ASCE MAGAZINE ISSN: 3073-1178

Revista ASCE Magazine, Periodicidad: Trimestral Octubre-Diciembre, Volumen: 4, Número: 4, Año: 2025 páginas 2797 - 2815

Doi: https://doi.org/10.70577/asce.v4i4.550

Recibido: 2025-11-28

Aceptado: 2025-12-03

Publicado: 2025-12-10

Eficacia de las tecnologías de realidad virtual en el aprendizaje de inglés como lengua extranjera en estudiantes universitarios: una revisión sistemática

Effectiveness of virtual reality technologies in learning English as a foreign language in university students: a systematic review

Autores

Erika Cecilia Borja Salazar[1]
https://orcid.org/0009-0005-5584-6796
eborja86@hotmail.com
Universidad Técnica de Cotopaxi
Latacunga - Ecuador

Alison Paulina Mena Barthelotty[2]
https://orcid.org/0000-0001-5956-1580
alipauli@icloud.com
Universidad Técnica de Cotopaxi
Latacunga - Ecuador

Edison Marcelo Pacheco Pruna[3]
https://orcid.org/0009-0009-5961-5687
marcell7528@gmail.com
Universidad Técnica de Cotopaxi
Latacunga - Ecuador

Yajaira Marianela Herrera Guanoquiza[4]
https://orcid.org/ 0009-0007-4751-5377
herrerayjaira@hotmal.it
Instituto Cotopaxi
Latacunga - Ecuador

Cómo citar

Borja Salazar, E. C., Mena Barthelotty, A. P., Pacheco Pruna, E. M., & Herrera Guanoquiza , Y. M. (2025). Effectiveness of virtual reality technologies in learning English as a foreign language in university students: a systematic review. *ASCE MAGAZINE*, *4*(4), 2797–2815.

Resumen

En el contexto de la educación superior, la demanda de métodos innovadores para la enseñanza del inglés como lengua extranjera (EFL) impulsó la exploración de tecnologías inmersivas. Al respecto, este estudio se planteó con el objetivo general de analizar la eficacia de las tecnologías de realidad virtual (RV) en el aprendizaje de inglés en estudiantes universitarios. Para ello, se propuso caracterizar la evidencia empírica disponible, identificar los tipos de RV utilizados y examinar sus efectos en competencias lingüísticas específicas. La investigación consistió en una revisión sistemática cualitativa de la literatura en base al protocolo PRISMA, que permitió seleccionar y analizar 14 estudios científicos publicados entre 2020 y 2025. Los resultados mostraron una diversidad de tecnologías, desde entornos inmersivos 3D y gafas RV hasta realidad aumentada y aplicaciones gamificadas. La evidencia indicó un impacto positivo y significativo de la RV, especialmente en la adquisición de vocabulario y el desarrollo de la expresión oral, la fluidez y la pronunciación, además de beneficios en la motivación y la reducción de la ansiedad lingüística. Se concluyó que la RV constituye una herramienta pedagógica eficaz para crear entornos de aprendizaje inmersivos y contextualizados, aunque su implementación óptima requiere una integración didáctica cuidadosa y superar barreras de accesibilidad tecnológica.

Palabras clave: Realidad Virtual, Enseñanza de Idiomas, Educación Superior, Inglés como Lengua Extranjera, Tecnología Educativa, Aprendizaje Inmersivo.

Abstract

In the context of higher education, the demand for innovative methods for teaching English as a Foreign Language (EFL) drove the exploration of immersive technologies. In this regard, this study was proposed with the general objective of analyzing the effectiveness of virtual reality (VR) technologies in the learning of English in university students. To this end, it was proposed to characterize the available empirical evidence, identify the types of VR used and examine their effects on specific language skills. The research consisted of a qualitative systematic review of the literature based on the PRISMA protocol, which allowed the selection and analysis of 14 scientific studies published between 2020 and 2025. The results showed a diversity of technologies, from immersive 3D environments and VR glasses to augmented reality and gamified applications. The evidence indicated a positive and significant impact of VR, especially on vocabulary acquisition and the development of speaking, fluency and pronunciation, in addition to benefits in motivation and the reduction of language anxiety. It was concluded that VR constitutes an effective pedagogical tool to create immersive and contextualized learning environments, although its optimal implementation requires careful didactic integration and overcoming technological accessibility barriers.

Keywords: Virtual Reality, Language Teaching, Higher Education, English as a Foreign Language, Educational Technology, Immersive Learning.

Introduction

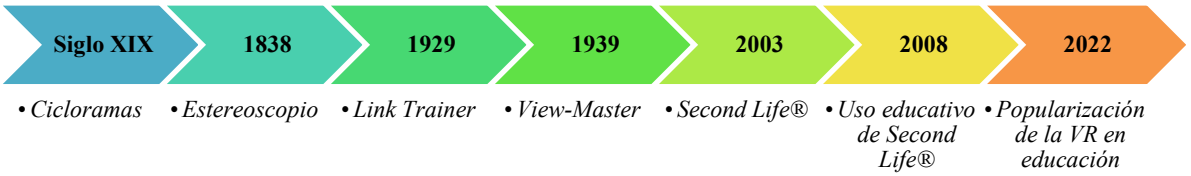
In the context of economic globalization and cultural diversity, language learning has become a compulsory subject for students, which has also made it a popular topic of research among academics (Chen et al., 2022). In this regard, English is considered the most widely used language worldwide, a reason why numerous educational institutions have integrated it into their curricula (Basantes et al., 2021). In such cases, this learning is defined as the acquisition of a language different from the mother tongue and not used in the student's daily life, representing a vital requirement for modern society due to the need for high mobility and sociability (Satullaeva & Kurbanbaeva, 2020).

In response to this need, Virtual Reality (VR) emerges as a technology with transformative potential. According to Chen et al. (2022) t is conceptualized as an immersive technology that simulates reality and provides users with real experiences. It is specifically defined as a highly interactive multimedia environment based on computer systems, in which the user becomes a participant with the computer in a “virtually real” world (Luo et al., 2024). Technically, it is a computer-generated simulation that replaces people’s surroundings through devices such as screen-equipped goggles, integrated headphones, and head-tracking systems(Arévalo & Carrión, 2025).

The described setup enables a fully immersive 360° experience. Since these systems completely envelop the users’ vision, they “offer high-quality experiential learning that goes beyond traditional passive teaching and learning environments and [...] actively engages students in multisensory learning within digital ecosystems” (Dooly & López, 2024). VR has rapidly evolved since its beginnings in the 1960s. In this regard, its technological evolution can be visualized in Figure 1, a timeline that illustrates the development of immersive virtual environments, from their earliest visual precedents to their application in modern education.

Figure 1

Historical Evolution of Immersive Virtual Environments and Virtual Reality in Education



Note. Adaptation of the timeline present in the original document from (Hua & Wang, 2023).

Additionally, at the pedagogical level, university-level English education shows growing interest in methods that promote a communicative approach, which is grounded in the educational theory of constructivism. This theory posits a process in which the learner independently shapes an intellectual model; in it, students are active agents and teachers act as cognitive facilitators who provide instructions and models for assigned tasks (Kim et al., 2022).

This framework is enriched by the Cognitive-Affective Model of Immersive Learning (CAMIL), cited by Feng & Luan (2023) which explains how immersive virtual reality (IVR) technology enhances learning performance by integrating technological, affective, and cognitive factors through multiple interconnected pathways. CAMIL emphasizes that immersion and interactivity generate sensations of presence (feeling "there") and agency (control over actions), which can alter students' self-perception and foster embodiment—that is, the experience of possessing a virtual body. Each sensory and cognitive experience enables students to actively interact with objects in 3D environments, facilitating vocabulary acquisition and the formation of coherent memories that promote retention and knowledge transfer.

The technological foundations of VR rely on essential requirements. According to Vera et al. (2003) as referenced by Moreno & Galván (2020), a virtual reality setup must meet three key conditions: simulation—the ability to represent a system with sufficient resemblance to reality to convince the user; interaction—which involves user control over the system so that their actions produce changes in the artificial world through interfaces such as keyboards, mice, or sensory suits; and perception—considered the most important factor, which targets the senses (sight, hearing, touch) through external elements such as display lenses, head-mounted displays (HMDs), or data gloves.

The reasons for adopting this technology in education are numerous. According to Guillén (2011) as cited by Agurto & Guevara (2023), R promotes motivation, provides real-life

experience, encourages more active participation, generates opportunities for immersion and interactivity, supports self-paced learning, and enables inclusion for students with special needs, among other advantages.

However, the application of these technologies in English language teaching faces concrete challenges. The outbreak of COVID-19 created an urgent need for VR-enhanced language learning due to lockdown measures (Hua & Wang, 2023). Despite growing academic attention, relatively few studies explore the gaps in understanding regarding the use of VR technologies in English classrooms. A critical challenge lies in the potential reduction of human interaction, which makes it difficult for teachers to observe students' learning processes (Luo et al., 2024). Additional obstacles include the cost of devices, the need for high-quality educational content, and the teacher training required for effective implementation (Ordoñez et al., 2023).

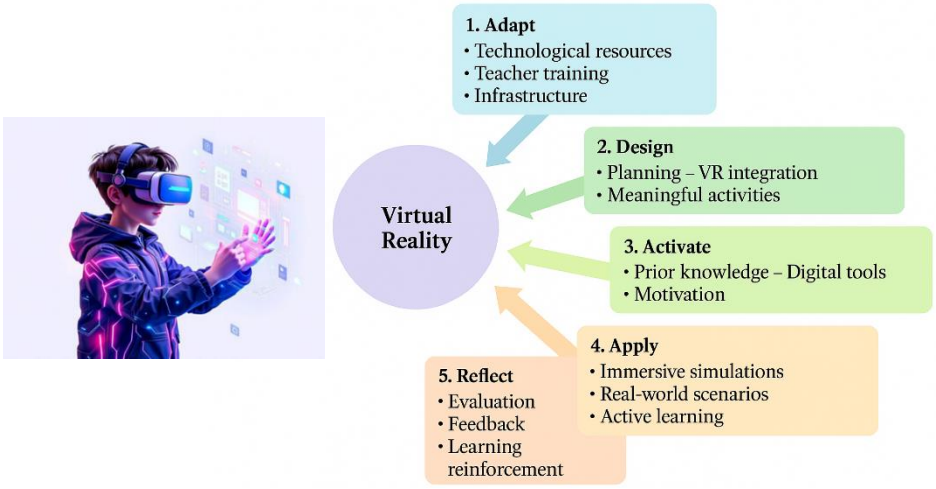
The justification for this study is based on the unique potential of VR to address fundamental shortcomings in English language learning. The technology can create artificial sensory experiences that engage individuals emotionally and attentively, while also enabling real-time interaction (Rahmanu & Molnár, 2024). This potential is particularly valuable in English as a Foreign Language (EFL) context, where opportunities for students to be exposed to the target language in real-life situations are often limited; VR enables a mixed reality that combines the real world with the virtual one (Kim et al., 2022).

Research such as that by Berns & Reyes (2021) argues that the use of VR technology could allow students—especially those with few or no opportunities to travel abroad—to experience linguistic and cultural immersion through "real-world" environments. Support for this advantage comes from educational psychology, whose findings show that people retain only 15% of information through vision and 25% through hearing, while the combination of audiovisual and audio raises retention to 65% (Pan et al., 2021), a principle that VR fully exploits.

To operationalize its implementation in the classroom, Agurto & Guevara (2023) propose following the ADAAR model.

Figure 2

ADAAR Model for the Implementation of Virtual Reality in the Classroom



Note. Adapted fromAgurto y Guevara (2023). The model represents the five stages for implementing virtual reality in educational contexts: Adjust, Design, Activate, Apply, and Reflect.

Therefore, this study is proposed with the general objective of analyzing the effectiveness of virtual reality technologies in the learning of English as a foreign language among university students through a systematic review of the scientific literature. To achieve this, it pursues specific objectives aimed at:

1. Characterizing the current state of empirical evidence through a descriptive synthesis of all available studies,
2. Identifying the types of virtual reality technologies used in university contexts, and
3. Examining the effects of virtual reality on the development of English language competencies, such as listening comprehension, pronunciation, vocabulary, and fluency.

Methodology

This systematic review was conducted using a descriptive qualitative approach, with the aim of interpreting, organizing, and critically analyzing the scientific evidence related to the use of virtual reality technologies in the learning of English as a foreign language among university students. To structure the process rigorously, the PRISMA protocol (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) was applied, which divides the review into four stages: identification, screening, eligibility, and inclusion.

Identification Stage

A comprehensive search was carried out in recognized academic databases. For this, combinations of keywords related to the topic were used, both in Spanish and English, including terms such as “virtual reality,” “language learning,” “English as a foreign language,” “higher education,” “immersive technologies,” among others. Boolean operators such as AND and OR were applied to refine the results.

Table 1

Scientific Information Search Path

Database / Repository	Keywords and Boolean Operators Used
Scopus	"virtual reality" AND "language learning" OR "EFL" AND "higher education"
ERIC	"immersive technologies" AND "English learning" OR "university students"
Google Académico	"realidad virtual" AND "aprendizaje de inglés" OR "educación superior"
Scielo	"tecnologías inmersivas" AND "lengua extranjera" OR "formación universitaria"
Redalyc	"realidad virtual" AND "idiomas" OR "enseñanza de inglés" AND "nivel universitario"

Screening Stage

Once the results were obtained, duplicate records were removed, and titles and abstracts were reviewed to verify the relevance of each study. The following inclusion criteria were defined:

- Empirical studies analyzing the use of virtual reality in university contexts.
- Research involving populations over 18 years of age.
- Articles published in indexed scientific journals.
- Documents available in Spanish or English.
- Publications dated between 2020 and 2025.

Exclusion criteria were also established, such as:

- Theoretical studies without practical evaluation.

- Research conducted at other educational levels (primary or secondary).
- Articles without full access, duplicates, or outside the established time and language range.

Eligibility Stage

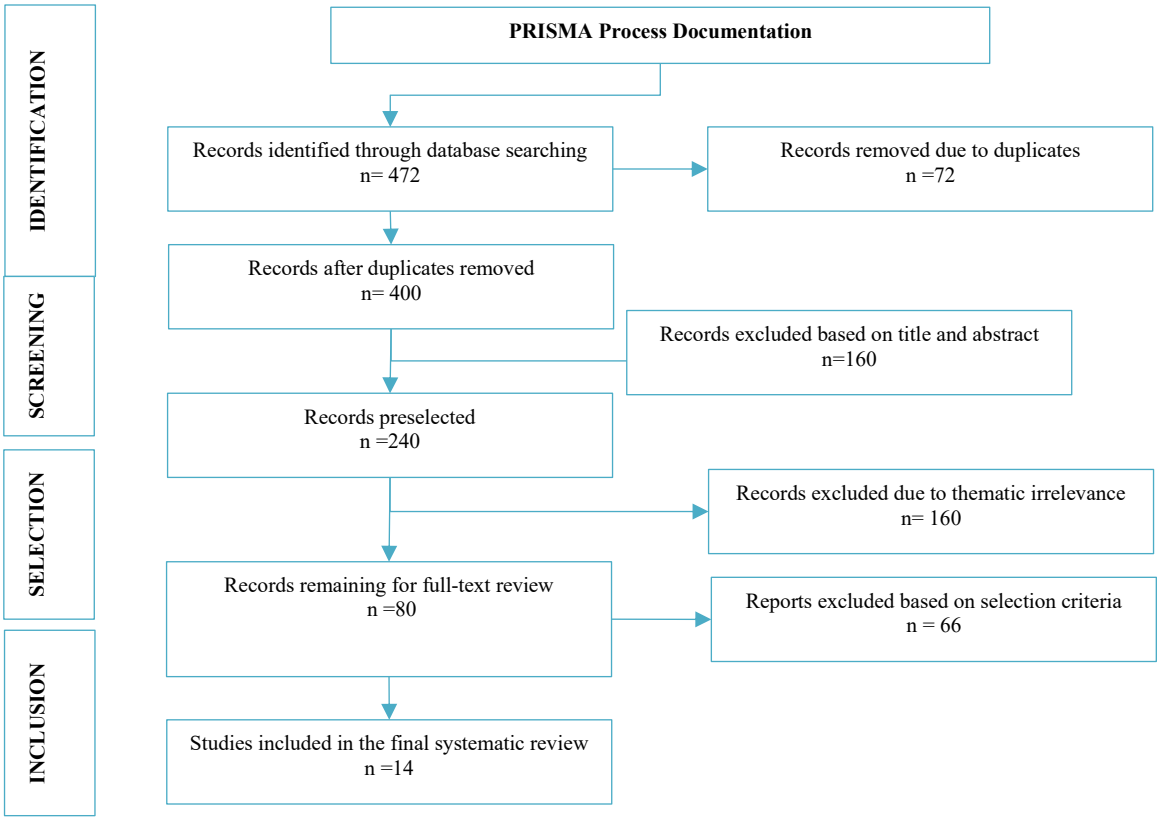
In this phase, the full content of the selected articles was reviewed to ensure they directly addressed the study's objectives. Only those that explicitly examined the impact of virtual reality on English as a foreign language learning among university students were retained.

Inclusion Stage

Finally, the most relevant studies were selected for in-depth qualitative analysis. A total of 20 scientific articles were included, providing significant evidence. The literature selection process for this study is detailed in Figure 3:

Figure 3

Study Selection Process



Note. This diagram is based on the PRISMA 2020 guidelines and illustrates the process of identification, screening, eligibility, and inclusion of the studies considered in this systematic review.

.

Results

The findings derived from the review of the 14 studies are organized into three tables, corresponding to the objectives established for the study.

a. Characterization of the Current State of Available Empirical Evidence

The analysis of the 14 included studies reveals the following methodological and distributional characteristics:

Table 2

Methodological Distribution of the Included Studies

Category	Classification	Count	Percentage	Representative Studies
Research Design	Systematic Review / Meta-analysis	4	28.6%	Chen et al. (2022), Dhimolea et al. (2022), Hua & Wang (2023), Luo et al. (2024)
	Experimental/cuasi-experimental	5	35.7%	Arévalo & Carrión (2025), Feng & Luan (2023), Aguirre et al. (2023)

	Mixed Methods	3	21.4%	Agurto & Guevara (2023), Kim et al. (2022), Rahmanu & Molnár (2024)
	Qualitative / Ethnographic	2	14.3%	Dooly & López (2024), Berns & Reyes (2021)
Sample Size	100+ participants	4	28.6%	Feng & Luan (2023), Arévalo & Carrión (2025)
	30-99 participants	6	42.9%	Aguirre et al. (2023), Rahmanu & Molnár (2024)
	<30 participants	4	28.6%	Agurto & Guevara (2023), Kim et al. (2022)

In general, studies with experimental and systematic review designs predominate, with a balanced distribution in sample sizes. Immersive VR is the most researched technology

Table 3

Geographic and Temporal Distributionl

Región	Number of Studies	Years of Publication	Main Contributions
Asia	7	2021-2024	Meta-analyses, large-scale experimental studies
Latin América	4	2020-2025	Applied research in real educational contexts
Europe	2	2021-2024	Systematic reviews, ethnographic studies
International	1	2022	Global-scope meta-analysis

n general, Asia leads scientific production, with methodologically diverse contributions. Latin America shows sustained growth in applied research.

Table 4

Study Variables and Application Contexts

Research Variable	Frequency	Percentage	Predominant Context
Vocabulary	9	64.3%	Undergraduate university students
Speaking Skills	7	50.0%	EFL (English as a Foreign Language) contexts
Motivation/Attitude	6	42.9%	Higher education
Escritura	3	21.4%	Asian universities
Listening Comprehension	4	28.6%	Immersive environments

The characterized evidence shows that vocabulary emerges as the most researched variable, with emphasis on English as a foreign language contexts in higher education.

a. Types of Virtual Reality Technologies Used in University Contexts for English Language Teaching

Below is a synthesis of the types of virtual reality technologies identified in the reviewed literature, detailing the specific tools and their application in the context of university-level English learning.

Table 5

Types of Virtual Reality Technologies

Nº	Reference	Type of Technology	Description
1	(Chen et al., 2022)	Realidad Virtual (RV)	VR is used to create immersive environments and contextual simulations where students interact with virtual speakers and practice English in real-life scenarios.
2	(Hua & Wang, 2023)	Realidad Virtual (RV), Aplicaciones para práctica del vocabulario	VR technologies include immersive 3D environments, interactive simulators, and apps for practicing vocabulary and simulating real English conversations.
3	(Luo et al., 2024)	Realidad Aumentada (AR) y Realidad Virtual (RV)	Combined use of AR and VR to create immersive experiences where students practice English in realistic virtual scenarios.
4	(Kim et al., 2022)	Plataformas interactivas de RV	Platforms that simulate real English communication scenarios, allowing students to practice in immersive environments such as conversation simulations and everyday situations.
5	(Rahmanu & Molnár, 2024)	Video esférico inmersivo con RV	Use of VR-based spherical video to create interactive environments where students practice vocabulary in realistic contexts.
6	(Feng & Luan, 2023)	RV inmersiva en plataformas de escritura	VR platforms that simulate realistic writing environments, enabling students to practice written English in authentic contexts.
7	(Dooly & López, 2024)	RV inmersiva en el aula	VR technologies that provide interactive and contextual environments, facilitating English practice through simulations of real-life situations.
8	(Arévalo & Carrión, 2025)	Realidad Aumentada (AR)	Mondly AR: Educational app using a virtual assistant to guide users through interactive

			experiences that project English vocabulary onto real objects.
9	(Pan et al., 2021)	VR inmersiva y gamificación	Use of VR in educational games such as Mondly VR and Crystallize, employing immersive VR and gamification to enhance interaction in English learning.
10	(Agurto & Guevara, 2023)	Gafas VR y aplicaciones interactivas	VR headsets and apps like QuiverVision and Anatomyou VR to create immersive environments and facilitate interactive, visual learning.
11	(Moreno & Galván, 2020)	Gafas VR, aplicaciones móviles y cámara Cardboard	Use of VR headsets for immersive environments, along with mobile apps and 360° cameras to simulate learning situations and support English practice.
12	(Aguirre et al., 2023)	Gafas VR y aplicaciones móviles VR	Use of VR headsets and mobile apps to immerse students in interactive scenarios simulating everyday situations for English practice.
13	(Berns & Reyes, 2021)	Aplicaciones VR (Mondly VR, VR Learn English, VR Speech)	VR apps that allow students to interact with virtual environments through voice recognition and games, enhancing English learning in university contexts.

Table 5 highlights the wide variety of virtual reality technologies used in university contexts for English language teaching. The review includes interactive platforms and gamified applications, as well as the combined use of AR and VR headsets. These available technologies provide immersive experiences that simulate real-life situations, allowing students to practice and strengthen their language skills.

Effects of Virtual Reality on the Development of English Language Competencies

Table 6

Effects of Virtual Reality on English Language Learning

Nº	Reference	Language Competency	Effect of VR
1	(Chen et al., 2022)	Listening comprehension, pronunciation, vocabulary	VR has a strong impact on language learning, especially in speaking and vocabulary, with a significant effect across all language skills ($p < 0.01$).

2	(Dhimolea et al., 2022)	Listening comprehension, pronunciation, vocabulary	Immersive VR significantly enhances language competencies, supporting practice in contextualized environments and reducing student anxiety
3	(Hua & Wang, 2023)	Listening comprehension, vocabulary, fluency	VR improves listening and pronunciation through constant exposure to immersive environments, with gains in vocabulary and fluency.
4	(Luo et al., 2024)	Listening comprehension, pronunciation, fluency	VR promotes significant improvements in listening and fluency through interactive scenarios and continuous exposure to new terms.
5	(Kim et al., 2022)	Listening comprehension, pronunciation, vocabulary, fluency	VR enhances listening and pronunciation, and also supports vocabulary and fluency through contextual interactions in virtual environments.
6	(Rahmanu & Molnár, 2024)	Vocabulary, fluency	Immersive VR improves vocabulary mastery and student fluency, with positive effects on vocabulary retention.
7	(Feng & Luan, 2023)	Writing, fluency	Immersion in virtual environments significantly improves students' writing, promoting better understanding and fluency in English composition.
8	(Dooly & López, 2024)	Listening comprehension, pronunciation, vocabulary	VR enhances listening, fluency, and pronunciation by offering an interactive and dynamic environment for contextualized English practice.
9	(Arévalo & Carrión, 2025)	Vocabulary	Mondly AR produced a significant increase in English vocabulary with a significance level below 0.05.
10	(Pan et al., 2021)	Listening comprehension, pronunciation, vocabulary, fluency	VR, through educational games like Mondly, improves listening and fluency, while also promoting vocabulary acquisition in a dynamic environment.
11	(Agurto & Guevara, 2023)	Listening comprehension, pronunciation, vocabulary, fluency	VR enhances listening, pronunciation, and fluency through interactions in simulated real-life situations, and students show high interest in its implementation.

12	(Moreno & Galván, 2020)	Listening comprehension, pronunciation, vocabulary, fluency	VR improves listening, pronunciation, and vocabulary, and facilitates fluency through English interaction scenarios such as museum visits and virtual dialogues.
13	(Aguirre et al., 2023)	Listening comprehension, pronunciation, vocabulary, fluency	VR improves listening and pronunciation through interactions in virtual scenarios, and also supports vocabulary retention and fluency through repeated practice.
14	(Berns & Reyes, 2021)	Listening comprehension, pronunciation, vocabulary, fluency	VR has a positive impact on listening, pronunciation, vocabulary, and fluency by offering interaction in simulated real-world scenarios.

Table 6 shows that VR has a considerable impact on the development of various language competencies. It significantly improves listening comprehension, pronunciation, vocabulary, and fluency by providing immersive and contextual experiences that support English practice. The reviewed studies indicate that this technology not only enhances classroom performance but also increases student motivation by allowing them to interact in realistic and dynamic scenarios.

Discussion

The results reveal the varied use of virtual reality (VR) for teaching English in higher education. Chen et al. (2022) and Hua & Wang (2023) consistently support the use of contextual simulations and immersive 3D environments as the most effective technology for creating authentic learning experiences. Kim et al. (2022) einforce this position, showing that interactive VR platforms simulating real communication scenarios are especially effective in cultivating conversational skills.

However, a significant discrepancy is observed regarding specific applications and devices. Berns & Reyes (2021) and Pan et al. (2021) argue that the use of specialized applications such as Mondly VR and Crystallize enhances learning due to the gamification and voice recognition features included in these systems. On the other hand, Agurto & Guevara (2023) and Moreno & Galván (2020) emphasize that effectiveness does not lie in specific applications, but rather in the pedagogical integration of basic hardware such as VR headsets paired with well-designed educational content.

The emergence of augmented reality (AR) as a viable option is a noteworthy finding. Arévalo & Carrión (2025) rovide strong evidence that Mondly AR is effective for vocabulary acquisition. Luo et al. (2024) expand on this approach by highlighting the benefits of extended reality (XR) as a comprehensive technological spectrum. Dooly & López (2024) nuance this perspective by cautioning that technological complexity does not always correlate with improved learning outcomes, emphasizing the importance of pedagogical design over technological sophistication.

Regarding the effects on language competencies, studies agree that VR has a positive impact, although differences exist in its effectiveness across specific skills. Chen et al. (2022) provide the most compelling evidence through their meta-analysis, demonstrating that VR has a significantly greater impact on vocabulary and speaking skills compared to traditional methods. Rahmanu & Molnár (2024) and Arévalo & Carrión (2025) support these findings, noting that VR interventions lead to measurable improvements in vocabulary mastery.

Nevertheless, important points emerge in the literature. Feng & Luan (2023) show that VR also positively affects writing skills—a traditionally less explored area. Dhimolea et al. (2022) support this expansion of application scope, noting that the benefits of VR extend beyond specific language competencies to include emotional aspects such as reduced language-related anxiety.

Contradictory positions arise when evaluating relative impact. Agurto & Guevara (2023) present evidence indicating a differential impact, with greater benefits for oral skills than for writing. Conversely, Hua & Wang (2023) and Luo et al. (2024) argue that VR produces equal improvements across all language skills. Differences in measurement methods used across studies may account for this discrepancy.

Finally, Aguirre et al. (2023) and Berns & Reyes (2021) broaden the debate by emphasizing that the advantages of VR go beyond linguistic mastery to include motivational and student engagement aspects. The findings suggest that the pedagogical value of VR lies in its ability to create immersive and holistic learning environments.

Conclusions

Regarding the first objective, which focuses on characterizing the current state of empirical evidence, it is determined that the field of research on virtual reality (VR) in English language teaching in higher education is emerging and geographically diverse, with increasing scientific production, particularly since 2022. The available literature predominantly features experimental and quantitative approaches, with a clear emphasis on measuring language competencies—especially vocabulary and speaking skills—among intermediate-level students in public universities.

Concerning the second objective, it is concluded that there is a wide range of VR technologies in use, which are constantly evolving. These include immersive virtual reality environments using VR headsets and 3D simulations, as well as augmented reality (AR) applications used to project vocabulary in specific scenarios. Although there is a trend toward using applications and platforms such as Crystallize and Mondly VR, the data indicate that pedagogical effectiveness depends more on the instructional integration of the technology through the creation of realistic environments or game-based learning.

As for the third objective, it is determined that VR has a positive effect on English language learning. The literature agrees that the most significantly impacted skills, as evidenced by the systematic review, are speaking and vocabulary. Additionally, notable improvements are observed in fluency, pronunciation, and listening comprehension, which are attributed to repetitive practice in safe and immersive contexts. Relatively recent evidence also supports its effectiveness for affective aspects, such as increased student motivation and reduced anxiety, as well as for less-studied skills like writing.

Finally, future research is recommended to include longitudinal studies that assess long-term learning retention, as well as investigations exploring the differential impact of VR on diverse student populations. It is important to overcome current limitations related to cost and technological accessibility, while optimizing pedagogical design to balance human and digital interaction. The continuous evolution of these technologies suggests a promising path toward their systematic curricular integration, positioning virtual reality as an essential component for creating immersive, personalized, and effective English learning experiences in the higher education of the future.

Referencias Bibliográficas

Aguirre, B., Ojeda, J., Erami, M., & Gónzalez, A. (2023). La realidad virtual como herramienta de aprendizajedel idioma inglés. *Revista Digital de Tecnologías Informáticas y Sistemas, 7*(1), 136-144. https://doi.org/10.61530/redtis.vol7.n1.2023.158.136-144

Agurto, J., & Guevara, C. (2023). Realidad virtual para la mejora del rendimiento académico en estudiantes de educación superior. *Revista Metropolitana de Ciencias Aplicadas, 6*(2), 233-243. https://www.redalyc.org/articulo.oa?id=721778126025

Arévalo, C., & Carrión, G. (2025). Didáctica de la realidad aumentada en el incremento del vocabulario inglés de los estudiantes universitarios. *Igobernanza, 8*(31), 206-229. https://doi.org/10.47865/igob.vol8.n31.2025.433

Basantes, E., Escobar, M., Cárdenas, M., & Barragán, R. (2021). El impacto de la virtualidad en el aprendizaje del idioma inglés en educación superior. *Polo del conocimiento, 6*(5), 46-56. https://doi.org/10.23857/pc.v6i5.2630

Berns, A., & Reyes, S. (2021). A Review of Virtual Reality-Based Language Learning Apps. *RIED. Revista Iberoamericana de Educación a Distancia, 24*(1), 159-177. https://doi.org/10.5944/ried.24.1.27486

Chen, J., Dai, J., Zhu, K., & Xu, L. (2022). Effects of extended reality on language learning: A meta-analysis. *Frontiers in Psychology*(13), 1016519. https://doi.org/10.3389/fpsyg.2022.1016519

Dhimolea, T., Kaplan, R., & Lin, L. (2022). A Systematic Review of Research on High-Immersion Virtual Reality for Language Learning. *TechTrends*, 1-35. https://doi.org/10.1007/s11528-022-00717-w

Dooly, M., & López, M. (2024). La realidad virtual (RV) en el aula de la lengua inglesa: un estudio etnográfico. *Didáctica. Lengua y Literatura*(36), 201-213. https://doi.org/10.5209/dill.88767

Feng, B., & Luan, L. (2023). Facilitating writing performance of EFL learners via virtual reality: Immersion, presence, embodiment. *Frontiers in Psychology, 14*. https://doi.org/10.3389/fpsyg.2023.1134242

Hua, C., & Wang, J. (2023). Virtual reality-assisted language learning: A follow-up review (2018–2022). *Frontiers in Psychology*(14), 1153642. https://doi.org/10.3389/fpsyg.2023.1153642

Kim, J., Man, S., Joo, M., Park, J., Lee, Y., & Hwa, J. C. (2022). Preliminary investigations for the development of a virtual reality-based English-language communication program: Using the Delphi method. *PLOS One, 17*(3), e0264850. https://doi.org/10.1371/journal.pone.0264850

Luo, S., Zou, D., & Kohnke, L. (2024). A systematic review of research on xReality (XR) in the English classroom: Trends, research areas, benefits, and challenges. *Computers & Education: X Reality, 4*. https://doi.org/10.1016/j.cexr.2023.100049

Moreno, N., & Galván, M. (2020). Realidad aumentada y realidad virtual para la creación de escenarios de aprendizaje de la lengua inglesa desde un enfoque comunicativo. *DIM: Didáctica, Innovación y Multimedia*(38). https://raco.cat/index.php/DIM/article/view/371406.

Ordoñez, G., Freire, M., Ortiz, M., & Herrera, A. (2023). Realidad Virtual en la Enseñanza del Inglés: Inmersión y Práctica. *MQRInvestigar, 7*(2), 1680-1702. https://doi.org/10.56048/MQR20225.7.2.2023.1680-1702

Pan, Z., Sun, Y., Wei, Z., & Li, M. (2021). Application of Virtual Reality in English Teaching . *The 3rd World Symposium on Artificial Intelligence*, 64-71. https://doi.org/10.1109/WSAI51899.2021.9486322

Rahmanu, W., & Molnár, G. (2024). Using spherical video-based immersive virtual reality technology to investigate vocabulary mastery among university sophomores in EFL settings. *Cogent Education, 11*(1). https://doi.org/10.1080/2331186X.2024.2425226

Satullaeva, N., & Kurbanbaeva, G. (2020). Teaching English As A Second Foreign Language. *The American Journal of Social Science and Education Innovations , 2*(08), 351-357. https://doi.org/10.37547/tajssei/Volume02Issue08-59

Conflicto de intereses:

Los autores declaran que no existe conflicto de interés posible.

Financiamiento:

No existió asistencia financiera de partes externas al presente artículo.

Agradecimiento:

N/A

Nota:

El artículo no es producto de una publicación anterior.