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GAMIFICATION TO IMPROVE ORAL COMMUNICATION IN ENGLISH LEARNERS: A SYSTEMATIC LITERATURE REVIEW

**SERUM VITAMIN D LEVELS AND THEIR
RELATIONSHIP WITH THE DEGREE OF BONE
COMMINUTION IN PATIENTS WITH HIP FRACTURES**

Luis Stiven Ponce Anchundia
Universidad Tecnica de Manabi, Ecuador

Carlos Humberto Chancay Cedeño
Universidad Tecnica de Manabi, Ecuador



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Gamification to Improve oral Communication in English Learners: A Systematic Literature Review

Luis Stiven Ponce Anchundia¹

stiven.ponce@utm.edu.ec

<https://orcid.org/0009-0008-3683-8020>

Universidad Técnica de Manabí
Ecuador

Carlos Humberto Chancay Cedeño

carlos.chancay@utm.edu.ec

<https://orcid.org/0000-0001-9505-2791>

Universidad Técnica de Manabí
Ecuador

ABSTRACT

This systematic review explores the effectiveness of gamification in enhancing oral communication skills among English language learners. Employing the PRISMA framework, 50 studies published between 2019 and 2023 were analyzed to address the research question: "To What extent does gamification foster students' oral communication?". Findings suggest that gamification positively impacts oral communication by increasing student motivation, fostering engagement, and reducing anxiety during speaking activities. Key factors contributing to these outcomes include the strategic use of game elements, collaborative learning tasks, and interactive learning environments. However, challenges such as the need for teacher training and the variability of gamification's effectiveness across different educational contexts were also identified.

Keywords: gamification, oral communication, english learners, motivation

¹ Autor principal

Correspondencia: stiven.ponce@utm.edu.ec



Gamificación para Mejorar la Comunicación Oral en los Estudiantes de Inglés: Revisión Sistemática de la Literatura

RESUMEN

Esta revisión sistemática explora la efectividad de la gamificación en el desarrollo de habilidades de comunicación oral entre los estudiantes de inglés. Se empleando el método PRISMA, analizando 50 estudios publicados entre 2019 y 2023 para abordar la pregunta de investigación "¿Hasta qué punto la gamificación fomenta la comunicación oral de los estudiantes?". Los resultados sugieren que la gamificación impacta positivamente en la comunicación oral al aumentar la motivación de los estudiantes, fomentar la participación y reducir la ansiedad durante las actividades de expresión oral. Los factores clave que contribuyen a estos resultados incluyen el uso estratégico de elementos de juego, las tareas de aprendizaje colaborativo y los entornos de aprendizaje interactivos. Sin embargo, también se identificaron desafíos, como la necesidad de formación docente y la variabilidad en la efectividad de la gamificación en diferentes contextos educativos.

Palabras claves: gamificación, comunicación oral, estudiantes de inglés, motivación

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INTRODUCTION

Mastering oral communication in English is a fundamental skill for navigating a globalised world. However, for many students, developing this competence can be challenging. In this context, gamification emerges as an innovative pedagogical strategy with the potential to transform English learning, particularly oral communication.

Gamification is defined as the application of game elements in non-game contexts to motivate participants and foster learning (Deterding, 2011). This methodology integrates elements such as points, badges, leaderboards, and narratives to create an engaging and challenging environment that stimulates active student participation (Hamari et al., 2014).

Various studies support the effectiveness of gamification in improving English learning in general (Seaborn & Spieler, 2015; Kiili et al., 2017). Research in the specific area of oral communication has shown promising results. For example, a study conducted by Vergara and Nielsen (2023) demonstrated that the implementation of gamified educational material had a positive impact on the development of oral English skills in early childhood.

Other studies, such as López-Miguel and Jaramillo-Botero (2020), have found that gamification fosters motivation, engagement, and oral fluency in university English students. In this sense, gamification not only promotes language practice but also creates a positive and stimulating learning environment that reduces anxiety and increases students' confidence (Ferreira et al., 2018).

In short, gamification is a valuable pedagogical tool for enhancing oral communication in English learning. Its ability to motivate, engage, and create a positive learning environment makes it a promising strategy for developing this fundamental linguistic competence.

Oral performance becomes the main obstacle to the success of language learning. Many learners struggle to speak skilfully in a foreign language due to the fear of making mistakes. Sometimes, this is caused by poor vocabulary, which leads to difficulties for learners in mastering the language.

The problem with this research lies in learners' inability to speak fluently. To address this problem, the current research checks gamification to foster oral production and the pleasure of speaking. To achieve this goal, the current research looks to answer the question of to what extent gamification fosters students' oral communication.



METHOD

To conduct this systematic review, the researcher followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines method. An exhaustive and replicable search strategy was designed, consulting electronic databases such as Scielo, Scopus, and Science Direct. The search terms included combinations of keywords specific to the study topic and related terms to maximize the sensitivity of the search. Additionally, reference lists of selected articles were reviewed to identify additional relevant studies that might have been missed in the initial search.

Study Selection

The study selection process involved four stages: identification, screening, eligibility, and inclusion. Initially, 1037 studies were identified, out of which 50 met the eligibility criteria and were included in the final review. It was carried out in two stages. In the first stage, duplicates were removed, and titles as well as abstracts of the retrieved studies were screened to exclude those not meeting the predefined inclusion criteria. The inclusion criteria were:

- Studies addressing the specific topic of the review.
- Articles published in peer-reviewed journals.
- Studies available in English or Spanish.
- Articles published in the last five years (2019, 2020, 2021, 2022, 2023).
- Open access articles

In the second stage, the full texts of potentially relevant studies were reviewed to confirm their eligibility. Firstly, the author evaluated each study to identify the most relevant aspects. Finally, two external revisors were required to check if the inclusion criteria established were correctly applied.

Data Extraction

Relevant data from each included study were extracted using a standardised data extraction form.

Extracted data included:

- Information about the authors and year of publication.
- Study design.
- Characteristics of the studied population.
- Description of interventions and comparators.
- Main outcomes and outcome measures used.

Synthesis of Results

The results of the selected studies were synthesised narratively, and where possible, a meta-analysis was conducted.

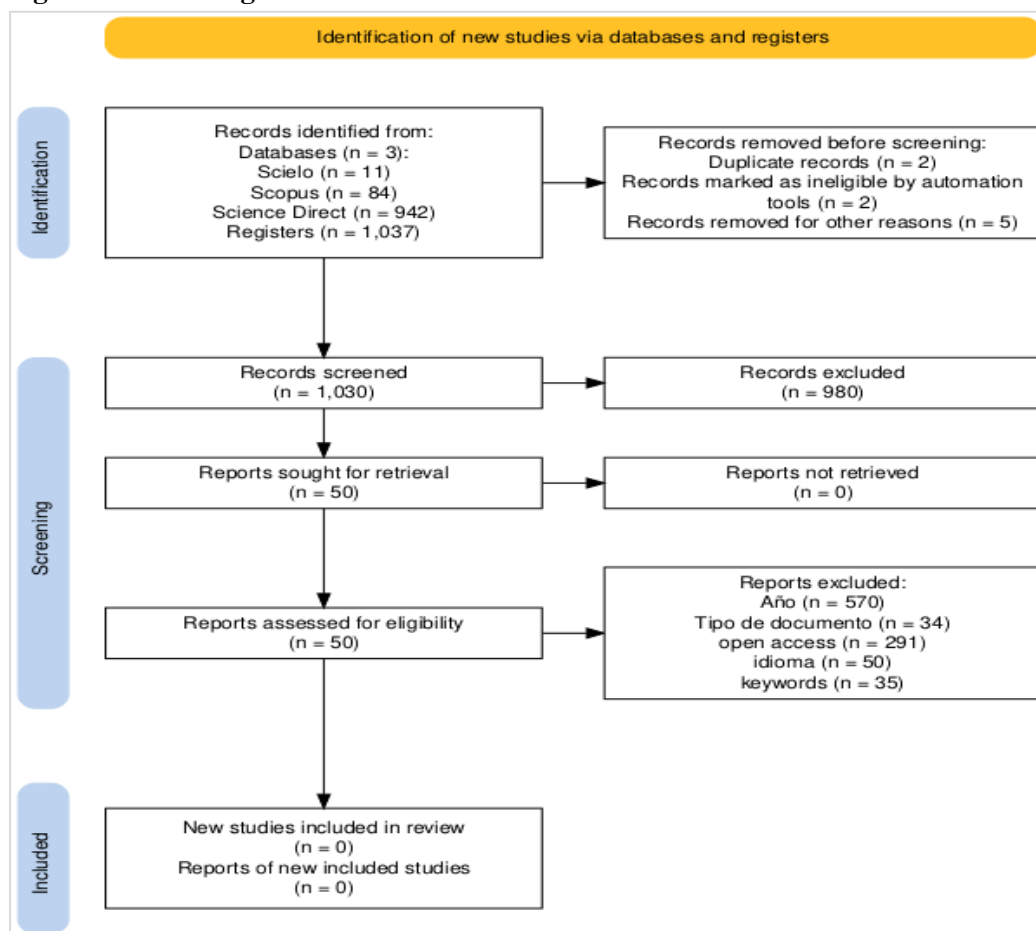
Characteristics of Included Studies

The review included 50 studies that focused on the implementation of gamified strategies in various educational contexts, primarily in higher education and secondary education. The studies varied in design, ranging from quasi-experimental studies to case studies.

PRISMA Reporting

Finally, the results were presented following the PRISMA flow diagram, detailing the study selection process from initial identification to final inclusion. A table summarizing the characteristics of the included studies and their main findings was provided, ensuring the systematic review's transparency and reproducibility.

Figure 1. Flow Diagram



Source: Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). *PRISMA2020: An R package and Shiny app*. Campbell Systematic Reviews, p. 18, e1230. <https://doi.org/10.1002/cl2.1230>

Impact of Gamification on Oral Communication

Most studies reported significant improvements in students' motivation, which in turn facilitated the practice of oral English skills. Gamification created a more interactive learning environment, reducing students' anxiety about speaking in public and encouraging active participation.

The teacher's role

The interaction between the teacher and the learner, who both participate in the process of acquiring a word to build knowledge, is crucial. Knowledge construction is not solely the responsibility of the learners; the teacher's role is very dynamic as they prepare suitable activities and conduct evaluations to verify the effectiveness of these activities.

Classroom interaction is undeniably a crucial teaching and learning tool that promotes acquisition through engagement. Self-facilitation techniques empower learners to pursue their communicative goals and adopt effective strategies for knowledge acquisition. Additionally, the teacher continues to oversee the tasks.

Class activities

Reading aloud, regular practice and technological tools are some of the resources that offer effective activities for developing speaking skills. Hypermedia resources encourage learners to acquire vocabulary. In the context of autonomous vocabulary learning, the teacher's role transforms into that of a facilitator. This does not mean that teachers become passive in the learning process; they still fulfil various roles. Teachers can provide pertinent vocabulary tasks and assess and teach strategies that enhance retention and pronunciation. Teachers need to promote independent learning, as it greatly benefits their students. They should also instruct on strategies for independent speaking practice. Comprehensive vocabulary learning strategies require more time but ensure better retention and ease of recall. Moreover, the teacher is responsible for fostering the student's ability to learn independently by designing engaging activities, creating a positive environment, providing a language context, and instilling a desire to learn and explore (Haddad, 2016).



Gamification

Gamification refers to the incorporation of typical game elements into various non-game contexts. This methodology originates from computer science and serious games, providing effective design principles that can be applied to educational activities. It also enables the creation of engaging tasks that fulfil needs critical for developing intrinsic motivation. Gamification includes several components (rules, content, aesthetics, mechanics, etc.) that, when integrated into educational activities, can enhance the user experience and promote learning through enjoyment and satisfaction (Cattoni et al., 2019).

The term "gamification" has its roots in the digital media gaming industry. It was first introduced in 2008 but didn't become widely recognised until the second half of 2010. Other similar terms like "games of productivity," "surveillance entertainment," "playful design," "behavioural games," "game layer," and "applied games" are still used, and new ones continue to appear. However, "gamification" has become the most well-known and accepted term (Deterding et al., 2011).

Social game design typically emphasises various forms of competition and collaboration. Game design is centered on achievement and challenge and focuses on overcoming obstacles, making progress, earning rewards, and fostering a sense of competence. In gamification that is based on success and challenges, the most frequently utilised mechanisms include points, challenges, rankings, levels, and badges (Legaki et al., 2020).

Csikszentmihalyi (1991) proposed that game-based online activities should have several key characteristics:

Clearly Defined Objectives with Manageable Rules. This includes having clear overall goals for the game as well as intermediate objectives.

Adjust Opportunities for Action to Learners' Capacities (Autonomy). Learners should feel a sense of control over their actions in the game, which enhances their sense of autonomy.

Provide Clear Information on Performance (Feedback). Players should receive timely and appropriate feedback to understand how they are coping with the challenges.

Eliminate Distractions and Facilitate Concentration. Gamification should create an engaging environment that minimises distractions and encourages concentration. Activities should be stimulating and motivate learners to continue through the use of points, levels, and badges.



Gamification tools

Currently, there are many tools to provide a gamification-based learning experience. Here are some: (Freeman, 2021)

Book Widgets is a gamification software designed for educators at all levels, including primary school teachers, middle or high school teachers, university professors, and professional trainers. It offers over 40 templates for digital exercises that are compatible with smartphones, tablets, and computers. The platform features a quick, effective, and user-friendly rating system that provides feedback to both learners and teachers, helping to identify problem areas and highlight where learners may need additional support.

Duolingo is a free linguistics gamification online application offering more than 94 language courses. It has over 500 million users worldwide. The Duolingo app for schoolteachers and students provides a fun and engaging way to teach languages, featuring personalised and self-paced homework.

Genially is a platform designed to gamify presentations, making them interactive and enjoyable. It enhances the learning experience by allowing the import of any presentation and by offering rich animations and gamification elements for various activities, such as quizzes and escape rooms filled with interactivity. Additionally, genially provides a wide range of templates that enable quick and easy integration of existing content, allowing users to become operational swiftly. Parents can also view class activities and grades to support their children's progress.

Kahoot supports various learning environments, including school, work, and home. It is used by more than a million players annually across over 200 countries. Kahoot creates a game show-like environment to encourage learning, making it particularly useful in schools for testing vocabulary, multiplication, and basic geography.

Wordwall is a platform that enables teachers to create simple and engaging activities for their classes. It provides a variety of predefined resources, and teachers can share their activities with others. Wordwall is especially useful for teaching vocabulary, and its activities can be accessed on any web-enabled device. Examples of activities include quizzes, matching exercises, and word games.



Implement gamification

To apply gamification to the teaching and learning process, Flores (2015) outlines five steps inspired by the model of Huang and Soman (2013):

Understand the Target Audience and Context: The instructor must be well-acquainted with their learners. This involves combining target audience analysis with context analysis to comprehend several key factors, such as group size, environment, skill sequence, and duration. Common challenges in education include issues with concentration, motivation, skills, pride, the learning environment, the nature of the course, and physical, mental, and emotional factors. By understanding these aspects, the educator can effectively determine which gamification elements to implement.

Define the Learning Objectives. Establishing learning objectives is essential for a successful teaching experience. These goals should include general educational objectives, specific learning objectives, and behavioural objectives.

Structure the Experience. Break down the program to identify the main points. The instructor prepares the sequence and quantifies what the student must learn and accomplish at each step. To ensure students complete each step, the instructor must provide motivational boosts and convey the educational program from simple to complex, starting with easier steps to maintain engagement and motivation.

Identify Resources. Consider several aspects such as tracking mechanisms, levels, rules, and feedback.

Apply Gamification Elements. Decide which gamification elements to apply, divided into autonomous and social elements. Stand-alone elements, like badges, levels, and time restrictions, focus on making learners compete with themselves and recognise self-achievement. Social elements include interactive competitions and cooperation, where learners' achievements are made public, and they become part of a community.

Similarly, Freeman (2021) outlines essential steps to implement gamification for learning, which include exploring the behaviours to promote, identifying the learning strategies and training objectives to be achieved, and configuring the game mechanics:

Use a Points System. Implement a points system to reward task completion, providing learners with a sense of accomplishment and recognition for their efforts.



Distribute Badges. Badges are a great way to reward progress and serve as milestones, even if learners do not earn points. They help motivate students to complete tasks by acknowledging their achievements.

Create a Script with Avatars. Develop a story that engages learners' imaginations by creating characters or avatars to use throughout the gamified learning experience. Ensure consistency by using the same characters or avatars throughout the game, allowing students to develop a connection with their unique roles.

Encourage Teamwork. Form teams to accomplish tasks within the story or game. Teamwork is invaluable for achieving learning objectives, as the fear of letting down teammates often motivates individuals more than the fear of personal failure.

DISCUSSION

Summary of Findings

The review suggests that gamification positively impacts the improvement of oral communication skills in English learners, primarily by increasing motivation and reducing anxiety. But since the studies were done in different ways, we need more research to know if this works for everyone.

Comparison with Previous Studies

This review agrees with earlier research that using games in language learning is a good idea. However, we need to do more studies over a longer time to see if this method works in the long run.

Practical Implications

Educational institutions should consider integrating gamified strategies into English teaching curricula, especially in activities aimed at enhancing oral communication. Teacher training in designing and implementing gamified activities is crucial for maximizing their effectiveness.

Study Limitations

This review is limited by the heterogeneity of the included studies and the potential lack of longitudinal studies evaluating the sustained impact of gamification. Additionally, most studies focused on lower education contexts, limiting generalization to other educational levels.

CONCLUSION

The incorporation of game-like elements into learning has emerged as a promising approach to enhance oral communication skills in English learners. By introducing elements such as points, badges,



leaderboards, and challenges, gamification can significantly boost learner motivation and reduce anxiety. When students feel engaged and rewarded, they are more likely to actively participate in speaking activities and overcome their fear of making mistakes.

However, the effectiveness of gamification can vary depending on several factors. The educational context, including the overall learning environment, teacher attitudes, and available resources, plays a crucial role. Gamification works best when it is seamlessly integrated into the curriculum and supported by a positive learning culture. Additionally, the design of the gamification intervention is essential. Well-crafted gamification elements that align with learning objectives and cater to students' interests can maximize its impact. Moreover, students' language proficiency levels can influence the effectiveness of gamification. While it can be beneficial for learners at all levels, it may be particularly effective for those who struggle with motivation or anxiety. For advanced learners, gamification can provide opportunities for challenge and differentiation. However, it is important to ensure that the gamification elements are appropriately scaled to match students' abilities and avoid frustration.

In conclusion, gamification holds great potential for fostering oral communication skills in English learners. By enhancing motivation, reducing anxiety, and creating a more engaging learning experience, gamification can contribute to improved language outcomes. However, to realize its full potential, it is essential to consider the educational context, the design of the intervention, and the student's language proficiency levels.

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