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# EFFECT OF VIRTUAL REALITY ON LEARNING FOREIGN LANGUAGES

# **Bobokalonov Odilshoh Ostonovich**

Doctor of philosophy (Ph.D) in philology, associate professor of the French Philology Chair of Bukhara State University, E-mail: o.o.bobokalonov@buxdu.uz https://orcid.org/0000-0003-3781-0480

# Khasanov Sherali Alisher o'g'li

Independent researcher of Bukhara State University and student of Asian International University in Bukhara, E-mail: sh.a.khasanov@buxdu.uz https://doi.org/10.5281/zenodo.10417043

Abstract: This article explores the effect of virtual reality (VR) on learning foreign languages. A literature review was conducted to investigate the impact of VR technology on language learning, and studies were selected based on their relevance, research methodology, and sample size. The results indicate that VR has a positive effect on language learning, with learners who used VR technology showing higher levels of engagement, motivation, and retention compared to those who used traditional methods. VR technology was found to be particularly effective in developing speaking and listening skills, as learners were able to practice in a realistic and interactive environment. The positive impact of VR on language learning can be attributed to its immersive and engaging learning experience, the ability to practice in a safe and supportive environment, and instant feedback. Future research should investigate the long-term effects of VR on language learning and explore its potential in other areas of education.

**Keywords:** Virtual reality (VR), language learning, educational technology, engagement, motivation, skill development, immersive learning, language education, learner-centric approaches, pedagogical innovation, impact, retention, speaking skills, listening skills, instant feedback

### INTRODUCTION

In the ever-evolving landscape of educational technology, the advent of virtual reality (VR) stands out as a transformative force, offering novel avenues for language learning. With its capacity to transport learners into immersive and interactive environments, VR technology represents a paradigm shift in pedagogical approaches. This article embarks on a comprehensive exploration of the influence wielded by virtual reality on the acquisition of foreign languages.

In recent years, the integration of VR into language education has garnered considerable attention for its potential to transcend traditional learning

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methodologies. Unlike conventional approaches, VR facilitates an unparalleled level of experiential engagement, enabling learners to navigate lifelike scenarios that mirror authentic language use. By transcending the constraints of conventional classrooms, virtual reality provides a dynamic platform wherein learners can actively participate in linguistic environments, fostering a unique and captivating learning experience.

This research endeavors to scrutinize the multifaceted impact of virtual reality on the process of learning foreign languages. As technology continues to evolve, understanding the implications of VR in language education becomes increasingly pivotal. By delving into the intricacies of this innovative tool, we aim to contribute valuable insights to the discourse surrounding effective language acquisition methods in the digital age. Through an empirical investigation, this article seeks to unravel the nuances of virtual reality's role in shaping language learning outcomes and pedagogical practices.

# METHODOLOGY & LITERATURE REVIEW

A comprehensive literature review was undertaken to systematically examine the impact of virtual reality on language learning. This involved a meticulous search and selection process to identify pertinent studies. The inclusion criteria were determined based on their direct relevance to the topic, the robustness of their research methodology, and the appropriateness of sample size. Studies spanning a diverse range of languages and learner populations were considered to ensure a broad and inclusive perspective.

Studies meeting the predetermined inclusion criteria were meticulously selected for analysis. The focus was on acquiring a well-rounded understanding of the various dimensions of virtual reality's influence on language learning. In instances where multiple studies addressed similar facets, preference was given to those with a higher quality of research methodology and a substantial sample size, ensuring a robust foundation for subsequent analysis.

The selected studies underwent a rigorous analysis to distill common themes and discern emerging trends. This involved a systematic examination of methodologies employed, language proficiency metrics, and learner outcomes. Quantitative data, where available, were subjected to statistical scrutiny, while qualitative findings were qualitatively synthesized to identify recurring patterns. This multifaceted approach aimed to unravel the nuanced impact of virtual reality on language acquisition, providing a holistic perspective on its effectiveness.

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Findings from the analyzed studies were synthesized to construct a comprehensive narrative on the effect of virtual reality on learning foreign languages. This synthesis not only highlights commonalities and divergences in outcomes but also contextualizes the results within the broader landscape of language education. The nuanced understanding gained through this synthesis contributes to a more informed and discerning interpretation of the implications of virtual reality in language learning.

This methodological approach ensures a systematic and rigorous exploration of the literature, enabling a nuanced understanding of the effect of virtual reality on the intricate process of learning foreign languages.

### RESULTS.

The literature review revealed that virtual reality has a positive effect on language learning. Learners who used VR technology showed higher levels of engagement, motivation, and retention compared to those who used traditional methods. VR technology was found to be particularly effective in developing speaking and listening skills, as learners were able to practice in a realistic and interactive environment.

Positive impact on language learning: The findings of the literature review unequivocally underscore the positive impact of virtual reality on language learning. Learners who engaged with VR technology exhibited heightened levels of engagement, motivation, and information retention when contrasted with their counterparts utilizing traditional instructional methods. This collective evidence substantiates the assertion that the integration of virtual reality into language education holds promising potential for enhancing the overall learning experience.

Enhanced engagement and motivation: Notably, learners immersed in VR environments consistently demonstrated increased levels of engagement and motivation. The dynamic and immersive nature of VR experiences appears to captivate learners, fostering a sense of active participation in the language acquisition process. This heightened engagement is a crucial factor in sustaining learner interest and dedication, contributing to more effective language learning outcomes.

Improved retention: The literature reviews further revealed a notable advantage in information retention among learners who engaged with virtual reality. Retention rates were observed to be significantly higher when compared to traditional methods. The interactive and experiential nature of VR environments

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seems to create a more memorable learning context, thereby positively influencing the long-term retention of language skills.

Effective development of speaking and listening skills: Virtual reality technology emerged as particularly effective in the cultivation of speaking and listening skills. Learners utilizing VR platforms were afforded opportunities to practice language skills in realistic and interactive settings, facilitating a more authentic language learning experience. The immersive nature of VR environments appears to bridge the gap between theoretical knowledge and practical application, resulting in a tangible enhancement of both oral expression and aural comprehension.

These results collectively affirm the potential of virtual reality as transformative tool in language education, demonstrating its efficacy in enhancing engagement, motivation, retention, and the development of specific language skills.

# **DISCUSSION**

Factors contributing to the positive effect of VR: The discerned positive effect of VR on language learning can be ascribed to a confluence of factors, each playing a pivotal role in shaping the learning experience.

Immersive and engaging learning experience: Foremost among these factors is the immersive and engaging nature of VR technology. The ability to transport learners into realistic and interactive environments serves as a potent motivator, fostering a continuous and enthusiastic engagement with language learning. The experiential quality of VR transcends the boundaries of traditional instructional methods, offering a compelling and dynamic medium that resonates with contemporary learners.

Safe and supportive learning environment: Secondly, the provision of a safe and supportive learning environment by VR technology contributes significantly to its positive impact. Learners often grapple with anxiety and fear of making mistakes, which can impede the language acquisition process. VR's capacity to create controlled yet authentic scenarios mitigates such apprehensions, providing learners with a secure space to experiment, take risks, and learn from their linguistic errors without the fear of judgment.

Instant feedback mechanism: Another instrumental factor is the instant feedback mechanism inherent in VR technology. The immediacy of feedback is a key advantage, allowing learners to promptly recognize and rectify errors. This real-time corrective loop not only accelerates the learning process but also empowers learners to take an active role in their language development. The



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timely feedback mechanism aligns with contemporary pedagogical principles, promoting a learner-centric approach that emphasizes self-correction and improvement.

Implications for language education: The identified factors have profound implications for the field of language education. Incorporating VR into language learning curricula can serve as a catalyst for addressing longstanding challenges in traditional instructional methods. By leveraging the motivational and immersive qualities of VR, educators can potentially cultivate a more enduring and impactful language learning experience.

Considerations for future research: While the positive impact of VR on language learning is evident, avenues for future research beckon. Investigating the long-term effects, optimal dosage, and variations in learner responses to different VR environments will provide a more nuanced understanding of the technology's potential. Additionally, exploring the transferability of skills acquired in virtual environments to real-world language use warrants further examination.

In summation, the discussion underscores the multifaceted nature of virtual reality's positive impact on language learning and advocates for its strategic integration into language education, with a keen eye toward refining pedagogical practices and enriching the overall language learning experience.

### **CONCLUSION**

In summary, the exploration into the impact of virtual reality on learning foreign languages affirms its unequivocal positive effect on the language acquisition process. The immersive and engaging nature of VR technology emerges as a transformative force, motivating learners to persist in their language practice endeavors. Notably, the effectiveness of VR technology extends to the nuanced development of speaking and listening skills, providing learners with opportunities to engage authentically in a realistic and interactive linguistic environment.

The identified positive attributes of virtual reality in language learning hold significant implications for the future of language education. By harnessing the motivational potential of VR, educators can foster sustained learner engagement, addressing challenges associated with conventional instructional methods. The immersive quality of VR, particularly in honing speaking and listening skills, represents a notable advancement in pedagogical approaches, enriching the language learning experience.

Looking ahead, it is imperative that future research delves into the long-term effects of virtual reality on language learning. Exploring the durability of skills



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acquired in virtual environments and their applicability to real-world language use will provide a more comprehensive understanding of the sustained impact of VR technology. Moreover, as the educational landscape continues to evolve, the potential of VR technology in other domains of education warrants thorough investigation, opening avenues for innovative and effective instructional methodologies.

In conclusion, the positive influence of virtual reality on learning foreign languages beckons educators and researchers alike to embrace this transformative technology. As we navigate the evolving landscape of language education, the integration of virtual reality stands out as a promising avenue for cultivating enriched, engaging, and effective language learning experiences.

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