiveness of gamification on the improvement of English vocabulary learning among superior basic education students at a public institution of Loja and to explore students' perceptions about the use of gamification on the development of English vocabulary learning among superior basic education students at a public institution of Loja.

This research will contribute to the beneficiaries which are students of the high school, it will help to improve performance, academic results and other aspects. Above all, this study will enable English teachers to use it mainly as a source of motivation, creating a pedagogical environment of games, capturing the attention and promoting the participation of students. As a result, this research aims to illustrate the effectiveness of gamification in vocabulary learning to improve students' knowledge.

4. Theoretical Framework

Nowadays, knowing English plays a very important role in society, as we live in an increasingly globalized world. Therefore, various technological tools and resources have been developed for learning English, and one of them is the utilization of gamification through the use of various applications, which has been very popular among students, with the ability to improve various aspects of the English language such as vocabulary.

4.1. Gamification

4.1.1 Definition of gamification

Gamification is a primary strategy used by teachers to encourage students' motivation and participation within the classroom. According to Khaleel et al. (2020), this strategy refers to the application of game elements to the educational fields to make the teaching-learning process more entertaining and interactive. In that regard, Kapp (2012) describes it as an important and powerful tool to attract students' attention and interest. From the above concepts, it can be concluded that gamification is a primary technique to promote fun and innovative learning.

Many authors mention that gamification is closely related to educational or entertainment games, which are physical and mental activities played through rules. To Bigdeli et al. (2023), "Games are product-oriented activities that progress based on predetermined rules and mostly comprise centralized decision-making" (p.1). Given this definition, games can be described as useful resources for enhancing students' thinking skills and facilitating their learning.

4.1.2 Elements of gamification

Within teaching, gamification has been divided into game mechanics, dynamics, and aesthetics in order to develop students' language skills efficiently and appropriately. This is corroborated by Lu and Ho (2020) who summarize the three components through the MDA framework (Mechanics, dynamics, and aesthetics) which comprises the rules, points, and badges for active players' engagement. Together, these elements allow teachers to design their classes with innovative and interactive activities.

4.1.2.1 Game mechanics. The first element refers to the system of rules that governs the players throughout the game. As Edusei (2022) claims "Game mechanics are rules that dictate how players achieve the game goal, interact with other players, and, in digital games, how the system responds to the actions they take" (p.5). Therefore, these are considered fundamental resources for motivating students to dynamically engage within the teaching-learning process.

In turn, game mechanics include elements such as points, badges, leaderboards, levels, and challenges that help teachers to arouse their students' interest, motivation, and curiosity. According to Ofosu-Ampong (2020), "Game components such as leaderboards, badges, points systems and levels that translate inputs to outputs are game mechanics" (p.115). Thus, these aspects help participants to be active learners and build their own knowledge.

4.1.2.1.1 Points. The points system comprises the numerical values obtained by players when completing a task or challenge. In that context, Long et al. (2023) have found that "Gamification motivates people to participate in games by incorporating point-scoring competition" (p.434). This means that students enjoy looking at their scores throughout the game as they are the reflection of their progress, thus serving as a tangible way of measuring competition among participants.

4.1.2.1.2 Badges. Other game design elements are badges, defined as powerful symbols of achievement that reward the progress and effort of players. To Alzahrani and Alhalafawy (2022), "Badges are visual representations of the player's achievements, which can be earned and awarded within the environment of gamification" (p.1951). In the same vein, Lastavec et al. (2023) state that:

> One of the most important attributes of badges is their flexibility. Different badges can be awarded for different types of activities, and the range of badges is limited only by the imagination of the gamification designer and the needs of the company (p.109).
>
> From these quotes, it is suggested that teachers select the badges based on students' ages and preferences to stimulate their participation and love for school games.

4.1.2.1.3 Leaderboards. They are elements used to show the ranked names and the scores of the best players or teams in the game. Park and Kim (2021) have identified that these components offer numerous benefits in the educational field such as fostering interaction among students through competition and cooperation, strengthening their intrinsic motivation, and improving their social behavior in the classroom. Based on the previous advantages, it can be said that leaderboards are an excellent resource to promote the students' persistence, competitiveness, enthusiasm, and respect for others.

4.1.2.1.4 Levels. In gamification, the level refers to the students' progress after completing a task or activity, which motivates them and encourages them to continue improving their learning. As Koskinen et al. (2023) claim "Learning games are usually designed so that the

difficulty level increases as the game progresses" (p.2). Due to this particularity of the games, students tend to feel excited, especially when moving to the higher levels, since it is the result of their effort and dedication throughout their lessons.

4.1.2.1.5 Challenges. Finally, the last game elements are challenges described as tasks or problems solved by players through their creativity, effort, and knowledge. According to Alhalafawy and Tawfiq (2022), the challenges are components that stimulate students to participate in an entertaining and exciting way. For this reason, it is essential that the activities designed by teachers attract the students' attention and motivate them to play the different games without falling into a state of boredom, stress, and frustration.

4.1.2.2 Game dynamics. The second element of the gamified system refers to the different actions that users must do to play the game effectively and correctly. This is supported by Tao et al. (2021) who define game dynamics as "the various ways the player interacts, makes choices, and plays the game. Examples of Dynamics include resource management, time pressure, cooperation, collection, building, or other strategies" (p.3). Undoubtedly, the dynamic part is a key element since it allows students to have clear instructions about how to develop the game without problems.

4.1.2.3 Game Aesthetics. As noted by Tao et al., (2021), this game feature has to do with the emotional reactions that a participant has when playing a game. In this perspective, Schwarz et al., (2020) listed 8 kinds of game aesthetics that can make players experience different types of reactions:

- ❖ Sensation: Players' senses are activated when engaged in novel experiences, captivating visuals, and immersive graphics evoke a more profound response to the game elements.
- ❖ Fantasy: The game immerses the players in an alternate reality, where they can assume various roles and engage in role-playing activities.
- ❖ Narrative: A captivating storyline that compels individuals to continuously engage with the game, identify with the game characters or foster their desire to uncover the unfolding plot.
- ❖ Challenge: The game provides missions whose fulfillment makes players provide players an ongoing sense of achievement and progress which later becomes a reason to continue playing it.

❖ Fellowship: The game requires that players interact with others either online or on-site, competitive, or cooperative behaviors can be produced.

❖ Discovery: This element adds depth to the gameplay experience, as players uncover new challenges, items, or hidden secrets within the game.

❖ Expression: Due to the creation and customization of avatars or characters that a game provides, players have the opportunity to express and show their creativity, reflecting their unique tastes and preferences.

❖ Submission: This aesthetic focuses on the ability of the game to provide a relaxing and immersive experience, allowing players to immerse themselves in the gameplay forgetting external pressures.

Considering all the characteristics previously discussed on gamification elements, it becomes significant to study if these constraints can hold a pedagogical influence in the educational field. Within this framework, the study carried out by Lampropoulos et al. (2022) seemed to have thrown light into this matter as it showed that gamification can positively affect the teaching-learning process. The following theme describes this study and others in depth which match with this same result.

4.1.3 Benefits of Gamification in Education.

Interestingly, Lampropoulos et al. (2022) reported some appealing data of the effect of gamification in education going from generating a new class setting to foster technology usage. In their words, they referred to this approach as a peculiar way to influence the development of student-centered classrooms, assist educators in their practice, and pave the way for seamless integration of technology-enhanced learning. Accordingly, Mei and Yang (2019) manifested that the application of gamified teaching can enhance environmental awareness and language learning experience. In consequence, gamification affects positively in enhancing the immediate learning environment as well as the way in which the participants (players) communicate.

Moreover, several studies have listed many other benefits and contributions of this methodology in Education. For instance, Pektaş and Kepceoğlu in 2019, after reviewing several authors, they came to the conclusion that transforming teaching to gamified teaching can 1) nurture students' motivation to persistently pursue learning objectives. 2) Engage learners into teaching instruction without inducing monotony or imposing rigid directives. 3) Empower participants to undertake new challenges without apprehension regarding real-life consequences.

4) Foster collaboration and the development of social skills essential for teamwork, decision-making, and problem-solving. Finally, gamification provides students with timely progress feedback. This last benefit allows them to observe and correct their mistakes as they perform the task which heightens their learning experience.

In addition to the emotional and psycological benefits that gamification can bring to students (López-Faican and Jaen, 2020), Pujolà (2021) framed this methodological strategy as a useful tool, suitable to any educational context, age, or pedagogical approach such as flipped classroom, or task-based learning. For example, Pektaş and Kepceoğlu (2019) suggested applying gamified applications to conduct either formative or summative assessment. This is because when playing a game, players tend to unconsciously provide the necessary information regarding their skill mastery needed for assessment. In that way, teachers can realize about their students' strengths and weaknesses without being intrusive in students' activity.

Without a doubt, gamification stands out as the engaging and motivating factor that transforms the class environment. In consequence, the challenge of promoting volunteering participation from students becomes a carefree matter for teachers in a gamified class (Garcia-Iruela and Hijón-Neira, 2020). Likewise, it facilitates the integration of technology into the classrooms which is considered, by nowadays students` generation, as a favorable learning way as stated by Aminatun and Oktaviani (2019). In this take, gamification becomes an appealing methodology to analyze within the English language learning field since learning a foreign language may sometimes be perceived by students as a challenging matter; however, based on what the authors have claimed, gamification contribute to ease challenging things (Fauziningrum et al., 2023).

4.1.4 Gamification in teaching English language.

Studying the gamification phenomena into language teaching and learning has recently become a compelling subject-matter for many researchers (Jun et al., 2020). For instance, Alomair and Hammami (2019) argued gamification can be highly adaptable to work on language acquisition in this contemporary context. As proof of this statement, there is the experimental work conducted by Yukselturk et al. (2018) with a group of 62 first-year university students in which gamified applications were implemented to nurture the development of English skills. According to this study, it was found that students' task-focus increased, keeping their concentration on language concepts during longer time-lapses. Moreover, it fostered students'

creativity and active use of the language in comparison to the traditional teaching method of lecturing.

Other studies such as the one by Asiri (2019) showed that using gamification in English class was perceived as a novel methodology capable of creating positive perceptions and attitudes in both teachers, and students. Furthermore, Cruaud (2018) remarked that this methodology helped to produce learners' autonomy which is a pivotal asset to develop when learning a language. Finally, the research developed by Redjeki and Muhajir (2021) in which Duolingo was implemented to gamify the English language experience. Their results depicted a notorious enhancement in learners' overall language skills, especially in grammar and writing with written sentences that portrayed fewer grammatical and spelling mistakes.

The previously discussed findings showed how gamification can impact on English learning by making students more excited and engaged with the process leaving behind the shyness and anxiety levels that usually inhabit them to reach their academic endeavors (Flores, 2015). Bearing this information in mind, it leads this research to draw attention to the theoretical background that this methodology has presented regarding EFL vocabulary development to match the purpose of the present study.

4.1.5 Importance of applying gamification for teaching vocabulary.

The significant role that gamification plays in vocabulary development falls in its characteristic to making language concepts more comprehensible and interesting (Castillo-Cuesta, 2020). In other words, during gamified classes students begin to acquire vocabulary not because they are asked to, but because they enjoy it (Fithriani R. , 2021). This provides a grasp on how gamification boots students' interests by allowing them to explore an anxiety-free learning environment while improving their vocabulary. Moreover, this methodology expands vocabulary instruction in regards to learning activities. For instance, students can begin using their smartphones not only for social media but also to download apps that can help them in vocabulary learning. This can help them greatly to keep in contact with the target language vocabulary even when they are not inside a formal class environment. Besides, through gamification applications teachers can monitor their students' progress while showing them educational usages for their mobile devices (Panmei & Waluyo, 2023). Finally, in the research by Zou et al., (2019) about the impact of using gamification in vocabulary instruction in which they analyzed 21 research papers on the matter, they concluded that "(1) digital games promote

effective vocabulary learning; (2) interactions in game environments are conducive to vocabulary learning; (3) game-embedded multimedia facilitates vocabulary learning; and (4) over-specified vocabulary information is better than isolated or minimally specified information." (p. 22–23). Within this framework, there are a plethora of scientific articles which have studied numerous applications to enhance vocabulary learning, some of these are explored in the topic below.

4.1.6 Games to Teach Vocabulary

Within the vast body of literature on gamification and vocabulary enhancement, some applications that have been found beneficial to develop EFL vocabulary have been, 1) wordwall (Çil, 2021), Educaplay (Castillo-Cuesta, 2020), Baamboozle (Hieu, 2021), and Quizizz (Degirmenci, 2021).

4.1.6.1 Wordwall. As noted by Çil (2021), Wordwall.net is an educational and entertaining website that offers a variety of interactive and individual game options, including information matching, picture matching, quizzes, wheel of fortune, puzzles, and more. These games are specifically designed for vocabulary practice. Users, typically teachers, have the ability to create their own games by utilizing pre-existing templates and adding their own content, such as words and images. Alternatively, teachers can also utilize games that have been created by other educators available on the platform.

The practical study carried out by Hasram et al. (2021) on the effects of this application on English vocabulary among year 5 pupils found out that according to the pre-test and post-test scores, students' vocabulary improved after the utilization of Wordwall. In their study, they also reported that incorporating mobile phone applications for language educational purposes enhances students' comprehension and vocabulary understanding. They also argued that vocabulary elements were presented in the form of images, accompanied by audio or video recordings which promoted the correct pronunciation of the words. Finally, the wide range of game options within the application facilitated engagement through repetitive practice, leading to a more profound understanding of the vocabulary and an increased ability to easily recall correct spelling.

4.1.6.2 Bamboozle. Utilizing this software, educators have the opportunity to use it as a means to incorporate various English teaching games into their instruction. These games involve dividing the class into smaller groups, typically two or three, fostering a competitive environment where each group strives to emerge as the victor. The inclusion of visual elements within the game not only facilitates children's comprehension but also enhances their ability to retain the information over an extended period. Consequently, this software offers a time-saving advantage for teachers, as it eliminates the need to invest excessive effort in creating an active and engaging learning environment specifically tailored for children (Hieu, 2021).

In the quasi-experimental research conducted by Arequipa Tandalla (2022), she studied the effectiveness of bamboozle and some other digital games on EFL vocabulary learning among 58 fifth-grade Ecuadorian students divided into a control and an experimental group. In this study, a web 3.0 survey, a structured survey, a pre-test and post-test, and a TAM questionnaire were implemented to both assess students' vocabulary prior and after the intervention and document their perceptions towards the use of the digital games utilized. Moreover, the study used the Group Statistics and Independent-Sample T-test to interpret the difference between students' scores while the SPSS Statistics served to process students' reactions on the implementation of digital games to improve their vocabulary. The P-value being p=0 <0.05 showed that bamboozle and some other digitals games positively influenced the development of EFL vocabulary. Thus, the researchers concluded that digital games such as bamboozle can engage learners in wordplay due to their interest in gameplay mechanics that include a variety of learning ways.

4.1.6.3 Bingo. It is a game that allows a wide range of benefits in learning languages such as English, especially in learning vocabulary. Bingo, a game that can be adapted in a variety of ways to practice vocabulary. It is a fun and participatory way to reinforce learning. It also encourages attention, concentration, and interaction among students. This is supported by Syukron & A.E (2022) who says that "Game like Bingo provides an interesting and motivating way to review and reinforce vocabulary words" (p.173). Without a doubt, the game of bingo is an effective and motivating tool that allows students to strengthen their English vocabulary learning through active participation and interaction among the students.

4.1.6.4 Board game. The "board game" is a board game that combines several aspects of gamification. That is, a fun, standardized, and visually appealing game that encompasses content,

design, players, and game mechanics. Typically, players move pieces on a pre-marked surface or board according to a set of rules. This means that players move around each square using dice or other methods of movement, which may present challenges in the form of words or questions related to the vocabulary in play. As participants move around the board, they must demonstrate their mastery of the vocabulary by correctly answering the questions or identifying the proposed words, which allows them to advance more quickly towards the goal and, above all, in an interactive and entertaining way. As illustrated by Quinchuela Andrade (2023) who says that, "a well-designed board game acts as an effective educational tool that motivates the player so that he or she can learn more" (p.12). Consequently, using this board game to learn vocabulary facilitates the stimulation of learners' interest and improves their level of engagement.

4.2. Vocabulary

4.2.1 Definition of vocabulary

Vocabulary is the set of words used by human beings to interact effectively in a foreign language. According to Setiawan and Wiedarti (2020), "Vocabulary can be defined as many words used to communicate with other people. Many words also have special connotations which provide different meanings" (p.85). This means that vocabulary is not only related to words but also to their meanings considered essential elements to understanding the general content of spoken or written texts.

Within the teaching-learning process of a new language, vocabulary is an essential element to express feelings, emotions, opinions, and experiences related to any topic. As Guaqueta and Castro-Garces (2018) mention "Among the language skills that any learner needs to be able to develop a linguistic competence, vocabulary is foremost a key component" (p.63). Therefore, it is necessary for English teachers to encourage their students to acquire words used in various contexts in order to enable them to interact accurately with people from other places.

One of the most relevant aspects of vocabulary is the term "word" which represents the smallest unit of language used to form different sentences, expressions, and phrases. In accordance with Shavkatovna (2022), "A word is the main structural and semantic unit of a language that serves for naming objects and their properties, phenomena, relations of reality, having a set of semantic, phonetic and grammatical features specific to a given language" (p.69). From this concept, it can be stated that every word is a unit of sound and meaning which are the root of communication in areas such as listening, reading, speaking, and writing.

4.2.2 Importance of Learning Vocabulary in English as a Foreign Language

In the English language, vocabulary provides students with multiple benefits. First of all, this allows them to communicate properly with each other since without vocabulary nothing can be transmitted. Sari and Aminatun (2021) state that "Vocabulary plays an important role in communication, so we cannot be able to communicate well without sufficient vocabulary" (p.16). Based on this, it can be determined that vocabulary is key to mastering the language and sharing opinions.

Secondly, vocabulary helps students significantly develop their listening, reading, writing, and speaking skills. This is supported by Ariffin (2021) who carried out a study where she found that vocabulary knowledge allows students to successfully perform their receptive and productive skills. From this research, it can be highlighted the importance of teaching vocabulary through pictures and interactive activities which allow students to acquire a large number of words for different real-life situations.

Finally, vocabulary offers students the possibility of having academic achievements and successful careers where they can use their knowledge of the English language to generate a positive impact within the working market. Researchers such as Bekteshi and Xhaferi (2020) have concluded that students who learn vocabulary in their English classes have high levels of stimulus for future job opportunities. As a result, vocabulary has been recognized as a vital factor in the educational field and in the work environment.

4.2.3 Types of Vocabulary

The vocabulary has been divided into four types related to listening, reading, speaking, and writing skills which play a specific role during the teaching-learning process. This is corroborated by Rustamova and Bahodirova (2023) who claim that "The four vocabularies of listening, speaking, reading, and writing are frequently taken into account by educators" (p.1101). Consequently, teachers need to prepare their lessons with tasks, activities, and games that motivate students to reinforce their vocabulary within each type; otherwise, they cannot develop their language skills effectively and productively.

4.2.3.1 Listening vocabulary. This type refers to the words we hear to understand the messages. As Putri (2022) points out, "A person's listening vocabulary is all the words they can recognize when listening to speech" (p.2). Based on this concept, it can be said that the term "vocabulary" is an essential tool to effectively and easily develop listening comprehension

skills, especially when students must recognize the main ideas and specific details conveyed by the speakers during their speech.

Within the listening process, teachers can implement a wide variety of activities or games through technology that helps the students to recognize, identify, remember, understand, and learn new words. In this context, Agustin and Ayu (2021) claim that watching and listening to conversations, songs, movies, TV series, and videos are effective ways to acquire and memorize as many words as possible since students have the opportunity of choosing their favorite content according to their level of age. Therefore, it is fundamental to encourage them to make use of innovative and entertaining tools focused on developing their sub-listening skills.

4.2.3.2 Spoken vocabulary. The second type is related to the words used by people when expressing their ideas or opinions toward others. To Dalimunthe and Haryadi (2022), spoken vocabulary can also be defined as the ability to express the meaning of words during conversation or verbal discourses. Undoubtedly, this highlights the importance of teaching a wide variety of lexical ranges to students who need to learn meaningful, helpful, and appropriate vocabulary to communicate in today's globalized world.

Considering the important role of spoken vocabulary in the English language teaching-learning process, teachers need to design their activities and lessons aimed at encouraging students' participation and interaction. Therefore, Tiley and Rentler (2022) have suggested some techniques such as image descriptions, discussions on different topics, conversations, and questions which must allow students to share their opinions based on the vocabulary learned in the classroom. Together, these activities make a huge contribution to the improvement of the students' speaking skills.

4.2.3.3 Reading vocabulary. The third type refers to the words that a reader needs to know in order to understand the content of the reading. It is also defined as the indirect acquisition of the meaning of words through conversations and readings in various situations (Ibhar, 2022). In this sense, teaching vocabulary has been one of the best methods to motivate learners during their learning of English as a foreign language, as it allows them to acquire useful words to communicate effectively with people from other countries.

Given the advantages of learning vocabulary, it is essential that teachers analyze and use entertaining and interesting reading focused on helping students expand their lexicon. According

to Abdelrady et al. (2022), there are some types of texts like stories, fables, novels, and newspapers that increase students' vocabulary based on their level and age. Thus, it can be highlighted that literature has had a strong impact on students, especially children, due to its effectiveness in teaching vocabulary in a creative and fun way.

4.2.3.4 Writing vocabulary. The last type consists of the words used by people when writing a text, which are an important element in conveying clear messages and ideas. In accordance with Barus and Panjaitan (2022) **"**When writing, our vocabulary determines how we express our thoughts clearly and accurately to others" (p.13). Therefore, it is necessary for students to have a broad and useful vocabulary that allows them to develop this skill effectively; otherwise, they will not be able to produce a text with coherence and cohesion, which will prevent readers from understanding what they have transmitted in their writing.

In order to expand the students' vocabulary in writing skills, English teachers must follow some steps. First of all, they have to motivate students to learn new words that allow them to write their ideas clearly since without vocabulary and grammar the texts do not make any sense. Secondly, teachers need to teach students vocabulary on different topics according to their interests in order to encourage them to produce their own writing by using the words learned in the classroom. Finally, they also must implement technological resources and digital platforms where students can practice and improve their writing skills. This has been supported by some studies developed by researchers who have found out the impact of websites to increase students' vocabulary use when writing a text (Rong and Noor, 2019). From these statements, it can be claimed that vocabulary and writing are closely related as the first one is key to developing the second one.

In conclusion, vocabulary is an essential factor to develop the four skills and make sense of the language. Therefore, teachers need to focus mainly on looking for new ways to expand the students' vocabulary within their lessons through interactive and innovative tasks, activities, and games aimed at creating a positive learning environment where the students feel motivated. In addition, it is fundamental to use technology as a tool to arouse the students' curiosity as today's modern teachers must adapt their teaching-learning process to the new technological era.

4.2.4 Aspects of Vocabulary

As Alharthi (2020) stated, developing vocabulary requires students to understand the form-meaning link of a word. He also expressed that there are other kinds of vocabulary

knowledge which are involved within the nurturing of receptive and productive skills such as word form, word meaning, and word use. All these aspects of vocabulary knowledge are analyzed in depth in the work by Nation (2022) in which he outlined the key points of each of these in the following table.

Table 1.

What is involved a word?

Aspect	Component	Productive knowledge	Productive knowledge
Form	❖ Spoken ❖ Written ❖ Word parts	❖ How is the word pronounced? ❖ How is the word written and spelled?	❖ What does the word sound like? ❖ What does the word look like?
Aspect	**Component**	**Productive knowledge**	**Productive knowledge**
		❖ What word parts are needed to express the meaning?	❖ What parts are recognizable in this word?
Meaning	❖ Form and meaning ❖ Concept and referents ❖ Associations	❖ What word form can be used to express this meaning? ❖ What items can the concept refer to? ❖ What other words does this make us think of?	❖ What meaning does this word form signal? ❖ What is included in the concept? ❖ What other words could we use instead of this one?
Use	❖ Grammatical functions ❖ Collocations ❖ Constraints on use (register,	❖ In what patterns must we use this word? ❖ What words or types of words must	❖ In what patterns does the word occur? ❖ What words or types of words occur with this one?

frequency…)	we use with this one? ❖ Where, when, and how often can we use this word?	❖ Where, when, and how often would we expect to meet this word?

Note**.** *(Nation, 2022, p. 16)*

In summary, the three aspects of vocabulary 1) word form, 2) word meaning, and 3) word use, portrayed in Table 1, play integral roles in language acquisition. Mastery of word form facilitates grammatical accuracy, while understanding word meaning enhances comprehension and expression. Proficiency in word use allows learners to effectively navigate varied communicative contexts. Developing a strong foundation in these aspects empowers language learners to become more proficient and confident in using vocabulary in a meaningful and contextually appropriate manner (Alharthi, 2020).

4.2.5 Components of vocabulary

4.2.5.1 Spelling. This component is defined as the ability to write words that accurately follow the orthographic rules of a given language. Even though nowadays there is spell check software freely available for writers to automatically correct, complete or replace a spelling error, it continues to be of utmost significance for language users to not relegate this spelling responsibility entirely to a software-based writing aid since some limitations of these are still present (Pan et al., 2021). This significance is observed within the employment and business fields where appropriate spelling may result in providing job security, whereas incorrect spelling may produce negative effects in terms of credibility, sales, and professional capabilities. Finally, spelling has been found useful to endorse the development of appropriate reading and writing skills since the use of the correct graphemes allows learners to access higher-order skills that are required in text production and understanding (Graham, 1999).

4.2.5.2 Meaning. As noted by Bender and Koller, (2020) meaning is defined as the relationship between any linguistic form (word, phrase, clause, etc) and the communicative purpose that the language user wants to convey. Although this definition may sound concrete, they warned that it is a more complex concept to understand in the world of linguistics. In this

research, the researcher studies the concept of "meaning" in the field of conventional or standing meaning. That is to say, what a word stands for depending on the context provided (Quine, 1960).

4.2.5.3 Association. According to Nation (2022) this component has to do with the items to which a given concept can be referred. For example, the word *friend* can be related to a person with whom we keep a close or tight-knit relationship; in consequence, hearing this word can lead us to think about our own *friend*. Indeed, that is what this term "association" refers to, it is "an idea or a memory that is suggested by somebody/something; a mental connection between ideas" (Oxford, 2023).

4.2.5.4 Grammatical function. In linguistics, grammatical function refers to the syntactic role of the words and phrases within the context of sentences or clauses, which consist of a subject, and an object. According to Dalrymple and Lodrup (2000), "This is defined in terms of a functional hierarchy, usually taken to represent relative syntactic obliqueness" (p.1). That is to say, these grammatical functions focus on the functional relationships of the elements present in a sentence in order to ensure the correct meaning of the words during the transmission of the messages.

To illustrate the grammatical function, it is necessary to take into account the following example: "Carlos bought a house". In this case, Carlos is the subject defined as the person who performs the action (Aliyevna, 2023), whereas the house is the object affected by the verb. In general, both subject and object have different functions in the sentence; however, they complement each other to make sense of the message.

4.2.5.5 Collocations. In lexicology, collocations are the combinations of words or phrases within a sentence that can be made up of nouns, verbs, adverbs, and adjectives. This is supported by Umar (2021) who claims that "Collocations are used mainly by semanticists, lexicologists, and phraseologists to refer mostly to different forms of word combinability" (215). Therefore, these constitute an important part of the teaching-learning process since they allow students to acquire the language successfully and learn new vocabulary for a wide variety of contexts and situations.

In the English language, there are many collocations such as breakfast or butterfly that arise from the combination of the different parts of speech. For instance, the term **breakfast** is formed by the verb "break" and the adjective "fast", while the word **butterfly** is made up of the noun "butter" and the verb "fly". In both examples, it is observed the importance of using

collocations since they help to form diverse words and phrases with new meanings. In this sense, some studies carried out by researchers have recommended teachers teach collocations through interactive, entertaining, and innovative activities to increase students' lexical range during their learning cycle (Noroozi, 2022).

4.2.6 Model for Teaching Vocabulary

Teaching vocabulary requires following different phases focused on designing and developing entertaining and innovative activities that motivate students to learn new words and expressions. In that sense, Ndraha (2020) mentions that "The typical lesson according to the situational approach includes a three-phase sequence, known as Presentation, Practice and Production" (p.924). As its name suggests, this method has been organized into several parts to help teachers organize and plan their classes with tasks, games, and technological resources aimed at the students' needs and their classroom learning cycle.

4.2.6.1 Presentation. This phase of the PPP model is aimed at activities and resources used by teachers to teach students new vocabulary. As Ilmiddinovich (2020) states "The first stage is the presentation of an aspect of language in a context that students are familiar with, much the same way that a swimming instructor would demonstrate a stroke outside the pool to beginners" (p.66). Considering the above, it can be concluded that presentation is one of the most relevant aspects of the teaching-learning process because it allows teachers to prepare their students to perform subsequent tasks individually and smoothly.

During the development of the first phase, the teachers must use interesting and interactive teaching resources focused on getting the students' attention and making their learning process easier and funnier. This is supported by Sari and Sembiring (2019) who state "The goal of the presentation is to introduce the new material to the learners by short and simple explanations, a brief description of the new topic, idea, pictures, video, music, and demonstrations acting" (p.71). Clearly, the authors show instructors ways to present the new vocabulary effectively and properly; however, these tools will not be successful if the teachers do not consider their students' ages, levels, needs, and interests.

4.2.6.2 Practice. The second part refers to the activities developed by the students after learning the vocabulary in the previous phase, allowing them to put the theory into practice. Arifin et al. (2019) point out that within this stage, teachers provide students with different types of spoken and written exercises which are completed by using their understanding and knowledge

of the topic. Therefore, it is highlighted that the practice is an essential step to encourage students to be active learners since they have the opportunity to demonstrate their learning in real situations of the target language.

In this stage, it is fundamental that teachers use tasks through technological tools that motivate students to practice frequently with the vocabulary learned during the instruction. According to Artha and Yasmin (2022), "Students practice when using words or structures in a controlled way, e.g., making sentences from prompts, answering questions and giving sentences based on a picture" (p.199). This means that the activities must be designed carefully taking into account the students' learning since they are the main actors that constitute the center of the teaching process.

4.2.6.3 Production. The last phase is developed when students use the grammar and vocabulary learned to produce their own spoken and written texts without making any mistakes. This is corroborated by Batubara et al. (2023) who claim that "Production is an activity that allows students to declare their ideas in a writing test. In this section, students create text to build upon the teacher's topic. It also determines how far students understand what has been explained" (p.75). In the same vein, Nopiyadi et al. (2023) mention that "In the production stage (also, transfer stage, free practice), students use new items more freely with less or little control by the teacher" (p.15004). From these definitions, it can be determined the importance of the production since it shows teachers the students' learning outcomes after teaching the new vocabulary.

The production phase offers teachers different activities, exercises, and tasks that can be performed by students to demonstrate their skills or knowledge about the words learned in the classroom. In this regard, Gbenedio and Osa-Omoregie (2019) suggest that "In this phase, the teacher can ask the students to produce their own examples of the new language item, either in written or spoken form, by asking questions which require them to produce and use the item in the expected ways" (p.84). Notably, this activity shows teachers a sample of how students can produce their texts according to their interests or preferences since if teachers do not take into account their opinions, participants will feel bored and frustrated during their teaching-learning process.

Overall, the use of the PPP model divided into presentation, practice, and production has provided teachers with a new alternative to designing interactive and innovative lesson plans which consider the students a key piece within the educational field. Therefore, it is necessary to

implement a wide variety of activities and technological tools appropriate for each stage; otherwise, the teaching-learning process will not follow a logical and coherent sequence and structure.

4.2.7 Intentional vs incidental word learning

Intentional and incidental vocabulary acquisition are commonly discussed as the exclusive approaches to word acquisition. That is to say, activities explicitly designed to concentrate students' attention on word learning are classified as intentional vocabulary learning, while activities involving the acquisition of words through encounters with meaningful content are categorized as incidental vocabulary learning (Webb, 2020). This differentiation is reasonable because there are numerous activities, such as flashcards, fill-in-the-blanks, and matching exercises, specifically designed to engage students in focused word learning to enhance their lexical knowledge. Furthermore, there are various situations involving reading and listening where words are acquired unintentionally, even though there is no explicit intention to learn them (Lindstromberg, 2020).

In addition, Webb (2020) asserted that the advantage of using the labels intentional and incidental to describe vocabulary acquisition lies in the ability to identify similarities and disparities among different learning conditions, as well as to recognize their respective strengths and weaknesses. For instance, it is noteworthy that intentional vocabulary learning, through methods like flashcards, filling in blanks, and writing words in sentences, is relatively effective compared to encountering unfamiliar words during reading, listening, or watching television (intentional learning). The study conducted by Peters and Webb (2018) reinforces this statement since it showed that EFL students were able to acquire 3.86 out of 48 unknown target words through meaning recall, and 3.73 out of 33 unknown target words through meaning recognition tests after watching a one-hour television program.

This dichotomous categorization may sometimes lead to oversight of the benefits of one approach over the other. For example, Webb (2020) states that after a continuous word-encounter it is more likely that much more gradual knowledge could be learnt about a word's essence in terms of form, meaning, and use. Thus, it is important to view intentional and incidental vocabulary acquisition as complementary strategies rather than mutually exclusive alternatives. For that, it becomes imperative for teachers to cautiously plan the selection activities and decide if they will focus on any of the approaches individually or combine them both.

4.2.8 Strategies for vocabulary learning

Within the frame of intentionally learning and mastering word knowledge, various inquiries can be found on how to improve it. Therefore, considering elaborating strategic inquiries and providing an answer to these will maximize or reduce the rate of vocabulary learning success. The following Table 2 summarizes these questions (Gu, 2020).

Table 2.

Strategic questions to design an effective vocabulary learning road

Questions	Task type
Which words do I need to learn?	Picking and choosing
When and where can I find the words that I need?	Sources
What are the task demands and difficulties in learning each vocabulary item?	Task analysis
To what extent should I learn this item?	Learning aim
How should I deal with the different types of vocabulary that I decide to learn?	Tactics
Which tactic out of my bag of tricks is my best bet in learning this item?	Person analysis and strategy análisis
What contextual resources or constraints are there for me to learn this item?	Context analysis

Note. (Gu, 2020, p. 272)

Once some answers have been through to these questions, it is necessary to elaborate the appropriate assessment tasks to measure and control students' progress on vocabulary learning. In this take, Brown and Abeywickrama (2019) divided these tasks into receptive and productive vocabulary. In the former words are showen to learners who are asked about its meaning (recognition or comprehension). In the latter, the word is not depicted but context is provided encouraging the student to think and obtain its meaning from their memory (recall and use). Thus, to better illustrate those tasks, the researcher has considered showing them in the following items.

4.2.8.1 Vocabulary in a one-sentence context: high-frequency word. In this receptive task, the learner will have to look for the specific meaning of the underlined word in the sentence.

Figure 1.

Vocabulary recognition task.

My grandfather is a very **<u>independent</u>** person
A. never willing to give help
B. hard-working
C. not relying on other people
D. good at repairing things

4.2.8.2 Vocabulary in a one-sentence context: low-frequency word. In this item, students will need to recognize and infer the most appropriate meaning of a word based on the context provided. For instance:

Figure 2.

Low-frequency word task

4.2.8.3 Vocabulary matching exercise. This receptive vocabulary exercise requires test-takers to align the designated word with its respective signification or explanation. For example:

Figure 3.

Vocabulary matching task

Find the meaning of the following words. Write the corresponding number in the blank
1. to impose and collect by force
Apathy _____
2. to be an agent of change
Dearth _____
3. rain or seed
Catalyst _____
4. a short time
Kernel ____
5. to be insensitive to emotion or passionate feeling
Plethora _____
6. excessively large quantity; overabundance
7. lack, scarcity
8. the act or process of change

4.2.8.4 Word association. Initially, this task encompassed the introduction of the target word as a stimulus to examinees, prompting them to provide the first word that arises in their

The **<u>hazardous</u>** road conditions were the cause of many fatal accidents over the weekend.
A. difficult
B. problematic
C. dangerous
D. complicated

thoughts. However, subsequent modifications were made to shift from supply answers to requiring test-takers to select from a predetermined set of options. The following item is an example of this kind of task.

Figure 4.

Word association task

Word association			
<u>Edit</u>			
mathematics	film	pole	publishing
revise	risk	surface	text
<u>Team</u>			
alternative	chalk	ear	group
orbit	scientists	sports	together

Note. Reprinted from *Language Assessment: Principles and Classroom Practices* (3rd ed., p 281) D. Brown and P. Abeywickrama, 2019, Pearson Education ESL. Copyright 2019 by Pearson Education.

4.2.8.5 Fill in the blank. This task belongs to the set of productive vocabulary since the specified vocabulary item is omitted from a sentence, demanding the learner to comprehend the surrounding context to generate the appropriate word that is missing.

Figure 5.

Fill in the blank task

> Directions: Write one word for each blank.
> A swimmer kicks with his legs to_____ his body through the water.
> That restaurant is so popular that you have to make a _____ or you'll be waiting two hours to get a table!
> I needed some medicine, so my doctor wrote me a _____
> The recent rains have caused rivers to overflow and _____ Many areas.

Note. Reprinted from *Language Assessment: Principles and Classroom Practices* (3rd ed., p 282) D. Brown and P. Abeywickrama, 2019, Pearson Education ESL. Copyright 2019 by Pearson Education.

4.3 Previous Studies

This section is focused on a review of previous research that delves into the efficacy, perceived benefits, and overall perception of gamification in the context of English vocabulary learning. Throughout this research, six relevant previous studies have been analyzed in detail. These studies cover English vocabulary training and learning experiences at different educational levels, each of which will be presented in full in the following sections.

To commence, a study conducted by Thiagarajah et al. (2022), titled "Effectiveness of Gamification Tool in Teaching Vocabulary," utilized a combined quantitative and qualitative approach. This research was conducted with a population of 60 students attending a homeschooling center in Setia Alam. The main objective of this research was to investigate what students' attitudes were about the use of gamification tools for vocabulary skill enhancement, and whether there was a significant contrast in the perceptions of males and females about the use of Kahoot! for vocabulary learning, and whether there was a significant contrast in the perceptions of males and females about the use of Kahoot! for vocabulary learning. In addition, the research intended to discern if there was a disparity in vocabulary scores when employing Kahoot! as compared to the traditional teaching approach. Ultimately, the study's findings culminated in the conclusion that students exhibited a notably favorable outlook on the integration of Kahoot! as a tool for enhancing English vocabulary within the ESL classroom. In summary, the major findings of this investigation underscored the students' overwhelmingly positive attitude towards the utilization of Kahoot! for vocabulary skill enhancement.

Second, Panmei & Waluyo (2022) carried out research called "The Pedagogical Use of Gamification in English Vocabulary Training and Learning in Higher Education", in which data were collected using three different instruments, the first instrument was a survey questionnaire, pre-survey and post-survey. Furthermore, this investigation was conducted at an autonomous university situated in the southern region of Thailand, encompassing a total of 100 participants, consisting of 57 females and 43 males. The main objectives were to find out the results in response to two fundamental questions. First, the research aimed to assess the extent to which the pedagogical integration of gamification improved students' vocabulary learning outcomes compared to a control group studying vocabulary independently without the support of gamification. Secondly, the study sought to delve into the students' perceptions regarding the pedagogical use of gamification as a tool for facilitating vocabulary development, promoting learner autonomy, and improving overall learning results. Upon completion of the research analysis, the initial finding revealed that, despite the notable scores obtained, there were no statistically significant disparities in overall vocabulary scores between students in the experimental group and those in the control group. In contrast, the second finding served to corroborate the emotional and experiential dimensions of students' vocabulary development throughout the research intervention.

On the other hand, Dindar et al. (2020)**,** made a study called "An experimental study on the effects of gamified cooperation and competition on English vocabulary learning". The purpose of this study is to find results of the proposed research questions which are: Is there a difference between gamified competition and gamified cooperation conditions in terms of effort to complete the English vocabulary learning tasks? Do gamified cooperation and competition conditions differ from each other in relation to learning achievement in English vocabulary learning? Is there a difference between gamified cooperation and competition conditions in terms of task interest and enjoyment in English vocabulary learning? And Is the social relatedness amongst the learners in gamified cooperation conditions different than the social relatedness amongst the learners in gamified competition conditions? To achieve this, the study involved 75 participants who were randomly assigned to either the gamified cooperation condition or the gamified competition condition and studied English vocabulary for 14 days. And also, the research and data collection were conducted through online platforms (questionnaire and quiz). Finally at the end of the research, it could be confirmed that the results indicate that there are no significant differences between gamified competition and gamified cooperation in terms of learning achievement.

Equally important, Genç Ersoy & Belet Boyaci (2021), researched on "Devising Gamification for Vocabulary Development and Motivation: An Experimental, Mixed-Model Study". This research employed a mixed-method, nested experimental design, where the primary framework was experimental, with qualitative data nested within quantitative data. So, in this study, they wanted to find out two things. First, they asked if students who learned vocabulary through games and those who learned in a more traditional way had different scores before and after learning. Second, they wanted to know what students thought about these two methods of learning vocabulary in their course. The study involved 34 fourth graders. What is important here is that when they summed the scores of how well the students learned new words and how motivated they were to learn, they observed a big difference between the group that learned through games and the group that was taught directly by a teacher.

Furthermore, Fithriani R (2021)**,** employed a study named "The Utilization of Mobile-assisted Gamification for Vocabulary Learning: Its Efficacy and Perceived Benefits". This study aimed to do two things. First, the researcher wanted to check whether the use of gamification on cell phones helps Indonesian adult learners of English as a foreign language to improve in

learning new words. Second, the researcher wanted to know what these learners thought about the use of these games. For this research, 74 first-year general English students from a university in Indonesia were selected as participants in this study and then randomly assigned to the experimental and control groups. Additionally, to align with the research inquiries, two tools were employed to gather information: vocabulary tests and questionnaires. In addition, both pre- and post-tests were conducted using online questionnaires to collect data, which were subsequently analyzed utilizing the SPSS 20 package. In summary, the key findings revealed that students in the experimental group achieved better results compared to their peers in the control group. Importantly, these findings substantiate the advantages of using mobile-assisted gamification for vocabulary learning, particularly in terms of improved learning outcomes, enhanced enjoyment, and increased motivation.

Lastly, Tiana et al. (2021), mentioned the title of their investigation as "Applying Online Gamification as the Media in Online Learning for Enhancing Learners' Vocabulary". This research employed a quantitative approach and employed a quasi-experimental design featuring pre-test and post-test evaluations. The study involved the formation of two groups, an experimental group and a control group, each composed of 32 students. The principal objective was to investigate whether the utilization of Kahoot, Quizizz, and Google Forms as online exercise platforms made a significant difference in enhancing learners' vocabulary. In summary, the findings from this study revealed notable distinctions when Kahoot and Quizizz were employed as exercise tools to enhance students' vocabulary, whereas no such significant difference was observed when Google Forms were used.

5. Methodology

5.1 Research Design

In general terms, the research project adopted a mixed-method approach within the framework of an action research model. This approach involved not only conducting research but also implementing an intervention proposal as part of the study.

To begin with, Molina, (2016) defines a mixed method approach as " the combination and integration of qualitative and quantitative methods in the same study". On the one hand, qualitative research assumes a fundamental research role, as it provides a means to explore and understand how individuals or groups attribute meaning to a social or human issue. In such a way, the research process involves the development of inquiries and methodologies, the collection of data usually in the participant's setting, the analysis of the data by extracting general patterns from specific cases, and the interpretation of the meaning of the data by the researcher (Creswell, 2008). On the other hand, the quantitative research method is collecting and analyzing numerical data. This method is ideal for identifying trends and averages, making predictions, verifying relationships, and obtaining general results. Similarly, this can be evaluated through the use of instruments, typically resulting in numerical data that can be subjected to statistical analysis methods (Creswell, 2008). Consequently, the mixed method is the most appropriate for this project, since through it, the researcher collected and analyzed quantitative data corresponding to students' vocabulary scores, as well as qualitative data comprising students' perceptions of the use of gamification for vocabulary learning.

5.2 Data Collection Sources and Techniques

As this research adopts a mixed-method approach, a combination of data collection techniques and instruments were used.

First, a pretest and a posttest were used to collect quantitative data, the questions contained questions such as, sorting, matching, space filling, etc. The purpose of this data collection was to help the researcher determine the level of knowledge about vocabulary learning before and after the intervention proposal.

Furthermore, an observation technique using the instrument of field notes on a weekly basis was used to collect data on the students' progress after introducing the use of gamification as a learning strategy. In addition, this technique allowed the researcher to collect qualitative data to complement the quantitative analysis of the research.

At last, the researcher applied a survey technique using a questionnaire instrument, which was used to obtain information about the learners' perception on the application of gamification to enhance vocabulary learning in EFL.

5.3 Data Analysis

From the point of view, Yellapu (2018) asserts that descriptive statistics is a way for researchers to organize and summarize data they have collected. It helps them to understand the relationship between different things they are studying. By putting the data in an organized form, connected things can be seen and learned in research. It is like sorting the data into groups to make it easier to understand.

5.3.1 Quantitative data

Descriptive statistics were used to analyze the quantitative data, which were presented through a tabulation of data reflected in tables and graphs. The results obtained allowed the researcher to measure the central tendency of the results obtained in the pretest and posttest (see Annex 1).

5.3.2 Qualitative data

Next, the analysis of the qualitative data will be carried out, for which all the observations taken from the field notes will be considered, as well as the different points of view and opinions that the students will indicate in the questionnaire. In this way, the effectiveness of using gamification to improve vocabulary will be evaluated. (see Annex 2).

5.4 Research Participants

In this research project, the participants of the following work were the researcher, who acted as a teacher and was part of the study considering that it is action research. Also, part of this study were 23 students of superior basic education of a public institution in Loja, whose age average ranges between 11 and 13 years old. This sample was taken by convenience because they have some deficiency in vocabulary learning.

5.5 Timing

The intervention plan had a duration of two months of English classes that were developed in eight weeks, with 3 hours of classes per week that were taught in the morning session during the 2023-2024 school year. In this intervention proposal, the teacher used the gamification strategy to improve the students' vocabulary learning.

5.6 Procedure

  The present research followed the five steps of the action research cycle suggested by Yasmeen (2008), which emphasizes collaboration, participation, and learning, which allowed the researcher to find solutions and achieve significant change to the problem previously identified within the classroom.

5.6.1 Diagnosing

  In the first stage of the research, it is essential to begin by identifying the problem, since this will establish the basis for the planning and execution of innovative actions. Then, the researcher analyzed what has happened in the English classes through the new experiences and will look for problems or things that did not work well.

5.6.2 Action Planning

  After identifying the problem, during the action planning stage, the researcher created an intervention plan that listed all the actions intended to solve it. In other words, the plan detailed what steps would be taken to enhance and accomplish vocabulary learning. Consequently, the plan explained how the use of gamification was implemented to address issues in English vocabulary learning.

5.6.3 Action Taking

  During the action taking stage, the researcher put the intervention proposal into practice, implementing what had been planned. In other words, the researcher selected the course of action for the research and the use of gamification to enhance vocabulary with the target group. To achieve this, data collection instruments were utilized, including a pre and post-test, field notes, and a survey technique employing a questionnaire instrument.

5.6.4 Evaluating

  During the evaluating stage, the collected information on the results of the intervention plan was analyzed and interpreted. Subsequently, the quantitative data was presented in tables and graphs. In contrast, the qualitative data was presented descriptively, as it pertained to what the students had expressed in the field notes and questionnaire.

5.6.5 Specifying

  Finally, after evaluating and obtaining results during the research process, all significant findings were acknowledged. At the end of the research work, everything that had been learned during that period of development was discussed and questioned, demonstrating how well the use

of gamification for vocabulary learning worked. These findings were communicated through conclusions and recommendations in the report.

6. Results

In the following section, the results obtained through the research instruments, which encompass both quantitative and qualitative approaches, are shown. With the help of these instruments, which were the pre- and post-test, the researcher was able to evaluate the students' performance after the intervention proposal, in terms of vocabulary considering indicators such as: spelling, meaning, association, collocation, and grammatical function.

6.1 Pre-test and Post-test Results

Objective 1: To validate the effectiveness of gamification on the improvement of English vocabulary learning among superior basic education students at a public institution of Loja.

First of all, the pre-test results are presented as follows:

Pre - Test Results

Table 3

Pre-test scores on vocabulary learning of 8ᵗʰ grade students

Grading scale (2/2)	Spelling		Meaning		Association		Collocation		Grammatical function	
	f	%	f	%	f	%	f	%	f	%
0 - 0,5	12	52	7	30	10	43	10	43	16	70
0,6 - 1	8	35	14	61	12	52	12	52	6	26
1,1 - 1,5	3	13	1	4	0	0	0	0	1	4
1,6 - 2	0	0	1	4	1	4	1	4	0	0
Total of students	**23**	**100**	**23**	**100**	**23**	**100**	**23**	**100**	**23**	**100**
Mean	**0,67**		**0,75**		**0,74**		**0,87**		**0,48**	

Table 3 displays the number and percentage of eighth-grade students who achieved scores in the ranges 0–0,5; 0,6–1; 1,1–1,5; and 1,6–2 across some vocabulary indicators, such as spelling, meaning, association, collocation, and grammatical function.

In the item 1 which was about spelling vocabulary words correctly, 52% of the students achieved a score between 0 and 0,5 in "spelling" words. This indicates that they face significant challenges in spelling, either due to insufficient practice or a lack of interest. Additionally, 35% of the students scored in the range of 0,6 and 1, which is still a low score because students show limitations in spelling vocabulary written exercises. Lastly, 13% of the students got a score between 1,1 and 1,5 in spelling vocabulary. It is evident that most students have problems

spelling words in the English language vocabulary. This indicator got a total mean of 0,67 out of 2.

Regarding the item about "meaning" vocabulary the results showed that 61% of the students scored between 0.6 and 1. This indicates that most of the students have difficulties identifying meaning through the use of pictures and recognizing the meaning of their vocabulary. In addition, 30% of them scored between 0 and 0.5, which means that a substantial part of the student population also had difficulties recognizing the meaning of the vocabulary. Finally, 4% of the students scored in the upper ranges of 1.1 to 1.5 and 1.6 to 2. This suggests that very few students performed well on the test, achieving above-average scores.

Within the "association" vocabulary, the majority of students scored between 0.6 and 1, with 52%, which shows that they have a moderate level of understanding of the meaning of words and are able to associate them. Meanwhile, 43% scored between 0 and 0.5, which shows that they have too much difficulty associating words with each other based on their meaning. And only 4% scored between 1.6 and 2, indicating a high level of comprehension—that is, they can connect words based on their meaning. Taken together, these data gave a mean score of 0,74 out of 2.

Next, regarding item 4 of the vocabulary "collocation," 52% of the sample obtained a score of 0.6 to 1, which shows that most of the students have mastered the combinations of words within a sentence. However, 43% of the students had difficulties with the use of collocations, with a score between 0 and 0.5. In addition, only a small percentage, 4%, demonstrated a high level of proficiency, with a score between 1.6 and 2. In summary, the results show an average score of 0.87 out of 2.

Finally, in the "grammatical function" of the vocabulary, 70% of the students obtained a score between 0 and 0.5, which shows that most of the students could not recognize the correct grammatical function of the word or phrase. This result indicates a lack of learning the grammatical structures of the tenses and the use of vocabulary. In addition, 26% of the students obtained a score between 0.6 and 1, which is still considered low, and they have difficulties with grammatical functions. Instead, 4% of the students scored between 1.1 and 1.5, which indicates that there is a minority of students who have demonstrated some mastery of the grammatical functions. Overall, the results indicate a mean score of 0.48 out of 2.

To sum up, it was included to demonstrate the importance of knowing how to master the vocabulary, since it is the basis for English language learning. Considering the results obtained, the researcher was oriented towards the implementation of an intervention plan, which involved the use of gamification.

Post – Test Results

Table 4

Post-test scores on vocabulary learning of 8th grade students

Grading scale (2/2)	Spelling		Meaning		Association		Collocation		Grammatical function	
	f	%	f	%	f	%	f	%	f	%
0 - 0,5	1	4	0	0	2	9	6	26	6	26
0,6 - 1	2	9	0	0	2	9	9	39	5	22
1,1 - 1,5	8	35	1	4	0	0	3	13	8	35
1,6 - 2	12	52	22	96	19	83	5	22	4	17
Total of students	**23**	**100**	**23**	**100**	**23**	**100**	**23**	**100**	**23**	**100**
Mean	**1,67**		**1,87**		**1,78**		**1,11**		**1,15**	

After the intervention period of eight weeks, a post-test was administered to the students to measure their vocabulary level, such as spelling, meaning, association, collocation, and grammatical function. Table 4 shows the number and percentage of eighth graders who scored between 0-0,5, 0,6-1, 1,1-1.5, and 1,6-2 on each vocabulary indicator.

As can be seen in Table 4, the "spelling" component showed that 52% of the students who scored between 1,6 and 2 did not have any difficulties in ordering letters and forming words. On the other hand, 4% of them scored between 0 and 0,5, indicating that some students were limited in their knowledge of basic and common vocabulary. This limitation is reflected in the confusion and misspellings present in their writings. As a result, this component obtained a mean of 1,67 out of 2.

In addition, in the "meaning" indicator, 96% of the students scored between 1.6 and 2, which shows that they had no problems identifying the meaning of words since their score was as good as expected. On the other hand, only a small percentage, which is 3% of the students, scored between 1, 1, and 1,5, which indicates that some might have had a little difficulty in their basic

vocabulary knowledge. In summary, the overall mean score is notably high at 1, 87 out of 2, suggesting a solid overall mastery of vocabulary among most of the students tested.

Regarding "association," 83% of the students obtained a score between 1,6 and 2, which shows a high knowledge of associating and understanding the meaning of words in the appropriate context. However, 9% scored between 0 and 0,5, as they showed an attempt to associate with their respective word meanings. This indicates that they have some difficulties associating words with their correct meaning. Therefore, the mean score is relatively high, with a value of 1,78out of 2.

About collocation, the results obtained in the post-test revealed that 39% of the students obtained a score between 0,6 and 1, which shows that they still have problems with "collocation." They could not adequately adapt word collocations within a sentence due to a lack of understanding of the appropriate collocations in each context. On the other hand, 22% of the participants scored between 1,6 and 2, indicating a stronger ability to effectively use word collocations. The overall mean is 1,11 out of 2.

Finally, in the "grammatical function," 35% of the students obtained a score between 1.1 and 1.5, which shows that most of the students recognized the grammatical use of words and had an improvement, as expected. However, 26% of the students scored between 0 and 0.5, which shows that there was a small problem with identifying the correct grammatical function of the words; they were confused in some cases. Therefore, the average obtained for this indicator was 1.15 out of 2.

To summarize, the results obtained revealed that the use of gamification was effective in terms of improving vocabulary such as spelling, meaning, association, collocation, and grammatical function with eighth grade students. In fact, the improvement could be evidenced by comparing the pre-test and post-test. To this end, the results of the questionnaire helped to analyze data on vocabulary improvement.

Figure 6

Comparison between the total pre-test and post-test means on the performance of eighth grade students' vocabulary knowledge

Comparison between pre-test and post-test total means
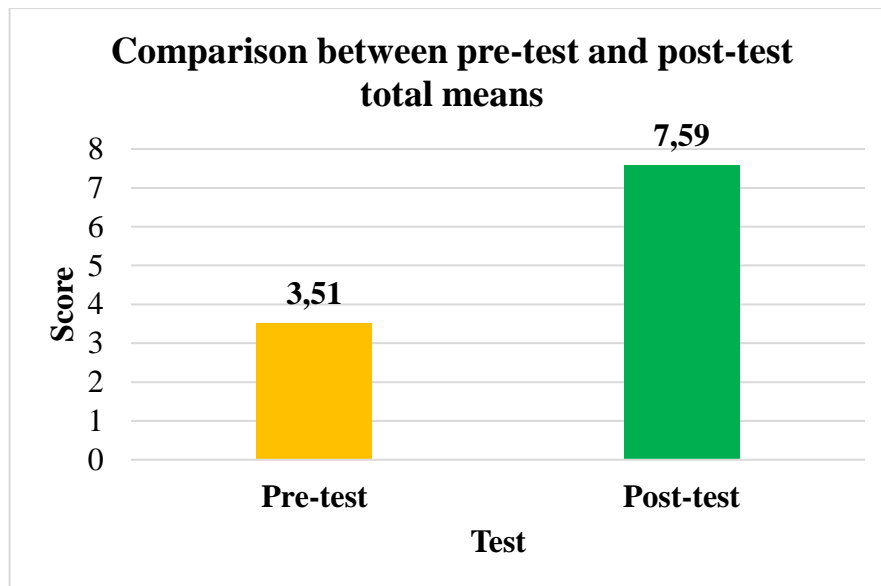
As shown in Figure 6, the mean scores obtained for students' vocabulary performance in the pretest and posttest are summarized. The purpose of the application of both tests was to measure and determine the improvement of English vocabulary learning in eighth graders, considering vocabulary indicators such as spelling, meaning, association, collocation, and grammatical function.

Accordingly, the overall pretest mean was 3.51/10, while the posttest mean was 7.59/10. Undoubtedly, these results revealed that the application of gamified elements and strategies was effective in increasing the level of vocabulary in eighth grade students. Moreover, the great improvement in vocabulary knowledge could be evidenced by comparing the pre-test and post-test.

6.2 Questionnaire Results

The questionnaire, composed of open and closed questions, was used to corroborate the findings obtained. Likewise, field notes were incorporated that collected significant data about students' perceptions regarding the implementation of gamification in the English vocabulary learning process, specifically with eighth grade students. Therefore, the data will be presented in tables and bar graphs with their corresponding interpretations and analyses.

Objective two: To explore students' perceptions about the use of gamification on the development of English vocabulary learning among eighth-grade students at a public institution of Loja.

Figure 7

Students' like about gamification in vocabulary learning

Students' like about gamification in vocabulary learning

(Bar chart: Yes 91% — approx. 21 students; No 4% — approx. 1 student; Sometimes 4% — approx. 1 student. Y-axis: "Students number" 0–25.)
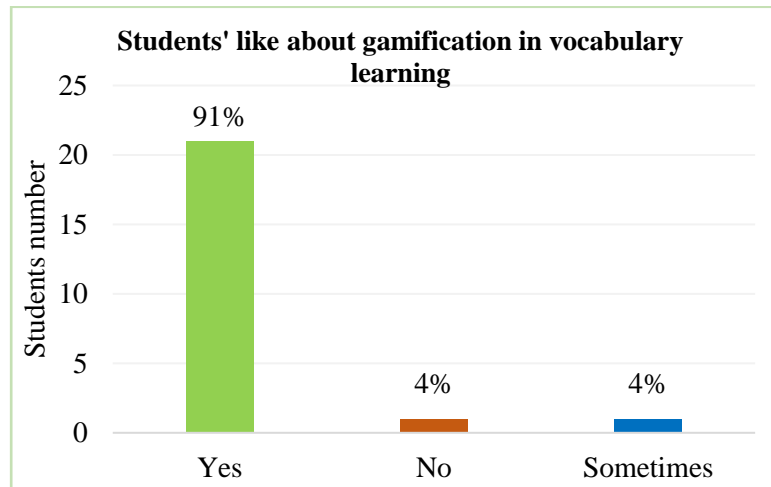
As seen in Figure 7, a remarkable 91% of students expressed a liking for learning vocabulary through gamification, highlighting their enthusiasm for learning English through various classroom games. The researcher's observations revealed that many students felt motivated, engaged, and exhibited positive emotions when participating in gamified strategies.

However, 4% of the students indicated that they sometimes liked learning vocabulary through gamification. They explained that, in certain cases, they felt fatigued and lacked the necessary mood to participate in gamified activities. On the other hand, a small percentage, 4%, mentioned that they did not like it.

Figure 8

Interaction and participation in games

Interaction and participation in games

(Bar chart: Yes 57% — approx. 13; No 9% — approx. 2; Sometimes 35% — approx. 8. Y-axis: 0–14.)
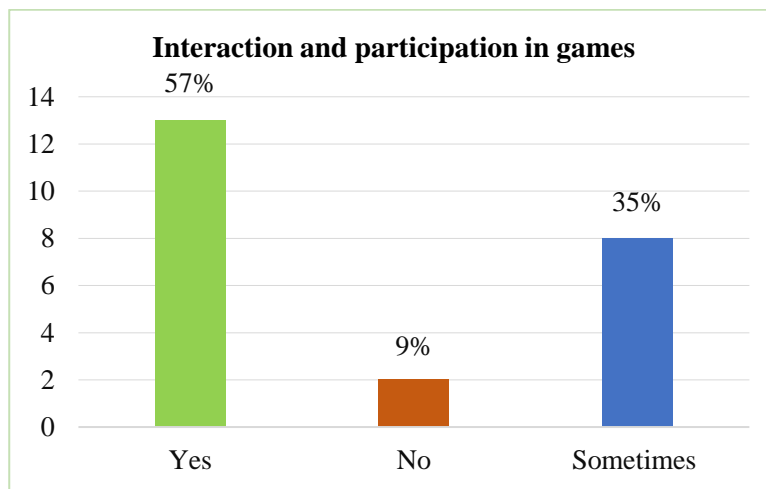
According to the data collected, as can be seen in Figure 8, 57% of the students claimed to interact and participate in online and conventional games to learn vocabulary. Meanwhile, 37% mentioned that they sometimes participated in this type of activity, and on the other hand, 9% indicated that they did not. This shows a varied participation in vocabulary learning games, with a significant majority having interacted in some way with them. Through the researcher's observations, the teacher identified that some students felt a bit insecure and were also fearful of mentioning an incorrect answer when participating, since other classmates might make fun of him or her.

Figure 9

Acquiring new vocabulary through in fun games

Acquiring new vocabulary through in fun games
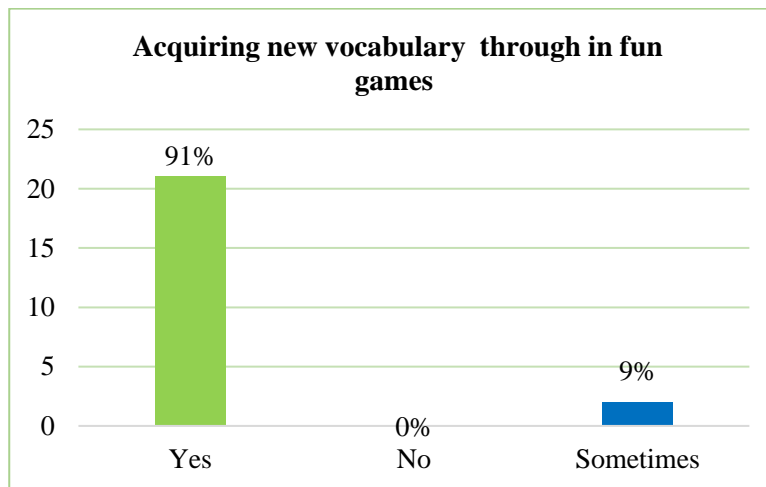
As you can see in Figure 9, the results show that 91% of the students affirmed that they did learn a lot of new vocabulary; in fact, they consider that the games have allowed them to acquire vocabulary in an entertaining and attractive way. This shows that the games are effective for word learning. However, a small percentage of 9% mentioned that they sometimes experience this feeling, indicating some variability in perception among the students. In addition, through the researcher's observations, the teacher saw that most of the students learned new words, since when they returned to the next class, the teacher asked questions about the topic seen before.

Figure 10

That motivated students in vocabulary learning

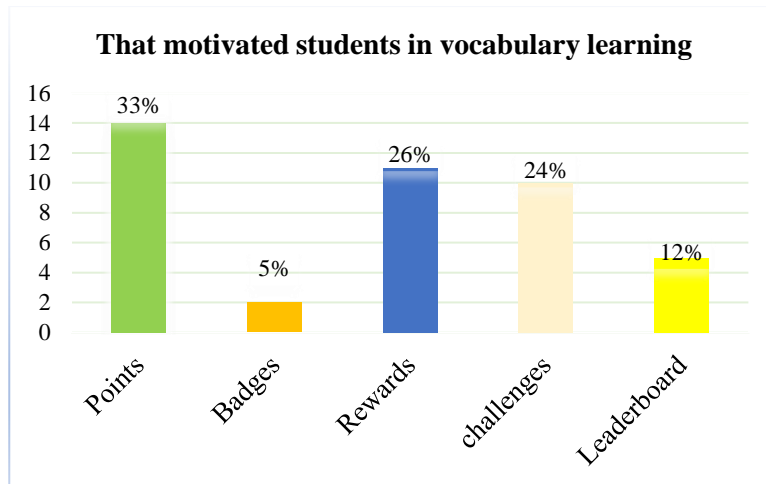**That motivated students in vocabulary learning**

Figure 9 shows the frequency of the gamification elements that motivated them the most in English vocabulary learning. The results indicate that the most motivating element was the assignment of points, with 33% of the students mentioning it as a significant factor as it offered them a tangible measure of progress and achievement. Likewise, 26% of the students felt that the rewards also incentivized them to learn. The researcher's field notes corroborate this result, as the teacher observed that the students were motivated and participated in class in order to obtain rewards for their achievements.

On the other hand, the challenges played an important role, with 24% of them also mentioning them as a motivator. Similarly, the field notes corroborate this result because most of the students were very enthusiastic about the activity, both the individual and group activity. The students were very excited, aiming to surpass themselves or the other group and demonstrate their skills and also to face new challenges.

To a lesser extent, 12% mentioned the leaderboard element, indicating that the friendly competition also contributed to their motivation. Finally, only 5% considered the badges as a relevant factor, because although the badges provided a sense of achievement, they were not as influential as other elements in the gamification process for vocabulary learning.

Figure 11

Engagement of students in vocabulary learning through games

Engagement of students in vocabulary learning through games
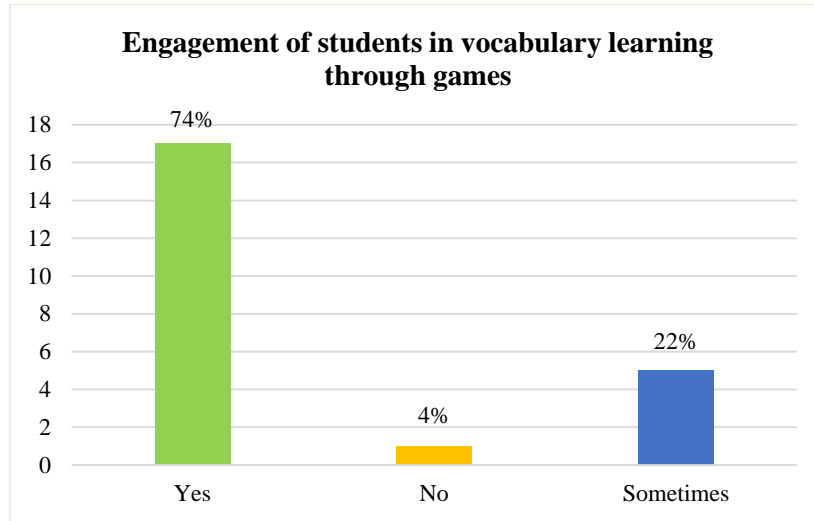
Figure 10 shows the level of students' engagement in learning vocabulary through games. The results show that most of the students responded that they were involved in learning vocabulary through games, with a percentage of 74%. According to the researcher's observations, this result can be affirmed since the teacher saw that most of the students were very engaged in learning, always wanting to participate in each activity that the teacher carried out.

However, 22% mentioned that sometimes they did not feel engaged with the learning. And a small percentage, 4%, responded that they did not, suggesting that a minority chose not to comment on their participation in these activities. Overall, these results suggest a high level of interest and engagement in learning vocabulary through games.

Figure 12

Student team collaboration in learning vocabulary through games

Student team collaboration in learning vocabulary through games

Figure 11 shows students' collaboration with their peers as a team while learning vocabulary through games. Seventy percent of the students stated that they collaborated as a team to learn vocabulary. This high rate of positive responses suggests that most students experienced collaboration as an integral part of their learning experience, which is even mo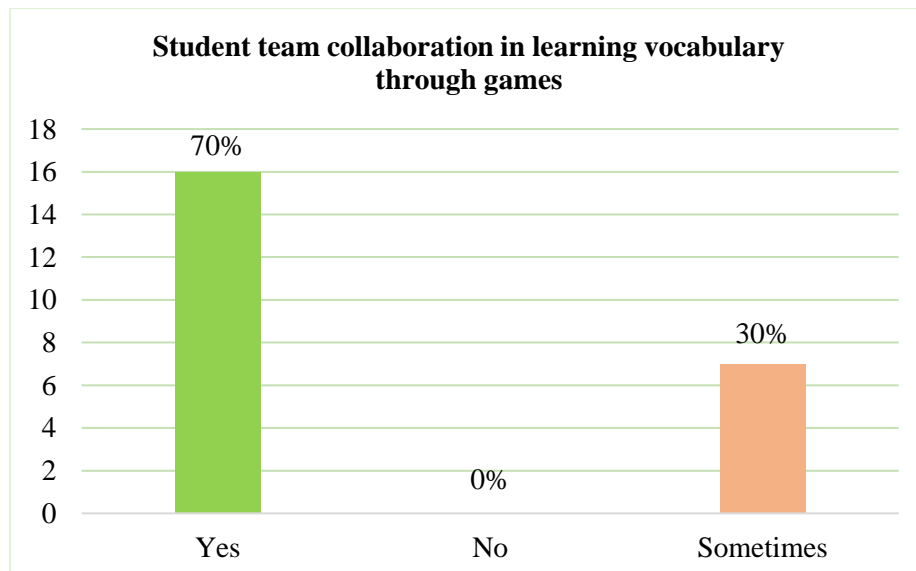re remarkable as there were no negative responses. In fact, the field notes confirm this, because the teacher, when making groups to work as a team, especially in the bingo game or board game, always saw that there was mutual collaboration and help among them, with the goal of winning and being rewarded.

However, 30% mentioned that they sometimes collaborated. Within this question, some students said that they did not want to collaborate because they felt a little uncomfortable with other classmates, since they did not have much trust, but collaboration was possible, although it was not a constant in all game experiences. Overall, these results suggest that collaboration as a team is a common and valuable feature of vocabulary learning through games.

Figure 13

The most entertaining games according to the students' opinion
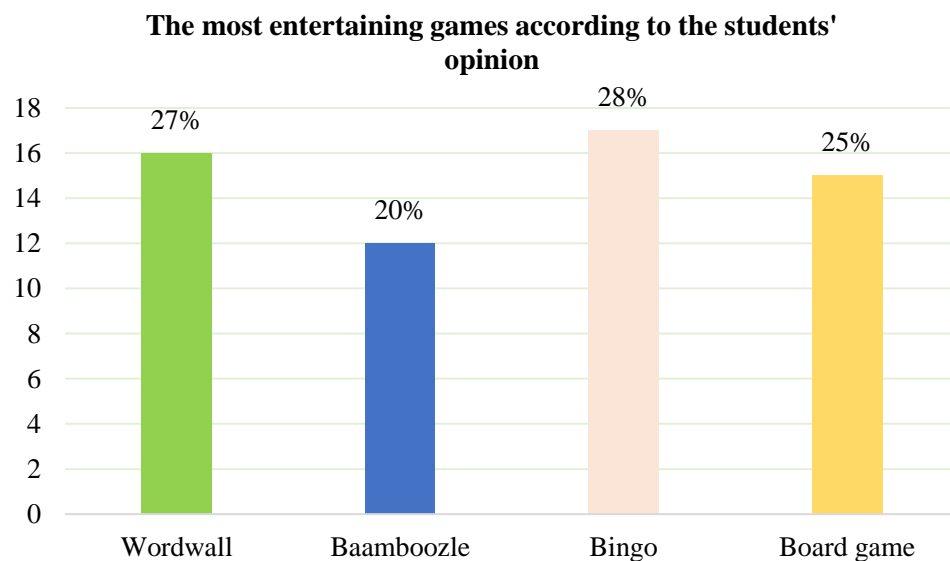
According to the data collected, as shown in Figure 12, bingo was the most mentioned game as the most entertaining for improving vocabulary, with a percentage of 28%. Within this question, the majority of students said that learning vocabulary in English through the game of bingo is very fun and entertaining, which is very exciting. Likewise, with 27% of favorable

responses, the Wordwall game was mentioned, as this game was competitive, especially due to the time limit in each game, and also because it fostered excitement in the learning process.

On the other hand, conventional board games were also highly valued, with 25% of responses, while Baamboozle received 20%. These results suggest a varied preference among students regarding the platforms and conventional games used to improve vocabulary, with bingo standing out as the most popular option in terms of entertainment.

7. Discussion

In this section, we address an interesting discussion that highlights how the results of this study are related to some previous studies mentioned above. In addition, this section provides detailed explanations of the answers to each research question and the limitations encountered during the intervention plan.

The present study was designed to improve English vocabulary learning by using gamification. Therefore, the researcher proposed a main research question: How does gamification improve the English vocabulary learning among superior basic education students at a public institution in Loja, during the school year 2023 - 2024? The study revealed a remarkable impact on the improvement of English vocabulary learning with eighth grade students. After the application of gamification, the mean score of the post-test increased with respect to the pre-test. It is supported by Thiagarajah et al. (2022), who found that the use of gamification tools can help and improve English vocabulary learning and student motivation, as students indicated that it was more academically interesting, fun, engaging, and well organized, allowing them to communicate their thoughts and ideas in a more constructive way, and this was confirmed by the students' results and scores.

In this regard, the first sub-question was: What is the effectiveness of gamification in English vocabulary learning among superior basic education students at a public institution in Loja? The results showed that the use of gamification had an impact on effectiveness since the post-test score was 7.59 out of 10, while the pre-test had a difference of 3.5 out of 10. This means that it was very useful, as gamification promotes the expansion of vocabulary and the improvement of indicators such as spelling, meaning, association, collocation, and grammatical function following the implementation of gamification. Similarly, previous studies have indicated that the use of gamification helps students learn unfamiliar words and phrases through games. According to Ketola J (2019), who states that they also obtained good results with respect to the mean scores of the students' pre-test and post-test, the mean scores in the pre-test is 3.59 and in the post-test with 8.98.

In fact, this indicates that incorporating games into vocabulary learning is highly effective, and consequently, utilizing gamified elements such as points, rewards, and challenges was a highly effective strategy for enhancing students' vocabulary in an engaging and enjoyable

manner. Khaleel et al., (2020) established in their findings that the implementation of gamification in the educational field offers significant advantages, as these elements are fundamental for enhancing individuals' effectiveness and understanding in a pleasant and enjoyable educational environment, resulting in exceptional performance.

In this regard, the second sub-question was: what are students' perceptions about the use of gamification on the development of English vocabulary learning among superior basic education students at a public institution in Loja? The results highlight students' perceptions that the use of gamification in English vocabulary teaching not only improved academic performance, as shown in Table 4, but also fostered collaborative, participatory, and enjoyable learning, as evidenced in Figures 8, 11, and 12. These findings indicate a positive impact, as the games provided a rich and meaningful context for learning, where students were actively engaged in constructing their knowledge. Furthermore, these results agree with the findings of Thiagarajah et al. (2022), who showed that "gamification tools have increased student's interest and motivation in learning" (p. 1049). Additionally, Thiagarajah et al. (2022) found that students are enthusiastic about learning English vocabulary through the use of gamification because they can learn in a fun and entertaining way.

On the other hand, the results revealed that the students found it enjoyable and entertaining to learn English vocabulary through bingo, which was very fun and exciting. Moreover, they found it better because they could remember the words when they played a game instead of just memorizing them. They even said that it was very cool to learn and practice vocabulary in a non-traditional way, as shown in Figure 12. These findings are consistent with Syukron and A.E. (2022), which state that the students were very satisfied and enjoyed learning vocabulary through the bingo game. They perceived that the game enhanced their learning experience and made it more enjoyable and entertaining. This perception was evidenced by the improvement in vocabulary acquisition, as shown by the average pre- and post-test scores, in which students performed well.

Likewise, with the implementation of Wordwall, the results showed that students had positive attitudes because the games and activities facilitated the retention of the meaning of each word. Therefore, the use of Wordwall proved to be an effective strategy for learning vocabulary, including spelling, meanings, associations, collocations, and grammatical functions. Most

students expressed that this tool promotes greater engagement and is very useful for practicing and learning new words in a more dynamic way than simply reading them in a book. This aligns with Hasram (2015), who states that "the use of online games promotes engagement through repetition, contributing to a deeper understanding of vocabulary and the ability to recall spelling easily." (p.1063).

In addition, the incorporation of board games also had a positive perception among the students because, through this game, they stated that it allowed them to remember words more easily and, at the same time, it allowed them to always be motivated and eager to learn. This game allowed them to learn English vocabulary in a fun, interactive, and entertaining way, facilitating the stimulation of each student's interest. In short, board games are definitely a useful and innovative tool for vocabulary learning because they allow children to retain words and learn vocabulary in a fun and interesting way. (Quinchuela Andrade, 2023, p. 24)

Finally, the Bamboozle application stood out in the students' perceptions, showing positive results in vocabulary learning. This particular game streamlined the learning process, adding dynamism, interest, and entertainment. The platform offers an interactive and playful experience that facilitates the retention of words and concepts very easily. These findings are supported by Hieu (2021), who states that students feel motivated and confident during learning, in addition to being highly interested in actively participating in class.

However, one of the limitations that emerged in the research work was the lack of technological tools and Internet access, which significantly hindered the learning process. As a result, it is suggested to expand the research around the use of gamification not only in English vocabulary learning but also in other skills for future research. In addition, it would be beneficial to explore alternatives to overcome these limitations, such as the development of educational applications accessible offline or the implementation of gamification strategies that do not depend exclusively on Internet connectivity.

8. Conclusions

Based on the results obtained on the use of gamification for English vocabulary learning, it can be concluded that:

The use of gamification to improve English vocabulary learning with eighth-grade students had a significant positive impact, improving various aspects of vocabulary such as spelling words, meanings, association, collocation, and grammatical function. Students found that this methodology provided them with fun and engaging learning while expanding their vocabulary, resulting in a noticeable improvement in the English language vocabulary learning.

The results of the pre-test and post-test clearly indicate that the implementation of gamification was effective in improving English vocabulary learning. The comparison between the average scores obtained in both tests reveals a substantial increase in vocabulary knowledge as well as in recognizing form, meaning and use of new words. These findings confirm that gamification is an effective methodology into the English language vocabulary teaching learning process.

Students' perceptions were positive regarding the use of gamification, as eighth-grade students showed a strong preference and liking for learning vocabulary through games. Highlighting their interest, active participation, and perception that games facilitate the learning of new words in an entertaining and engaging manner. In summary, the results underscore the positive impact of gamification on students' attitudes and their participation in vocabulary learning.

Gamification elements such as points, rewards, challenges, and leaderboards, stimulated students' competitive spirit and encouraged their active participation in learning new English vocabulary. Additionally, students affirmed that they enjoyed the playful activities, by feeling motivated by rewards and challenges, and experiencing engagement, collaboration and teamwork with their peers. Ultimately, this innovative approach has proven to be an effective and promising strategy for raising students' vocabulary competence.

9. Recommendations

Based on the results presented before, it can be given some recommendations:

It is recommended that teachers consider integrating gamified learning approaches into the English language curriculum. By incorporating gamification strategies, teachers can create an immersive and enjoyable learning environment that effectively promotes vocabulary expansion and comprehension. Furthermore, ongoing research and experimentation with different gamification techniques are encouraged to optimize learning outcomes and cater to diverse student needs and preferences.

In light of the clear benefits observed from the implementation of gamification in improving English vocabulary learning, it is recommended that students actively engage with gamified learning platforms and activities to enhance their English language learning acquisition. By embracing gamification techniques, students can enjoy a more dynamic and interactive approach to learning vocabulary, leading to greater retention and comprehension. Additionally, students are encouraged to explore various gamified resources and applications tailored to their English language individual learning styles and preferences.

Considering the strong preference and enthusiasm demonstrated by eighth-grade students for gamified vocabulary in the English language learning contexts. Authorities are encouraged to provide professional development opportunities for teachers to familiarize them with gamification strategies and their implementation in the classroom. Equipping teachers with the necessary knowledge and skills will enable them to effectively leverage gamified learning experiences to enhance students' vocabulary learning outcomes and foster a more interactive and enjoyable learning environment.

Teachers and curriculum developers should take into account the game elements that provoke discouragement with students and incorporate playful activities, rewards, and challenges to foster students' enjoyment and commitment to vocabulary learning. Additionally, Further research and experimentation should be conducted to explore the long-term effects and sustainability of gamified vocabulary learning approaches based on teachers and student's feedback.

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11. Annexes

Annex 1. Pretest and Post-test

UNIVERSIDAD NACIONAL DE LOJA
DEPARTMENT OF PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTR0ANJEROS
DATA COLLECTION INSTRUMENT: PRE-TEST

Dear student, answer the following test with sincerity and honesty. Your answers will be anonymous and confidential.

Student`s code. …………………………………………………..

Date: …………………………………………….

Spelling

1. **Order the letter to complete the word according to the graph. 2 points (0,50)**

❖

M	E	N	A

My _____ is Carlos

❖

R	T	E	P	A	N	I

I am a _____

❖

E	D	C	E	H	A	A	H

I have a _____

•

T	R	Q	U	I	S	E	O	U

My favorite color is _____

Meaning

2. **Choose a word from the box and write it under the corresponding graph. (2 points – 0,25)**

Shoes	Dress	Socks	Jacket
T- Shirt	Tie	Jeans	Shirt

[   ]   [   ]

[   ]   [   ]

[   ]   [   ]

[   ]   [   ]

Association

3. **Match the lexical sets with their corresponding word category. (2 points – 0,50)**

[   ]   a.   Clothes   1. Pan, spoon, glass, knife

[   ]   b.   Family members   2. Niece, ancle, aunt, nephew

[   ]   c.   Accessories   3. Scarf, cap, dress, skirt,

[   ]   d.   Kitchen   4. Ring, handle, watch, glasses

Collocations

4. **Underline the correct collocation. (2 points – 0,50)**

❖ My brothers always **watch / look** at video on the tablet.

❖ Carla is my best friend. I always **talk / talk to** her.

❖ I like to **listen / listen to** reggaeton music when I'm alone.

❖ Carla **sails / surfs** the Internet every day.

Grammatical functions

5. **Order the following sentences. (2 points – 0,50)**

❖ student/ I / am / a / intelligent / very

❖ Pablo / brother / my / is

❖ brother`s / is / my / nephew / My / son

❖ My / daughter / is / my / brother`s / niece

THANKS FOR YOUR COLLABORATION!

UNIVERSIDAD NACIONAL DE LOJA
DEPARTMENT OF PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS
DATA COLLECTION INSTRUMENT: POST-TEST

Dear student, answer the following test with sincerity and honesty. Your answers will be anonymous and confidential.

Student`s code. …………………………………………………..

Date: …………………………………………………….

Spelling

1. **Order the letter to complete the word according to the graph. 2 points (0,50)**

❖

O	Y	J	N		E

I _____ listening to music

❖

O	P	M	N	L	I	E	C	A

I am a _____

❖

S	E	S	T	I	R	S

I have two _____

●

U	P	P	L	R	E

My favorite color is _____

Meaning

2. **Choose a word from the box and write it under the corresponding graph. (2 points – 0,25)**

Short	Pajamas	T - Shirt	Skirt
Sneakers	Gloves	Boots	Cap

Association

3. **Match the lexical sets with their corresponding word category. (2 points – 0,50)**

a. Clothes   1. Short, curly, wavy, long, bald.

b. Family members   2. Brother, Grandfather, daughter, son.

c. Accessories   3. Jacket, pants, skirt, coat, vest.

d. Hairstyles   4. Earring, bracelet, sunglasses, belt, purse.

Collocations

4. **Underline the correct collocation. (2 points – 0,50)**

❖ My dad likes **to read** / **read** bedtime stories to my little sister.

❖ During recess, I like **play / to play** games with my classmates.

❖ I need **to do / do** my homework before I can go out to play.

❖ My sister loves **sing / to sing** along to her favorite songs.

Grammatical functions

5. **Order the following sentences. (2 points – 0,50)**

❖ mom / is / My / tall

❖ live / I / uncle / my / Pete / with

❖ hair / is / His / and / curly / black

❖ Sandy / is / My / Sister / tall

THANKS FOR YOUR COLLABORATION!

Annex 2. Questionnaire

UNIVERSIDAD NACIONAL DE LOJA
DEPARTMENT OF PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS
DATA COLLECTION INSTRUMENT: QUESTIONNAIRE

Student`s code. ………………………………………………..

Date: …………………………………………….

Dear student, the researcher requests your collaboration by answering the following questions to help me conduct my research on the use of gamification through online platforms for English vocabulary learning. The information you provide is confidential and will be used to obtain data for research purposes. Thank you very much for your cooperation.

1. **Did you like learning vocabulary through games? (Like)**

   Yes   No   Sometimes

2. **Did you interact and participate in online games to learn vocabulary? (Interaction - participation)**

   Yes   No   Sometimes

3. **Do you think games have made you learn new words in a fun and interesting way? (Interest)**

   Yes   No   Sometimes

4. **What elements of gamification motivated or engaged you the most in learning vocabulary? (Elements)**

   Points   Badges   Rewards   Challenges   Leaderboards

65

5. **Did you engaged in vocabulary learning with online platforms and conventional games that incorporate gamification? (Engagement)**

    Yes   No   Sometimes

6. **When you learned the vocabulary through the online and conventional game, were you able to collaborate with your partners as a team? (Individual – collaborative)**

    Individually   Collaboratively   Depends on the activity

7. **Which of the online platforms and conventional games have been the most entertaining for you to improve your vocabulary? (You can choose one, two or all of them). (Entertainment)**

    Wordwall   Bamboozle   Bingo   Board game

THANKS FOR YOUR COLLABORATION!

Annex 3. Test scoring guide

N.º	Question	Answer	Indicator	Score
1	Put the letters in the correct order according to the graph.	0,50	Spelling	2
2	Choose a word from the box and write it under the corresponding graph.	0,25	Meaning	2
3	Match the lexical sets with their corresponding associations**.**	0,50	Association	2
4	Underline the correct collocation.	0,50	Collocation	2
5	Order the following sentences	0,50	Grammatical functions	2
TOTAL				10 points

Annex 4. Grading Scale

GRADING SCALE

QUALITATIVE SCALE	QUANTITATIVE SCALE
Master the learning process	9,00 – 10,00
Reach the learning	7,00 – 8,99
It is about to reach	4,01 – 6,99
Does not achieve the learning	≤ 4

Annex 5. Field notes

UNIVERSIDAD NACIONAL DE LOJA
FACULTAD DE LA EDUCACIÒN, EL ARTE Y LA COMUNICACÓN CARRERA
DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

FIELD NOTES

Setting:	Unidad Educativa "Lauro Damerval Ayora"
Individual Observation:	8th "A" students
Observation #:	1
Observer involvement:	Estheisy Gabriela Tene Tene
Date:	November 27th, 2023 December 01st, 2023
Place:	8th "A" classroom
Duration of Observation:	90

Descriptive Notes	Reflective Notes
In this first week, the teacher conducted a test and then started with the class. But before all that, the teacher developed a warm-up activity. The activity consisted of listening to a song that introduced vocabulary about colors, family, and others. Through this activity, the students seemed very happy and excited to have classes with the teacher.	Because in the first stage, according to the lesson plan model, teachers should apply strategies to improve concentration and attention. So, by starting a class like this, the students were very concentrated and participative.
The teacher presented the vocabulary about family members on flash cards by using slides to provide a detailed understanding with better clarity. In addition, the teacher asked the students to form groups of 4 to play the family member board game, and most of the students were enthusiastic and engaged in the game.	Because in the presentation phase, the teacher facilitates the students' understanding by presenting flashcards using slides. Moreover, by presenting it this way, the students were very interested and motivated. In fact, they were able to play the board game without any problems during the practice.
In this lesson, the teacher used an online game (Wordwall) for the students to play. The students participated and were very engaged in the game, and by winning and receiving their reward, they were more motivated to continue participating.	Because by applying this effective and engaging pedagogical strategy, students were engaged, their learning experience was enriching, and their' understanding of vocabulary improved.

FIELD NOTES

Setting:	Unidad Educativa "Lauro Damerval Ayora"
Individual Observation:	8th "A" students
Observation #:	2
Observer involvement:	Estheisy Gabriela Tene Tene
Date:	December 04th, 2023 December 08th, 2023
Place:	8th "A" classroom
Duration of Observation:	90
Descriptive Notes	**Reflective Notes**
At the beginning of the class, the teacher developed a warm-up activity called the Hangman on the Wordwall platform to attract attention and prepare the body and mind for learning. In this activity, the students participated actively, as they found the game very interesting and fun.	Because introducing a warm-up activity before starting the class is fundamental to preparing the students physically and mentally, by applying this strategy to the students, they were very motivated and productive during the class.
In this phase, the teacher shows and explains with flash cards by using slides about the adjectives and also gives examples. After that, the teacher asked the students to form groups of four to play the bingo game. All of the students were very motivated and attentive during the game, encouraging collaboration and friendly competition.	Because the teacher facilitated comprehension, allowing students to identify and remember the different types of adjectives more effectively. Moreover, the bingo game for practicing adjectives in English represents an effective and dynamic pedagogical strategy, as the students were very engaged with the game and were able to correctly say the adjectives in English at the end.
Similarly, in this section, the teacher used an online game (Wordwall) for the students to play. The students were so participative in this class; they responded very well, and the rewards for winning motivated them to continue participating.	Because applying this strategy to students is more effective. As a result, students were able to create various sentences employing adjectives.

FIELD NOTES

Setting:	Unidad Educativa "Lauro Damerval Ayora"
Individual Observation:	8th "A" students
Observation #:	3
Observer involvement:	Estheisy Gabriela Tene Tene
Date:	December 11th, 2023 December 15th, 2023
Place:	8th "A" classroom
Duration of Observation:	90

Descriptive Notes	Reflective Notes
Before starting the lesson, the teacher developed an introductory activity through the game "Simon Says." Then, after finishing the game, the teacher asked the students what topic would be discussed during the class, and they responded quickly and were very active and interested.	Because in the first stage, according to the lesson plan, the teacher developed a warm-up activity, introducing the topic to be covered during the class. Therefore, starting the class with a warm-up activity is essential, as it had a positive impact and a lot of participation from the students.
The teacher has presented vocabulary about body parts using slides and also possessive adjectives. These two topics are related to each other, as possessive adjectives are necessary to describe body parts. After the explanation, the teacher divided the class into groups of four and had them play the board game. This pedagogical strategy merged effectively, generating an enriching experience for the students.	Because it is crucial for the instructor to use various teaching aids and games during the presentation and practice phases of the lesson plan, the students were very participative, and an increase in collaboration and communication was noted. In other words, by interacting with the content in a practical way, students consolidated their knowledge in a meaningful way.
In the production activity, students play an online game (Baamboozle), which consists of identifying the parts of the body. In addition, students completed the worksheet related to the topic and answered correctly.	Because in the production phase, the students play the game online, and as a result, the students were very animated, and their excitement about winning and getting their prize was very noticeable. Therefore, it could be corroborated that it was a successful teaching and learning experience.

FIELD NOTES

Setting:	Unidad Educativa "Lauro Damerval Ayora"
Individual Observation:	8th "A" students
Observation #:	4
Observer involvement:	Estheisy Gabriela Tene Tene
Date:	December 18th, 2023 December 22nd, 2023
Place:	8th "A" classroom
Duration of Observation:	90

Descriptive Notes	Reflective Notes
The teacher started the class with a song about clothes and accessories that served as a warm-up and introduced the topic they were going to see during the class. In this exercise, the children were very motivated and collaborative.	Because in the first phase, according to the lesson plan model, the teacher developed strategies to attract interest and activate the students. By initiating this activity, students remained interested and motivated from the beginning of the lesson.
The teacher introduced the topic using flash cards, showing videos through slides. In addition, the teacher encouraged the students to repeat the vocabulary after her, and on the other hand, the teacher encouraged them to have conversations in pairs and to tell each other what they were wearing. After this, the teacher divided the class into groups of four so that everyone could participate and practice the vocabulary about clothes and accessories through the bingo game.	Students were able to identify and describe what they were wearing correctly. They were so engaged with the game; in this class, I could see a lot of emotion; everyone was very attentive to fill the board and win. I was pleased to know that this game kept them very happy and entertained. Overall, this turned out to be a very meaningful and valuable class.
In this stage, the teacher had the students play on the online platform (Baamboozle). On the other hand, they had a worksheet in which they had to identify each piece of clothing in English, and they identified it correctly.	In this phase, the learning of the vocabulary was very fun and entertaining, as sharing with classmates generated a sense of excitement and challenge, which contributed to a positive environment.

FIELD NOTES

Setting:	Unidad Educativa "Lauro Damerval Ayora"
Individual Observation:	8th "A" students
Observation #:	5
Observer involvement:	Estheisy Gabriela Tene Tene
Date:	January 01st, 2024 January 05th, 2024
Place:	8th "A" classroom
Duration of Observation:	90

Descriptive Notes	Reflective Notes
Also this week, the teacher started with an introductory activity called "word search," in which the teacher wrote some letters on the board and the students had to find as many words as possible in a short time. Through this, the teacher asked what the topic of the class was going to be about.	Because in the first phase, according to the lesson plan, the teacher should always start with a warm-up activity, the students were immediately involved, and many of them were excited to participate. However, some of the students were a little confused, perhaps because the topic seemed a little new to them. But the teacher explained it to them, and then they remained very active and participative throughout the class.
The teacher introduces the topic about verbs by giving a short definition and also each verb with pictures. In fact, the teacher encourages the students to write down all the verbs in their notebook and to paste the images corresponding to each verb at home. Afterwards, the teacher divided the students into small groups to play the board game. In this game, the students were very motivated and participative, with the goal of being the winner of the group and receiving their reward.	As the teacher showed each verb in the presentation and gave examples based on the students' everyday activities, the students demonstrated their ability to immediately recognize and thus to participate by giving their own examples with each verb. To help the students understand the terms related to the verbs more attentively and without getting stressed, a board game was included. In other words, whatever I implemented for the students worked in a meaningful way.
In the production stage, according to the topic, the teacher found it more convenient to apply the online platform (Baamboozle) again. In this activity, the students had to complete the sentences with the verb according to the image they saw. On the other hand, the students were very active and participative, answering correctly in order to earn more points and become the winners.	The students' impression of the game at this phase was good since it was dynamic and entertaining, and they enjoyed competing with other pupils and trying to win the challenge.

FIELD NOTES

Setting:	Unidad Educativa "Lauro Damerval Ayora"
Individual Observation:	8th "A" students
Observation #:	6
Observer involvement:	Estheisy Gabriela Tene Tene
Date:	January 08th, 2024 January 12th, 2024
Place:	8th "A" classroom
Duration of Observation:	90

Descriptive Notes	Reflective Notes
This week, the class was virtual. The teacher began by introducing a song about professions as a warm-up. The teacher encouraged them to sing the song, so the students were engaged in the warm-up activity.	Because in the first phase, according to the lesson plan, the teacher started with a warm-up. The majority of the students participated. I say this because some of the students did not activate their microphones.
The teacher introduced the topic of professions with flash cards by using slides. The teacher encouraged all the students to repeat each verb after her. On the other hand, the teacher showed a video in which all students had to guess what profession it is, and the students very attentively answered correctly. Also, the teacher encouraged pupils to describe to their family members what profession they have, and they were all very enthusiastic to participate. Finally, as a practice, the teacher had the students play the board game virtually on an application called "Genially."	In this phase, the majority of the students were very motivated and participative. Of some students, I cannot say the same because they did not turn on their microphones and cameras. But in practice, all students were very interested in participating, because I proceeded to say that the one who participates earns points for some homework or activity in class that has a low grade.
In this production stage, the teacher had the students play the game on the Wordwall platform. The students were very engaged in the game. And to end the class, the teacher had all the students do live worksheets.	In this case, the students were very engaged in the game. The game consisted of ordering the sentences according to the image of the profession they saw and also matching the image with their respective profession. The results were good because most of the students responded very well. In addition, I could see a great improvement because when the students did the live worksheets, their grades were excellent.

FIELD NOTES

Setting:	Unidad Educativa "Lauro Damerval Ayora"
Individual Observation:	8th "A" students
Observation #:	7
Observer involvement:	Estheisy Gabriela Tene Tene
Date:	January 15th, 2024 January 19th, 2024
Place:	8th "A" classroom
Duration of Observation:	90

Descriptive Notes	Reflective Notes
In the same way, this week the class was conducted virtually. The teacher started with a warm-up activity called "Hangman" on the Wordwall platform. The students were very participatory and animated in this game. In addition, the teacher, as always, after the activity is over, asks the students what they will see during the whole class.	In the same way as the previous week. Most of the students participated; I saw that they were motivated to learn the new topic, but others were not, because some of the students had problems with the internet connection, although others, having the connection well, did not activate their microphones and cameras. The truth is, virtual teaching with eighth graders presents some challenges.
In this presentation phase, the teacher introduced the vocabulary of hairstyles through flash cards using slides. On the other hand, the teacher shared several videos in which they had to watch and guess which hairstyle each person has, and the other one was an animated video. And finally, the teacher made them play a board game on the "Genially" platform about hairstyles. This game motivated them a lot.	The students were very enthusiastic, attentive, and participative during the class. In fact, I saw even more attention when I presented the animated video and the board game on the Genially platform. Because of the virtual classes, I had to find a way to make them play, so this online game helped me a lot.
In the production stage, the teacher made the students play on the Baamboozle platform; they were very motivated and engaged in this game. So much so that they told me to make them play it again. And finally, the teacher made all the students work on the live worksheet.	This Baamboozle game contributed effectively to teaching, promoting participation, learner autonomy, and emotional connection to learning. In other words, this experience highlights the importance of leveraging interactive tools to improve vocabulary.

Annex 6. Lessons Plans
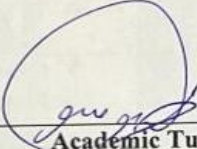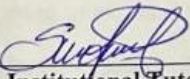
Lesson plan # 11			
Institution Name:	Unidad Educativa "Lauro Damerval Ayora"		
Date:	January 8th, 2024 January 12th, 2024	**School Year:**	2023-2024
Type of Institution	Public (X) Private ( ) Fisco-Misional ( )		
Institutional Tutor:	Lic. Susana España		
Academic Tutor:	Mgtr. Edgar Mariano Castillo Cuesta		
Preservice Teacher:	Estheisy Gabriela Tene Tene		
Thesis Director:	Ph. D. Marcia Criollo Vargas		
Schedule:	Wednesday (10H45 – 12H15)		
Time per lesson:	90 min	**Language level:**	A1
Class: Number of Students:	8th "A" 34 students		
Topic: Contents:	Diverse Families Professions		
Lesson Objectives:	❖ To describe the jobs that family members do, providing simple descriptions of their professions. ❖ To improve meaning through interaction and participation in a bingo game.		
Materials	❖ Computer / Projector / Slides / Markers / Whiteboard / Flashcards / Worksheet / Speaker		

Starter (warmer, lead in, review)	Time
Warm up: Guess. Teacher chooses a student from each column and gives him/her a drawing that is about occupations. Each student has to make gestures or mime and the rest of the students guess what occupation he/she is doing. The group that manages to guess in the least time is the winner.	10

Presentation	Time
❖ Teacher presents some flashcards of different occupations by using slides. ❖ Teacher encourages students to repeat and pronounce each different occupation after her. ❖ Teacher presents the use of vocabulary related to professions in context. Example: My father is a doctor. ❖ Teacher shows a video with a song about different professions and then encourages the students to sing it. https://www.youtube.com/watch?v=ckKQclquAXU	20

Practice	Time
❖ Students write on their notebook all the vocabulary of different occupations given by the teacher. ❖ Students write sentences given by the teacher in their notebook. ❖ Students read a short text and underline words about different professions. (student's book page 26).	30

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❖ Group game: Teacher divides the class into 7 teams and the teacher hands out the sheets to play Profession Bingo. Students play a bingo game about the different professions; they have to know the meaning of each one.

❖ First group of students to complete the table earns points and also their reward, with the purpose of motivating them to keep on winning.

Production	Time
❖ Students play on the Wordwall platform, the game consists in completing the sentence, order, and match with the different occupations according to the image they see. https://wordwall.net/resource/66100122/professions	30

Assessment

❖ Group work: Students work in groups of 3 on a worksheet in which they have to match the picture with the right occupation.

Observations

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Signatures:

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Thesis Director
Ph. D. Marcia Criollo Vargas

_____
Academic Tutor
Mgtr. Edgar Mariano Castillo Cuesta

_____
Institutional Tutor
Lic. Susana España

_____
Preservice Teacher
Estheisy Gabriela Tene Tene

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Lesson plan # 12			
Institution Name:	Unidad Educativa "Lauro Damerval Ayora"		
Date:	January 8th, 2024 January 12th, 2024	**School Year:**	2023-2024
Type of Institution	Public (X) Private ( ) Fisco-Misional ( )		
Institutional Tutor:	Lic. Susana España		
Academic Tutor	Mgtr. Edgar Mariano Castillo Cuesta		
Preservice Teacher:	Estheisy Gabriela Tene Tene		
Thesis Director:	Ph. D. Marcia Criollo Vargas		
Schedule:	**Thursday** (08H45 – 09H30)		
Time per lesson:	45 min	**Language level:**	A1
Class: Number of Students:	8th "A" 34 students		
Topic: Contents:	Diverse Families Professions		
Lesson Objectives:	❖ To describe family members' occupations. ❖ To improve grammatical function through an individual and collaborative game on the Wordwall platform.		
Materials	❖ Flipchart / Markers / Whiteboard / Flashcards / Worksheet / Speaker		

Starter (warmer, lead in, review)	Time
❖ **Warm up: Whispers.** A whispering communication game. The teacher starts with a sentence. Example (My brother is 25 years old and he is a doctor) and whispers it to one student in each file. Then they have to whisper it to the next student, and so forward. Then the final student has to say out loud what they think the sentence they heard was.	5

Presentation	Time
❖ Teacher illustrates examples with the different occupations by using slides. ❖ Teacher encourages students to repeat aloud after her each example with the different professions previously seen in class. ❖ Teacher presents some words cards which contains different occupations.	10

Practice	Time
❖ Students scramble the word cards given by the teacher about occupations. ❖ Students provide insights into the diverse professions held by their family members. Example: My grandmother is a very beautiful nurse. My uncle is an engineer.	15

Production	Time
❖ Teacher divides the class into 7 teams. Students play on the Wordwall platform, the game consists of reordering each sentence in its correct order. ❖ Students on the team that correctly orders the sentences win a badge and a reward,	15

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so students will be more motivated and improve their grammatical function.

Assessment

❖ Students work on worksheets on which they have to write the missing letters in the boxes to complete the vocabulary of the different occupations.

Observations
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Signatures:

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Thesis Director
Ph. D. Marcia Criollo Vargas

_____
Academic Tutor
Mgtr. Edgar Mariano Castillo Cuesta

_____
Institutional Tutor
Lic. Susana España

_____
Preservice Teacher
Estheisy Gabriela Tene Tene

Annex 7. Research Matrix

THEME	Gamification and English vocabulary learning among superior basic education students at a Public Institution in Loja, school year 2023 - 2024			
GENERAL PROBLEM	**OBJECTIVES**	**CATEGORIES THEORETICAL FRAME**	**INSTRUMENTS**	**INDICATORS**
How does gamification improve the English vocabulary learning among superior basic education students at a public institution in Loja, during the school year 2023 - 2024?	To improve English vocabulary learning by using gamification among superior basic education students at a public institution in Loja, during the school year 2023 - 2024	**Independent variable** 5.1. Gamification 5.1.1 Definition of gamification 5.1.2 Elements of gamification 5.1.2.1 Game mechanics. 5.1.2.1.1 Points. 5.1.2.1.2 Badges. 5.1.2.1.3 Leaderboards. 5.1.2.1.4 Levels 5.1.2.1.5 Challenges 5.1.2.2 Game dynamics 5.1.2.3 Game Aesthetics 5.1.3 Benefits of Gamification in Education 5.1.4 Gamification in teaching English language. 5.1.5 Importance of applying gamification for teaching vocabulary 5.1.6 Games to Teach Vocabulary 5.1.6.1 Wordwall 5.1.6.2 Bamboozle 5.1.6.3 Bingo 5.1.6.4 Board game	Mixed methodology ● Quantitative ● Qualitative Action research model	Intervention plan PPP - Presentation - Practice - Production

SUBPROBLEMS	SPECIFIC OBJECTIVES		Testing technique	Vocabulary
What is the effectiveness of gamification in English vocabulary learning among superior basic education students at a public institution in Loja?	To validate the effectiveness of gamification on the improvement of English vocabulary learning among superior basic education students at a public institution of Loja.	**Dependent Variable** 5.2. Vocabulary 5.2.1 Definition of vocabulary 5.2.2 Importance of learning Vocabulary in EFL Context 5.2.3 Types of Vocabulary 5.2.3.1 Listening vocabulary 5.2.3.2 Spoken vocabulary 5.2.3.3 Reading vocabulary 5.2.3.4 Writing vocabulary 5.2.4 Aspects of Vocabulary 5.2.5 Models for Teaching Vocabulary 5.2.5.1 Presentation 5.2.5.2 Practice 5.2.5.3 Production 5.2.6 Intentional vs incidental words learning 5.2.7 Strategies for vocabulary learning 5.2.7.1 Vocabulary in a one-sentence context: high-frequency word. 5.2.7.2 Vocabulary in a one-sentence context: low-frequency word. 5.2.7.3 Vocabulary matching exercise. 5.2.7.4 Words association.	**Testing technique** ● Pre-test and post test	**Vocabulary** ● Spelling ● Meaning ● Association ● Collocation ● Grammatical Function

		5.2.7.5 Fill in the blank.		
what are students' perceptions about the use of gamification on the development of English vocabulary learning among superior basic education students at a public institution in Loja?	To explore students' perceptions about the use of gamification on the development of English vocabulary learning among superior basic education students at a public institution of Loja.		Survey technique ●Questionnaire ● Field notes	**Gamification** • like • Interaction and participation • Interest • Elements • Engagement • Collaboration – teamwork • Entertainment **Games** • Wordwall • Baamboozle • Bingo • Board Game