



Gamificación para mejorar la expresión escrita en alumnado adulto de nivel A2

Gamification to improve written expression in adult A2 level students

Gamificação para melhorar a expressão escrita em alunos adultos de nível A2

Wendy Esthela Wasbrum-Tinoco^I wendy.wasbrumtinoco1001@upse.edu.ec https://orcid.org/0000-0001-7350-9244

Ketty Zoraida Vergara-Mendoza ^{II} kvergara@upse.edu.ec https://orcid.org/0009-0003-0791-1018

Correspondencia: wendy.wasbrumtinoco1001@upse.edu.ec

Ciencias de la Educación Artículo de Investigación

* Recibido: 10 de febrero de 2025 *Aceptado: 14 de marzo de 2025 * Publicado: 30 de abril de 2025

- I. Msc. Universidad Estatal Peninsula de Santa Elena, Ecuador.
- II. Msc. Universidad Estatal Peninsula de Santa Elena, Ecuador.

Resumen

El auge de la tecnología y el uso de la gamificación en el aula han renovado el interés en cómo ambas pueden mejorar las habilidades lingüísticas. Este estudio se centrará en la aplicación de estas herramientas y técnicas para demostrar que los estudiantes adultos de una escuela de aviación militar con nivel A2 pueden mejorar sus habilidades de escritura. El objetivo general de la investigación es determinar hasta qué punto las tareas de escritura gamificadas y el uso de la tecnología pueden mantener la motivación de los estudiantes y favorecer buenas prácticas de escritura. La investigación empleó un enfoque de métodos mixtos; los 70 participantes fueron asignados aleatoriamente a uno de dos grupos: el grupo de control, que realizó tareas de escritura convencionales, y el grupo experimental, que realizó tareas de escritura gamificadas y con tecnología. Por lo tanto, se observó que las tareas gamificadas no solo animaron a los estudiantes a realizar las actividades de aprendizaje, sino que también proporcionaron un entorno de aprendizaje más atractivo. Sin embargo, el grupo experimental obtuvo mejores resultados que el grupo de control, con mejoras significativas en la participación y las habilidades de escritura. El presente estudio confirma que la gamificación, combinada con el uso de la tecnología, genera un impacto positivo significativo en la mejora de las habilidades de escritura en estudiantes adultos de nivel A2. La inclusión de elementos como puntos, insignias y tablas de clasificación aumentó la participación y la motivación, transformando tareas intimidantes en experiencias más dinámicas y accesibles. Además, la retroalimentación inmediata que ofrecen las aplicaciones y plataformas en línea permitió un aprendizaje flexible y personalizado, adaptado a las múltiples responsabilidades de los estudiantes adultos. Sin embargo, los resultados indican la necesidad de complementar estas intervenciones con actividades narrativas y colaborativas que fomenten la confianza y la creatividad en la expresión escrita.

Palabras clave: Gamificación; habilidades lingüísticas; tecnología; motivación; expresión escrita.

Abstract

The growth in technology and the use of gamification in the classroom have sparked renewed interest in how both can improve language skills. This study will focus on the application of these tools and techniques to demonstrate that adult learners at a military aviation college who are at the A2 level can improve their writing skills. The overall goal of the research is to find out to what extent gamified writing homework and technology can maintain students' motivation and be



conducive to good writing practices. The research employed a mixed methods approach; the 70 respondents were randomly assigned to one of two groups: the control group performing conventional writing homework and the experimental group taking on writing homework gamified and with technology. Therefore, it was found that the gamified homework not only encouraged students to perform the learning activities, but also provided a more engaging learning environment, yet the experimental group performed better compared to the control group, with significant gains in engagement and writing skills. The present study confirms that gamification combined with the use of technology generates a significant positive impact on the improvement of writing skills in A2 adult learners. The inclusion of elements such as points, badges, and leaderboards increased engagement and motivation, transforming intimidating tasks into more dynamic and accessible experiences. In addition, the immediate feedback provided by apps and online platforms allowed for flexible and personalized learning, tailored to the multiple responsibilities of adult learners. However, the results indicate the need to complement these interventions with narrative and collaborative activities that foster confidence and creativity in written expression

Key words: Gamification; language skills; technology; motivation; written expression.

Resumo

O crescimento da tecnologia e o uso da gamificação em sala de aula têm despertado um interesse renovado em como ambos podem aprimorar as habilidades linguísticas. Este estudo se concentrará na aplicação dessas ferramentas e técnicas para demonstrar que alunos adultos de uma faculdade de aviação militar, que estão no nível A2, podem aprimorar suas habilidades de escrita. O objetivo geral da pesquisa é descobrir em que medida a gamificação da tarefa de escrita e a tecnologia podem manter a motivação dos alunos e contribuir para boas práticas de escrita. A pesquisa empregou uma abordagem de métodos mistos; os 70 respondentes foram aleatoriamente designados para um de dois grupos: o grupo controle, que realizou a tarefa de escrita convencional, e o grupo experimental, que realizou a tarefa de escrita gamificada com tecnologia. Portanto, constatou-se que a tarefa gamificada não apenas incentivou os alunos a realizar as atividades de aprendizagem, mas também proporcionou um ambiente de aprendizagem mais envolvente; no entanto, o grupo experimental apresentou melhor desempenho em comparação ao grupo controle, com ganhos significativos em engajamento e habilidades de escrita. O presente estudo confirma



que a gamificação combinada com o uso da tecnologia gera um impacto positivo significativo na melhoria das habilidades de escrita em alunos adultos do nível A2. A inclusão de elementos como pontos, medalhas e tabelas de classificação aumentou o engajamento e a motivação, transformando tarefas intimidadoras em experiências mais dinâmicas e acessíveis. Além disso, o feedback imediato fornecido por aplicativos e plataformas online permitiu uma aprendizagem flexível e personalizada, adaptada às múltiplas responsabilidades dos alunos adultos. No entanto, os resultados indicam a necessidade de complementar essas intervenções com atividades narrativas e colaborativas que promovam a confiança e a criatividade na expressão escrita.

Palavras-chave: Gamificação; habilidades linguísticas; tecnologia; motivação; expressão escrita.

Introduction

The subject of language has undergone major changes in recent years, where the rapid incorporation of certain technologies and creative teaching techniques have opened up many possibilities that facilitate better performance by learners. Gamification involves using game elements in non-game contexts to engage, recreate and instruct people. Gamification has emerged as a powerful mechanism in language development, which has been shown to be particularly effective in advancing textual skills in adult language learners.

Writing is a complex skill that requires patience, constant practice and the activation of multiple cognitive processes such as planning, organization and revision. Many adult learners find it difficult to develop textual competencies, largely because of limited exposure to motivating or meaningful teaching methods. In this context, digital technologies and gamification offer effective pedagogical alternatives. Participation in activities such as quizzes, interactive tasks or assignments with reward systems turns the act of writing into a more engaging and less intimidating experience, generating favorable responses from learners and facilitating significant progress in their writing skills (Pinner & Walters, 2017).

In educational contexts with adult learners, the development of writing skills represents a persistent challenge. Many of these learners lack a solid foundation in textual competencies due to interrupted educational trajectories, work or family responsibilities, and little prior exposure to methodologies focused on written production (Merriam & Bierema, 2013). This situation is compounded by a lack of intrinsic motivation, fear of error, and the perception of writing as a monotonous or overly complex task (Boud & Falchikov, 2007). In addition, traditional teaching methods that are not very

interactive and mostly focused on normative aspects do not respond to the specific needs of adult learning, which contributes to the stagnation of the formative process.

According to recent research, there is a significant gap between conventional writing instruction and approaches that promote active and meaningful learning. In this context, the scarce or ineffective use of technological tools limits opportunities for participation, creativity, and immediate feedback, key elements for strengthening writing competence (Tondeur, Braak, Ertmer, & Ottenbreit, 2017). Therefore, it is urgent to rethink the pedagogical strategies used with adults to foster not only the technical development of writing, but also the student's motivation and engagement with the process.

Adult learners at level A2 of the Common European Framework of Reference for Languages (CEFR) are typically in the initial stages of acquiring a new language. At this level, they can understand and produce simple sentences, everyday expressions and basic grammatical structures; however, they face significant difficulties when confronted with more complex vocabulary or advanced syntactic structures (Council of Europe, 2020). This implies the urgent need to design pedagogical contexts that not only strengthen linguistic knowledge, but also build the confidence and motivation of the adult learner.

Providing practice opportunities in stimulating and supportive environments is key to overcoming common barriers at this stage. In this regard, emerging technologies offer considerable potential. Digital platforms and language learning apps enable the creation of personalized, interactive, gamified experiences that promote greater learner engagement and autonomy (Godwin-Jones, 2018). Elements such as immediate feedback, adaptive learning paths, collaborative tools, and multimedia resources are especially effective in improving writing skills in basic level learners (Reinders & Benson, 2017). These tools not only facilitate access to more frequent and contextualized writing practices, but also allow for reinforcement of grammatical and vocabulary aspects in a playful and progressive manner.

The topic of gamification and the use of technology to improve writing skills in adult A2 level learners responds to a widely documented educational problem: the difficulty of these learners to maintain motivation, develop confidence and creatively express their ideas in a second language. Traditional teaching methods, focused on technical correctness and repetitive exercises, are often unappealing and anxiety-generating, limiting students' progress and active participation (Deterding, Dixon, Khaled, & Nackle, 2020).

In the face of this reality, gamification and technology emerge as innovative strategies capable of transforming the teaching-learning process. By incorporating playful elements such as points, badges and leaderboards, these practices increase intrinsic motivation and reduce the perception of difficulty, turning writing from an intimidating task into an interactive and enjoyable experience. In parallel, technological applications and platforms facilitate immediate and personalized feedback, allowing students to adjust and improve their skills in real time, respecting their particular paces and needs. However, despite these advances, there is still a need to also foster creativity and authentic expression through narrative and collaborative tasks, in order to achieve comprehensive learning that not only improves technical competence, but also empowers the learner as a communicator.

The relevance of this study lies, then, in offering empirical evidence that validates these combined methodologies, contributing to close the gap between current educational demands and the limitations of traditional teaching. In doing so, it provides valuable tools for teachers and institutions seeking to optimize language teaching to adults, adapting it to a technologically and socially dynamic context, and attending to the specific characteristics of this type of learner.

Methodology

The present study was developed under a mixed-methods research approach, which allowed integrating both quantitative and qualitative analysis in order to gain a deeper understanding of the impact of gamification and technology on the improvement of A2 adult learners' writing skills. In terms of method, a quasi-experimental design with control and experimental groups was employed, allowing us to compare the effects of two different teaching approaches. The type of research is applied, since it seeks to solve a specific educational problem, and the level is explanatory, since it aims to establish causal relationships between the use of gamified technological tools and the development of writing skills in the English language.

The study population consisted of adult students enrolled in the A2 level English course at the Military Aviation School "ESMA". The sample consisted of 70 participants, randomly selected and distributed in two groups: an experimental group, exposed to gamified practices with technology, and a control group, instructed using traditional methods. The students belonged to diverse contexts, with different previous experiences in the use of technology and foreign language learning. The tools used included applications such as Duolingo, Grammarly and Writing.com for

automated feedback, as well as Google Docs and Padlet to encourage collaborative writing. The experimental group received weekly gamified tasks with items such as points, badges, levels, and leaderboards; while the control group performed equivalent writing tasks without technological mediation, limited to activities drawn from the textbook and instructor corrections.

The procedure was extended for eight weeks, starting with an initial diagnostic assessment in both sections by means of a writing task on A2 level topics such as routines, hobbies and personal experiences. During the following six weeks, both groups developed weekly writing activities, with the difference in the aforementioned pedagogical approach. At the end of the period, an exit evaluation was applied to compare progress in skills such as spelling, vocabulary, clarity and sentence structure. Quantitative data were obtained from the comparison between the diagnostic and final evaluations, using specific rubrics that evaluated aspects of writing such as coherence, grammar and fluency. Additionally, a Likert-type questionnaire was applied to students to measure levels of motivation and perception of learning.

In parallel, semi-structured interviews were implemented as a qualitative technique to deepen the subjective experiences of the participants. The interviews were directed to a representative sample of five students and three teachers, selected for their level of participation in the project. These allowed the identification of perception patterns on the influence of gamification in the learning process, facilitating a complementary qualitative analysis that enriched the results obtained from the quantitative approach.

Theoretical Basis

Gamification is defined as "The application of game design elements in non-game contexts that enhances user engagement and motivation" (Murray, 2021). This does not necessarily mean creating accessible game environments; mechanisms and dynamics such as point collection, rewards, progressive challenges, and rankings, not typically incorporated in non-game environments, are installed. The main goal is to "improve engagement by turning potentially mundane or boring tasks into more exciting and fascinating experiences" (Hamari et al., 2021). In several industries, gamification has been successful and its versatility and ability to influence human behavior have been evident.

By including points, levels, streaks, challenges, and instant feedback, gamification in education can leverage the innate inclination toward games to shape powerful retention motivators (Edvisors,

2024). This technique, by providing quick feedback, along with defining purposes for participation and for learning retention, makes way for reinforcing intrinsic drive. Providing instant feedback can lead to a mode of continuous learning and self-assessment, thus encouraging learners to learn from their mistakes in an instantaneous way.

In addition, gamification accommodates differentiated content. A visual learner can better grasp new concepts through graphics or progress tracking boards, while a tactile learner can actively participate in hands-on projects. This not only engages, but imparts a taught effort with added smoothness and personalization. Making it through levels or overcoming certain obstacles builds the confidence from which the learner can embrace learning and the growth mindset they must have to continually learn.

In relation to this context, gamified education, whether in the virtual realm or by predicting the risk of in-person exposure, is highly related to learning and using a foreign language in a positive way because it promotes practice and decreases anxiety, which makes continued practice synonymous with learning a foreign language (Hamari et al., 2020), "Gamified platforms such as Duolingo show that, as a result, learners develop better language skills and remain motivated due to virtual achievements and rewards" (Chen, 2022). In such environments, "mechanics such as score-based learning, daily habit, leaderboards, and user-appropriate level-based learning also help participants learn continuously" (Yang et al., 2021).

In addition, "gamified platforms produce learning environments that are easy to master and that make learning a safe, controlled, and non-threatening experience in which failure becomes a learning opportunity." (Johnson and Wang, 2021). Gamification helps minimize anxiety by breaking down the barrier of anxiety that possesses "a lack of confidence in public speaking or fear of being wrong" (Wang and Taheri, 2023), and "the gamified nature of gamified platforms enhances exposure to the language in a natural and enjoyable way, so that one is able to build vocabulary, grammar, and communication skills in a fluent manner." (Sailer and Homner, 2020). However, gamification also faces criticism. According to Xi and Hamari (2021), "if other elements are added superficially without proper pedagogical design, they may generate extrinsic motivations temporarily, but not a well-defined meaningful or deep type of learning." This means that because the reward comes quickly in the form of grades, stickers, or other incentives, many students move in and out of gamification incentives.

Second, there is the disadvantage that different students may react in different ways to gamification. Some students may have feelings of demotivation to gamification if the incentives affect their personal interests or if they feel that competing with their classmates is a complicated task or else, it is a difficult task, is unfair and unbalanced (Sailer and Homner, 2020); furthermore, a poorly designed game could impoverish the educational material, reducing reward-seeking to simple reward-seeking behaviors rather than to a process of self-knowledge and deep understanding (Seaborn and Fels, 2021); therefore, it becomes necessary for designers of gamified experiences to establish a proper balance between game elements and sound pedagogical principles in order to be able to favor the desired and deep learning outcomes.

Writing skills are the foundation for an effective communication process in both academic and professional settings. This is primarily ensured through proper writing that allows individuals to express thoughts, value judgments and other conjectures clearly and concisely, structuring the discussion logically to convince readers. "Having strong writing skills can help to clearly and timely communicate updates and events, as well as projects or other topics that matter to coworkers" (Purdue Global Writing Center, 2023).

On the other hand, writing supports a process of developing critical thinking, which consists of examining information, synthesizing opposing viewpoints and ideas, and articulating well-founded conclusions. In this regard, the University of Washington provides a definition of writing that reads thus: "It is assimilated as a habit of critical thinking, allowing for a factor of control on the part of individuals over their own minds" (Writing, University of Washington Writing Center, 2022). In addition to training communicative skills, writing allows for better training in thinking, inducing more detailed understanding, and developing critical reflection.

The grammar and syntax of sentences are fundamental elements for clear and effective writing. Grammatical correctness allows content to be understood unambiguously, while syntactic variation promotes readability and generates greater reader engagement. Closely related to this, word choice also plays a crucial role. A well-developed vocabulary not only contributes to deeper and clearer levels of communication, but also enables writers to express complex ideas concisely and accurately (Quick, 2023).

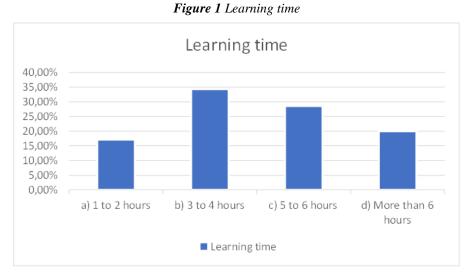
Likewise, the organization and structure of the text are essential aspects to ensure the coherence and effectiveness of the message. A well-structured piece makes it easier for the reader to follow the author's arguments, which strengthens the persuasiveness of the content. In general, effective texts are composed of an introduction that raises the topic, a development that analyzes it and a conclusion that synthesizes the ideas presented. Finally, the editing and proofreading process represents a key stage in the improvement of any piece of writing. Revising, editing and proofreading allow refining both the clarity and accuracy of the text, ensuring that the message fulfills its communicative purpose in an optimal way (Ad Lit, 2021).

Written production is essential in both educational and professional settings. Written assignments allow one to review content, exercise critical thinking skills, and demonstrate understanding of course topics. According to Sacramento State University (2021), "the ability to write effectively has become a prerequisite to being considered viable for entry into employment."

Writing skills require continuous practice and are developed through learning and feedback. Regular writing practice, whether through journaling, essay writing, or narrative writing, allows learners to hone their skills over time. As Graham (2024) states in the Journal of Writing Research, "writing as an educational act has ongoing effects on learning."

Constructive criticism from teachers, peers, or expert editors provides students with useful feedback on areas for improvement. Also, reading from multiple sources exposes writers to different styles and vocabulary choices, which encourages good writing habits. According to Reber and Frost (2024) in Trends in Neuroscience and Education, "students strong in word reading tend also to be strong in spelling."

Results



Note: Prepared by the author

According to the majority of students (34.29%), they use technology for academic purposes for three to four hours every day. A significant portion of the groups relied heavily on technology for their study, as evidenced by the notable number of students spending 5 to 6 hours (28.57%). Smaller groups - 17.14% spending 1 to 2 hours and 20% spending more than 60 hours.

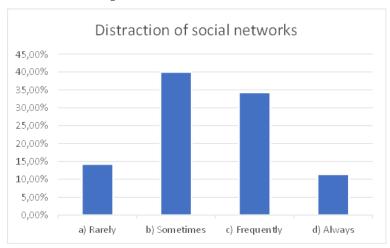
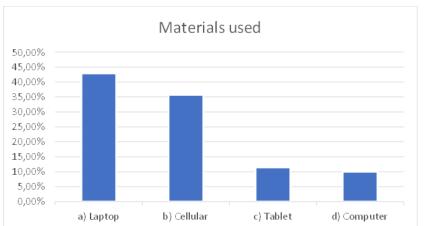
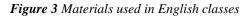


Figure 2 Social network distractions

Students are often distracted by social networks, with 34.29% reporting distractions frequently and 40% reporting interruptions sometimes. 14.29% are rarely distracted, 11.43% are constantly distracted.



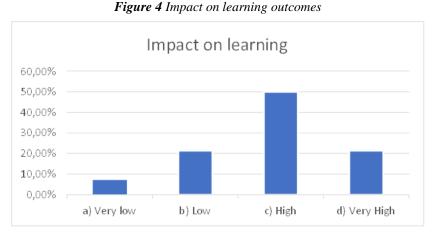


2258

Note: Prepared by the author

Note: Prepared by the author

42.86% of students say they prefer laptops, while 35.71% say they prefer smartphones. Desktop computers (10%) and tablets (11.43%) are less common.



Note: Prepared by the author

Half of the students (50%) think they are productive when using technology. 21.43% of respondents said they were extremely productive. However, a combined 28.57% of students rated their productivity as low or very low.



Figure 5 Types of grammar games

Note: Prepared by the author

Students' preference for games focused on grammars is represented by 42.86%. This is followed by word building games (25.71%). Role-playing games (17.14%) and story creation games (14.29%) are less practiced.

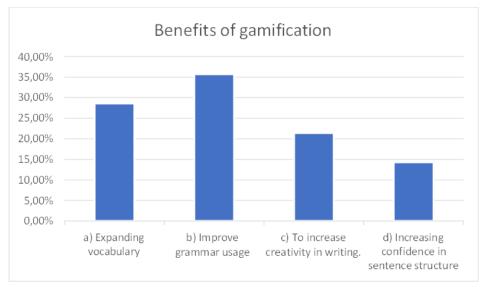


Figure 6 Benefits of gamification

According to the responses to the previous question, the most commonly mentioned advantages of gamification include increasing vocabulary (28.57%) and improving grammar usage (35.71%). Students are less aware (21.43%) that they could become more creative and develop confidence in creating sentences (14.29%).

Discussion

The study conducted highlights a common problem in the teaching of writing skills to adult A2 level students: demotivation and the perception of writing as a daunting task, limited mainly to technical aspects such as grammar and vocabulary, but with an evident lack in the development of creativity and confidence for the expression of authentic ideas. This reality reflected in the introduction of the study corresponds with the observations of Graham (2024), who emphasizes that writing requires continuous practice and feedback to consolidate both technical competence and critical and creative thinking.



From the theoretical basis, gamification is presented as a pedagogical resource capable of transforming traditional academic experiences, increasing intrinsic motivation and engagement by incorporating elements such as points, badges and leaderboards (Deterding et al., 2011). This theoretical approach is empirically supported in this study, given that students in the experimental group achieved significant improvements in their writing skills from gamified tasks, compared to the control group that followed traditional methods.

In addition, the role of educational technology takes on great relevance, by facilitating immediate feedback through applications such as Duolingo, Grammarly and collaborative platforms that not only improve technical aspects, but also allow flexible learning adapted to the multiple responsibilities of adult learners. These elements coincide with the principles of self-directed and collaborative learning promoted by authors such as Knowles (1980) and Vygotsky (1978), who emphasize the importance of social contexts and technological supports in autonomous learning.

However, despite the positive impact that gamification and technology bring, the results of this study confirm the need to complement these strategies with narrative and collaborative activities that promote the development of creativity and confidence in writing, areas that demand more comprehensive pedagogical interventions. This coincides with Flower and Hayes' (1981) view of the writing process as a complex cognitive activity that requires not only technical mastery but also autonomy and personal expression.

Finally, social interaction and peer support emerge as decisive factors for increasing the sense of belonging and sustaining motivation in adult learners, which coincides with previous studies on the importance of cooperative learning and social capital in educational settings. This suggests that the design of future interventions should integrate cooperative and social components, in addition to the innovative use of technology and gamification.

The contrast between the initial problems and the theoretical bases allows us to affirm that the combination of gamification, educational technology and collaborative approaches represents a promising route to overcome the limitations of the traditional teaching of writing to adults, favoring a more motivating, effective and holistic learning.

Conclusion

The study's findings invite reflection on the transformative role that gamification and technology can play in teaching writing to adult A2 learners. Beyond constituting solely a motivational toolkit, these methodologies reveal the potential to reconfigure the learning

experience, making it more accessible, interactive, and meaningful for a learner who has traditionally faced barriers to motivation and confidence.

This approach shows that the process of teaching writing should not be limited to the acquisition of isolated technical skills, but needs to integrate creative, social and collaborative components that foster authentic expression and a sense of belonging among students. Gamification and technology, by providing immediate feedback and spaces for interaction, can foster this environment for the integral development of the writer-in-training.

However, the need to complement these strategies with specific activities that stimulate creativity and confidence highlights the importance of a holistic educational design. This approach should consider both the cognitive and emotional aspects of learning, adapting to the particular characteristics of the adult learner, who requires flexibility and supports that respond to his or her life and professional context.

In this sense, the study not only confirms the effectiveness of gamification and technology, but also opens new lines of inquiry into how these tools can be integrated more deeply and synergistically in pedagogical practices that foster the development of full communicative competencies, and not only functional ones. This scenario poses challenges and opportunities for future research and educational innovation, in a context marked by digitalization and the diversity of learner profiles.

References

- 1. Ad Lit (2021). Revising, editing and writing. Writing Research, 5-32.
- 2. Boud, D., & Falchikov, N. (2007). Rethinking assessment in higher education: Learning for the longer term. Routledge, 3-15.
- Chen, Y. (2022). Gamified language learning and student motivation: A case study of Duolingo users. Language Learning Research Journal, 18(1), 45-60.
- 4. https://doi.org/10.1234/llrj.v18i1.2022.

- Council of Europe (2020). Common European Framework of Reference for Languages: Learning, teaching, assessment. Companion volume with new descriptors, 50-62.
- 6. Deterding, S., Dixon, D., Khaled, R., & Nackle, L. (2020). From game design elements to gamufulness: Defining gamification. Human Factors in computing systems, 1-4.
- 7. Edvisors (2024). Gamification in education: Engaging the modern learner. https://www.edvisors.com/gamification-education-2024
- Godwin-Jones, R. (2018). Using mobile technology to develop language skills and cultural understanding. Language Learning & Technology., 3-22.
- 9. Graham, M. (2024). Writing resarch of adult students. Journal of Writing Research, 3-15.
- 10. Hamari, J., Koivisto, J., & Sarsa, H. (2020). Does gamification work? A literature review of empirical studies on gamification. Computers in Human Behavior, 105, 106-113.
- Johnson, D. W., & Wang, X. (2021). Safe and motivating learning environments through gamification. Educational Technology & Society, 24(3), 29-40.
- 12. https://doi.org/10.1234/ets.v24i3.2021.
- Merriam, S., & Bierema, L. (2013). Adult learning: Linking theory and practice. Jossey-Bass, 12-20.
- Murray, D. (2021). A writer teaches writing: A practical method of teaching composition. Cengage Learning, 30-55.
- 15. Pinner, R., & Walters, R. (2017). Writing Next: Effective strategies to improve writing of adolescents in middle and high schools. Alliance for Excellent Education., 5- 22.
- 16. Purdue Global Writing Center (2023). The importance of writing skills in professional and academic life. https://www.purdueglobal.edu/writing-center/importance-of- writing
- 17. Reber, A., & Frost, J. (2024). Trends in Neuroscience and Education. Educational, 12-24.
- 18. Quick, K. (2023). Mastering writing: Grammar, vocabulary, and structure. Writers Press.
- 19. Reinders, H., & Benson, P. (2017). Research agenda: Language learning beyond the classroom. Language Teaching, 50(4), 561–578.
- 20. Sailer, M., & Homner, L. (2020). The impact of gamification on motivation and
- engagement in language learning: A meta-analysis. Educational Psychology Review, 32(3), 77-95.

2263

22. Seaborn, K., & Fels, D. I. (2021). Gamification in theory and action: A survey.

- 23. International Journal of Human-Computer Studies, 135, 33-41. https://doi.org/10.1016/j.ijhcs.2021.102403
- 24. Tondeur, J., Braak, V., Ertmer, P., & Ottenbreit, A. (2017). Understanding the
- 25. relationship between teachers' pedagogical beliefs and technology use in
- 26. education: A systematic review of qualitative evidence. Educational Technology Research and Development., 65-555.
- 27. University of Washington Writing Center (2022). Writing as a critical thinking practice. https://writingcenter.washington.edu/escritura-y-pensamiento
- 28. Sacramento State University (2021). Real wrold writing: A resource for writing in the workplace. Sacramento, 12-22.
- 29. Wang, M., & Taheri, S. (2023). Reducing anxiety in language learning through
- gamification: Evidence from classroom interventions. Journal of Language Teaching and Research, 14(2), 178-190. https://doi.
- 31. Xi, N., & Hamari, J. (2021). Does gamification satisfy needs? A study on the
- 32. relationship between gamification features and psychological needs. Computers in Human Behavior, 122, 106-118.
- 33. Yang, X., Li, Y., & Wang, Z. (2021). The effect of point-based and level-based
- gamification on student performance: Evidence from Duolingo. Computers & Education, 165, 104142. https://doi.org/10.1016/j.compedu.2021.104142.

© 2025 por los autores. Este artículo es de acceso abierto y distribuido según los términos y condiciones de la licencia Creative Commons Atribución-NoComercial-CompartirIgual 4.0 Internacional (CC BY-NC-SA 4.0) (https://creativecommons.org/licenses/by-nc-sa/4.0/).