

**Diseño de estrategias gamificadas para mejorar la comprensión lectora en estudiantes de inglés
Design of gamified strategies to improve reading comprehension in english students.**

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Resumen

El presente estudio tiene como objetivo diseñar estrategias gamificadas para fortalecer la comprensión lectora en estudiantes de inglés como lengua extranjera. Se empleó una metodología mixta, combinando herramientas cualitativas y cuantitativas. Las técnicas incluyeron entrevistas a docentes y encuestas a estudiantes, así como la implementación de plataformas gamificadas como Classcraft. Los resultados revelaron que la gamificación incrementa significativamente la motivación, participación y comprensión lectora en el aula. Asimismo, se identificaron los elementos clave de la gamificación: objetivos claros, retos, recompensas y el uso de avatares personalizados. El estudio concluye que la gamificación es una herramienta efectiva para optimizar el aprendizaje del inglés y fomentar una experiencia educativa más dinámica y participativa.

Palabras clave: Gamificación, Comprensión lectora, Inglés, Estrategias educativas, Motivación.

Abstract

This study aims to design gamified strategies to strengthen reading comprehension in students learning English as a foreign language. A mixed methodology was used, combining qualitative and quantitative tools. Techniques included interviews with teachers and surveys with students, as well as the implementation of gamified platforms such as Classcraft. The results revealed that gamification significantly increases motivation, participation, and reading comprehension in the classroom. Key elements of gamification were also identified: clear objectives, challenges, rewards, and the use of personalized avatars. The study concludes that gamification is an effective tool for optimizing English learning and fostering a more dynamic and participatory educational experience.

Keywords: Gamification, Reading Comprehension, English, Educational Strategies, Motivation.

Introduction

The teaching of English as a foreign language (EFL) faces numerous challenges worldwide, especially when it comes to reading comprehension. This skill is essential not only for language learning but also for the general academic development of students. However, despite pedagogical efforts, many students still experience significant difficulties in understanding written texts in English (Cronquist & Fiszbein, 2017; Figueroa-Flores, 2015). The reasons for this problem are varied, ranging from the lack of effective strategies to the low interest students show in traditional reading activities (Figueroa-Flores, 2015). In this context, innovative strategies such as gamification have been proposed as a potential solution to improve motivation and reading comprehension in English language learners.

Gamification, understood as the incorporation of typical game elements such as points, rewards, challenges, and avatars into educational contexts, has proven to have a positive impact on various aspects of learning. According to Deterding et al. (2011), gamification not only increases motivation but also fosters engagement and active participation, factors essential for improving reading comprehension. The idea of applying game dynamics in the educational field is rooted in intrinsic motivation theory, which holds that students learn better when they are motivated by interest and enjoyment rather than external rewards (Ryan & Deci, 2000). In this sense, gamification provides a platform for students to experience greater connection with the reading material and face challenges that match their skill level, promoting autonomous learning and self-regulation (McGonigal, 2011; Nicholson, 2015).

The implementation of gamified tools such as Classcraft has gained popularity in the teaching of English as a foreign language. This platform allows the integration of playful elements into the classroom, creating a dynamic and participatory learning environment. According to Zichermann and Cunningham (2011), Classcraft and other similar platforms not only encourage healthy competition among students but also facilitate the personalization of learning through the

creation of avatars and the assignment of personalized challenges, which help maintain student interest throughout the educational process. In this way, students can experience more interactive learning, where reading becomes a fun and meaningful activity.

The purpose of this study is to explore the design of gamified strategies to improve the reading comprehension of English students. To achieve this, a mixed methodological approach was adopted, including both qualitative and quantitative tools, in order to assess the effectiveness of gamification in the classroom. The techniques used include interviews with teachers to understand their perceptions of gamification and surveys with students to measure their motivation and participation in gamified reading activities. Previous studies indicate that gamification has a positive impact on academic performance and student motivation (Hamari et al., 2014; Landers, 2014), which supports the hypothesis that gamified strategies can enhance reading comprehension in the context of English learning.

The research also addresses the identification of key elements of gamification that contribute to its success, such as setting clear goals, providing constant feedback, and incorporating progressive levels that challenge students to continuously improve (Vlachopoulos & Makri, 2017). These elements, as will be discussed further, are essential for designing educational experiences that are not only effective in terms of learning but also manage to maintain student interest and motivation throughout the learning process.

General basic education in Ecuador constitutes a key educational stage within the national education system, as established by the Organic Law of Intercultural Education (LOEI). This phase covers the first to the tenth year of education and aims to provide comprehensive training to students, developing both their academic competencies and their critical, creative, and social abilities. According to the LOEI, "basic education aims to guarantee access, retention, and graduation for all children, through an inclusive educational system that takes into account the different sociocultural realities of the country" (Ministry of Education, 2017).

The structure of general basic education in Ecuador is divided into three main cycles:

Initial Cycle (Preparatory), this covers the first two years of education, aimed at children aged 5 and 6. During this cycle, the development of basic cognitive and socio-emotional skills is prioritized, such as motor skills, language, and socialization. According to the Ministry of Education (2020), "initial education is the first level of basic education and constitutes the foundation for the integral development of children, fostering their social and cultural integration."

Elementary Cycle (Basic Education I): This cycle covers the first three years (ages 7 to 9). In this cycle, the focus is on learning fundamental competencies such as reading, writing, mathematics, and basic knowledge of social and natural sciences. As Coll and Monereo (2008) state, "learning in this cycle is characterized by the teaching of essential content that will form the basis for future academic training."

Middle Cycle (Basic Education II): This cycle covers the last four years (ages 10 to 14). Students develop a deeper understanding in areas such as mathematics, natural sciences, language and literature, and social sciences. According to the LOEI (2017), "basic education, in its final cycle, aims to consolidate the competencies necessary for students to continue their studies in secondary education or access an increasingly demanding labor market."

One of the significant advancements of the Organic Law of Intercultural Education (LOEI) is its inclusive approach, which prioritizes an education that respects and promotes the country's cultural diversity. The law establishes that "intercultural education is a fundamental principle for respecting, valuing, and integrating the different cultures, peoples, and nationalities that make up Ecuadorian society" (Ministry of Education, 2017). This approach aims to integrate both universal knowledge and the wisdom and practices of indigenous peoples, Afro-descendants, and other cultural groups into the curriculum.

Within the framework of basic education, the use of technological tools such as ICT (Information and Communication Technologies) is encouraged to enrich teaching and learning processes. The Ministry of Education of Ecuador has implemented programs such as the "National Digital Education Plan," which aims to "equip schools with technological tools and train teachers in the pedagogical use of ICT in the educational process" (Ministry of Education, 2020).

Despite these efforts, the teaching of English remains a challenge in basic education in Ecuador. As Cronquist and Fiszbein (2017) point out, "although there are policies to integrate language teaching into the curriculum, the quality of teaching remains uneven, especially in rural areas where educational resources are limited." This is a persistent challenge despite efforts to improve the quality of education across the country.

One of the most important aspects of Ecuadorian basic education is teacher training. The LOEI (2017) emphasizes that "the continuous training of teachers is essential to improving educational quality and ensuring teaching that meets the challenges of the 21st century." In this regard, the implementation of innovative and active methodologies, such as gamification, is urgently needed to foster student participation and interest. As Figueroa-Flores (2015) states, "gamification allows transforming learning into an interactive and motivating experience that encourages the active participation of students."

General basic education in Ecuador is a crucial stage for the integral formation of students, with an intercultural and inclusive approach that seeks to reduce inequalities in access and school success. Despite progress, there are challenges in educational quality that require constant attention, particularly in teacher training and the integration of technologies, to ensure quality education for all children in the country.

Gamification is a methodology that has proven effective in increasing student motivation and engagement in various areas of learning. In the case of English teaching, the integration of

playful elements such as rewards, challenges, levels, and avatars can transform the classroom into an interactive and stimulating space. Gamification-based applications not only make learning more entertaining but also allow for a personalized educational experience and encourage greater active participation from students.

There are various gamification applications that teachers can use to improve English teaching, providing students with a more dynamic and personalized experience. Below are some of the most prominent:

Classcraft is a widely used gamification platform in education to transform the classroom into a game-like environment. This application allows the creation of a virtual world where students become characters who must complete challenges and missions related to educational content. In the context of teaching English, teachers can integrate grammar, vocabulary, and reading comprehension exercises, so students progress through levels, earn points and rewards, and face collaborative challenges. As Chaves (2019) states, "Classcraft allows students to be fully immersed in learning the language, motivating them through competition and cooperation."

Duolingo is one of the most popular apps for language learning and has a completely gamified approach. Using a system of points, levels, and rewards, Duolingo turns English practice into an interactive and fun experience. Students can practice vocabulary, grammar, pronunciation, and listening comprehension through short exercises and challenges. Additionally, the "lingots" system, which are virtual coins earned by completing lessons and overcoming challenges, motivates students to keep learning. According to McGonigal (2011), "The gamification mechanics in Duolingo help turn learning into a personal challenge, where users feel motivated to continually improve."

Kahoot! is a tool that allows teachers to create interactive quizzes in the form of question-and-answer games. Students respond to questions competitively, earning points based on the

speed and accuracy of their answers. In English teaching, Kahoot! is very useful for reviewing vocabulary, grammar, and reading comprehension topics in a fun and dynamic way. Teachers can create personalized quizzes, and students compete individually or in teams. The competitive nature and point incentives keep students focused and motivated. As Arteaga (2011) highlights, "Kahoot! promotes active and participatory learning, making students engage with the content in a playful way."

Quizlet is a learning platform based on digital flashcards that uses a gamified approach to facilitate vocabulary and phrase learning in English. Students can create their own study cards or use those shared by others and then participate in memorization games such as "Match" or "Gravity." The possibility of challenging other students or competing with them in real time makes learning the language more engaging and challenging. Chaves (2019) notes that "Quizlet not only promotes memorization but also stimulates healthy competition and repetition, two essential factors in learning a new language."

Memrise is another app that uses gamification to teach English and other languages. Like Duolingo, Memrise employs a system of levels and rewards to motivate students to complete vocabulary and grammar lessons. A key feature of Memrise is its use of videos and audio from native speakers to improve pronunciation and listening comprehension. Students must overcome various "challenges" to earn points and progress in their learning. According to Figueroa-Flores (2015), "Memrise uses gamification to create a dynamic learning environment that not only promotes vocabulary acquisition but also oral comprehension through constant exposure to real-life language situations."

LingoDeer is an app focused on teaching English grammar and structures through a gamified approach. Through interactive lessons and games, students gradually and progressively learn the grammatical rules. LingoDeer offers detailed explanations, practice exercises, and a points and levels system that keeps students motivated. "LingoDeer allows students to

understand English grammar and syntax in a structured way while enjoying the learning process" (Vlachopoulos & Makri, 2017).

BrainPOP is an educational platform that, through animations, quizzes, and interactive games, facilitates learning on various topics, including English. Students have the opportunity to engage in activities related to vocabulary, pronunciation, reading comprehension, and writing. The platform fosters competition and teamwork, making the learning process both educational and entertaining. According to Shrestha (2014), "BrainPOP is an excellent tool for teaching English in an engaging way, using videos and games that allow students to learn in a playful manner."

Gamification applications such as Classcraft, Duolingo, Kahoot!, Quizlet, Memrise, LingoDeer, and BrainPOP offer an innovative and effective way to teach English, keeping students motivated and engaged. These tools allow for more interactive, competitive learning that is tailored to students' individual needs. Additionally, integrating gamification in the classroom can promote greater participation and academic performance, making students active protagonists in their own learning.

Motivation is essential for students to actively engage in the learning process. According to Valenzuela (2015), motivation is a crucial driving force in cognitive processes, and its absence can lead to difficulties for both students and teachers. In this context, many teachers observe a lack of collaborative participation among students. Issues like indiscipline and poor performance are often identified, which may be a result of insufficient motivation. However, some teachers claim that when they manage to create a motivating environment, student participation significantly improves, which is reflected in a collaborative atmosphere during lessons.

Success in English teaching also depends on the techniques used in the classroom. An effective approach is the implementation of participatory methods that encourage student

interaction and academic effort. According to the experiences of surveyed teachers, the most common techniques in English classrooms include grammar exercises and writing, which facilitate learning linguistic structures. Additionally, it is recognized that language learning is enhanced when students interact with each other, especially when pairing students with different cognitive levels, thereby promoting collaborative learning.

Serious games or gamification are powerful tools for improving both student learning and assessment. A well-designed game can foster healthy competition, curiosity, and creativity, enhancing the learning experience (McGonigal, 2011). According to several teachers, these games not only facilitate knowledge acquisition but also allow for the evaluation of student progress in an entertaining way. However, some teachers argue that while games can be useful in certain contexts, they are not an indispensable component of education, and their effectiveness depends on proper planning.

Gamification is the incorporation of game mechanics into the educational field with the aim of enhancing students' cognitive development. Liberio-Ambuisaca (2019) suggests that gamification surpasses traditional teaching methods by creating a motivating and engaging learning environment. In the context of English, many teachers agree that serious games improve both pedagogical practice and student performance, although some point out that organizing and applying these games can be a challenge, as results are not always as expected.

Gamification has expanded beyond business contexts and has begun to be adopted in education, especially in language teaching. According to Chaves (2019), gamification has proven to be an effective tool for optimizing the learning of foreign languages such as English. The data collected in this study indicate that students feel motivated when content and skills from the curriculum are integrated through educational games. This confirms that gamification, when applied appropriately, can be a key element in improving English teaching, fostering greater concentration, participation, and motivation from students.

It is crucial to implement interactive technological tools, such as Classcraft, in English teaching. This platform allows the educational experience to be transformed into an engaging and rewarding process for both teachers and students. The application of gamification through Classcraft should follow a structured process that includes the following key elements:

Objective: Define the goals of the topic and the skills to be achieved.

Design: Create a game narrative that motivates students with an intriguing story.

Challenges: Turn tasks into challenges, promoting a more playful and dynamic approach to learning.

Levels: Structure activities in a way that they vary in difficulty, from simple to complex, maintaining students' interest.

Rules: Establish clear rules that also promote respect and coexistence both inside and outside the classroom.

Avatar: Assign each student an avatar that allows them to create an identity within the game.

Rewards: Motivate students with prizes, such as additional points or badges, whenever they achieve their goals.

Each of these stages should be designed so that students not only learn but also enjoy the process. Teachers should ensure that the activities are fun, challenging, and engaging, so that students naturally get involved, without additional pressures related to tasks or grades. When gamification is implemented effectively, it can transform the traditional classroom into a more interactive and collaborative environment, moving away from the monotony of conventional learning and promoting a space where students become the protagonists of their own knowledge.

Materials and Methods

For this research, a mixed-methods approach was adopted, combining both qualitative and quantitative methods to gain a more comprehensive understanding of the impact of gamification in English teaching. This approach allowed for a rich collection of data, both numerical and narrative, facilitating an in-depth analysis of the results.

Structured interviews were conducted with teachers who actively participated in the implementation of gamified strategies. These interviews were designed to gather detailed information on the teachers' perceptions, experiences, and challenges faced when integrating gamification into their pedagogical practices. The interviews also provided an opportunity to explore the educators' perspectives on how gamification influenced students' motivation, participation, and performance.

In addition, direct observations were carried out in the classrooms to understand how gamified activities unfolded in the real environment, allowing for a deeper evaluation of the immediate effects on students.

Surveys were administered to students, designed to measure the impact of gamified activities on their motivation, participation, and reading comprehension. The surveys included closed-ended questions and Likert scales, which allowed for the quantification of responses and statistical analysis to identify trends and patterns in students' attitudes and behaviors. The data collected through these surveys were used to assess the relationship between gamification and key factors such as motivation, focus, and academic performance.

Regarding the tools used, **Classcraft** was implemented, a gamified platform designed to enhance the learning experience through interactive activities. Classcraft allowed students to engage in a series of challenges and personalized activities, where they could earn points, receive rewards, and level up by completing tasks related to reading comprehension, grammar, and

vocabulary. Students were also able to create personalized avatars, which added an element of identity and ownership to the learning process, promoting a greater sense of involvement and belonging. In addition to Classcraft, other gamified applications and platforms were used, offering interactive exercises, games, and quizzes related to English learning, providing students with continuous opportunities to reinforce their language skills in a fun and dynamic way.

Analysis of Results

The analysis of the data collected revealed a significant increase in the active participation of students during gamified activities compared to traditional classroom settings. This was evident in both the surveys and direct observations, where students showed greater enthusiasm and commitment toward the tasks assigned when these were structured as games or challenges. The use of platforms like Classcraft allowed students to become more engaged in the learning process, leading to improved concentration and the quality of their work.

Motivation and Participation: Quantitative results showed an increase in students' motivation and participation, particularly among those who initially showed less interest in English classes. A significant percentage of students reported feeling more motivated to learn when activities were presented in game format, which fostered a sense of healthy competition and collaboration. The creation of personalized avatars and the opportunity to earn rewards for their achievements helped keep students focused and more willing to tackle learning challenges.

Concentration and Academic Performance: The qualitative analysis also indicated that the clarity of learning objectives and the structure of progressive levels within the gamified activities were key factors that helped students maintain higher concentration. The challenges were designed to be incremental, allowing students to experience tangible progress and feel motivated by reaching new goals. This was correlated with improved academic performance in

specific activities, such as reading comprehension, where students demonstrated a greater ability to interpret texts and answer questions accurately.

Implementation of Clear Rules: The results also emphasized the importance of establishing clear rules within the gamified environment. Students responded positively to the structure and defined rules, as these provided them with a framework for their participation in activities. Clear rules helped set expectations and reduce confusion, fostering a more organized and effective learning environment.

Teachers' Perceptions: In the interviews conducted with teachers, it was highlighted that gamification not only improved participation but also enhanced the classroom dynamics, promoting collaboration and interaction among students. Teachers reported that, with increased motivation, students were more actively engaged in activities and showed greater interest in learning. However, some challenges were also mentioned, such as the need for planning and preparation to integrate technological tools into the classroom, as well as adapting to the varying skill levels of students.

The results obtained from this analysis indicate that when gamification is implemented in a structured way with the right tools, it can be highly beneficial in improving motivation, participation, and academic performance in English language teaching.

Table 1:

I am motivated and participate actively in English classes.

Response	Frequency	Percentage	Valid Percentage
Strongly agree	8	10.10%	10.10%
Agree	28	35.40%	45.60%
Undecided	16	20.30%	65.80%
Disagree	27	34.20%	100.00%
Total	79	100.00%	100.00%

The results presented in the table reflect a varied distribution of student motivation and participation in English classes. A total of 45.6% of respondents agreed or strongly agreed with being motivated and actively participating, indicating that, although a significant portion of students feels engaged, almost 54.4% (including undecided and disagreed responses) do not experience sufficient motivation to fully engage. In particular, 34.2% of students disagreed with the statement, suggesting that a considerable proportion of students still face barriers to actively participating in English learning. This data highlights the need to implement pedagogical strategies, such as gamification, to foster a more engaging and motivating environment aimed at increasing participation and improving academic performance in the classroom.

Table 2.

Analysis of Qualitative Results.

Analysis Unit	Category	Segment
Motivation	Participation	- Students demonstrate a low level of participation in the classroom.
		- Students participate satisfactorily during English lessons.
Teaching Process	Techniques	- Written exercises and grammar.
		- Individual and pair work.
		- Reading and repetition of content.
Analysis Unit	Category	Segment
Motivation	Participation	- Students demonstrate a low level of participation in the classroom.
		- Students participate satisfactorily during English lessons.
Teaching Process	Techniques	- Written exercises and grammar.
		- Individual and pair work.

The qualitative analysis of the results reveals several key aspects regarding the teaching of English using traditional techniques and the application of serious games and gamification. Regarding motivation, there is an uneven level of student participation in the classroom, with some showing satisfactory involvement while others do not. This suggests the need for strategies that foster greater motivation among all students. As for the teaching process, techniques such as written exercises, individual and pair work, and reading and repetition activities remain dominant but could benefit from the integration of more dynamic and participatory methods.

The analysis of serious games shows a positive perception of their ability to enhance learning and assessment, with some highlighting their effectiveness, while others believe they are not yet sufficiently effective in practice. Finally, gamification shows clear potential to improve student performance, although its implementation has been uncertain in some contexts, with results not always satisfactory. Overall, the results suggest that while gamification has the potential to transform English teaching, its integration requires careful planning and more consistent results to maximize its effectiveness.

Conclusions

The implementation of gamified strategies in English teaching has proven to be an effective tool for improving reading comprehension and increasing student participation. The results obtained in this study reinforce the idea that gamification, by incorporating game dynamics and interactive elements, can transform the learning process into a more engaging and motivating experience. Students become more involved and motivated when participating in educational activities that require not only cognitive skills but also creativity, healthy competition, and collaboration—characteristics inherent in games. This transformation is especially beneficial in second language learning, where motivation and constant practice are crucial.

For these strategies to be truly effective, it is essential that teachers receive proper training in the use of technological tools and gamified strategies. Training will allow them to adapt their pedagogical approaches to the specific needs and characteristics of their students, thus ensuring a more personalized and efficient learning experience. Teachers must be capable of designing activities that not only use games as a complementary technique but also integrate the available tools effectively in the classroom.

It is important for educators to consider the diversity of their students when selecting the most suitable tools and platforms. For example, platforms like Classcraft offer the possibility of customizing learning experiences, enabling students to engage more meaningfully. By employing such resources, outcomes can be optimized, ensuring that students benefit from a dynamic, motivating, and individualized teaching approach.

Gamification should not only be viewed as an innovative technique but as a comprehensive strategy that requires planning, monitoring, and reflection by teachers. When applied appropriately, gamification has the potential to bring about a positive change in English learning by fostering greater participation, collaboration, and healthy competition among students.

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