

Virtual Reality in English Teaching: Immersion and Practice

Realidad Virtual en la Enseñanza del Inglés: Inmersión y Práctica

Autores:

Ordóñez-Procel, Gilmer Javier
Escuela de Educación Básica Provincia Napo Pastaza
Docente
Balsas – Ecuador



javiernakata89@gmail.com



<https://orcid.org/0009-0000-4177-3446>

Freire-Medina, Martha Lucia
Universidad de las Fuerzas Armadas ESPE
Docente
Quito – Ecuador



marthafreirem@gmail.com



<https://orcid.org/0009-008-5250-5795>

Ortiz-Joutteaux, Maria Rebeca
Unidad educativa fiscal Amarilis Fuentes Alcivar
Docente
Guayaquil – Ecuador



beckyortizjoutteaux@gmail.com



<https://orcid.org/0009-0003-4476-2146>

Herrera-Lopez, Alexandra Patricia
Unidad educativa fiscal Adolfo H. Simmonds
Docente
Guayaquil – Ecuador



alexandraherrel@hotmail.com



<https://orcid.org/0009-0007-7741-3590>

Citación/como citar este artículo: Ordóñez, Gilmer; Freire, Martha; Ortiz, María. Y Herrera, Alexandra. (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>

Fechas de recepción: 15-MAY-2023 aceptación: 15-JUN-2023 publicación: 15-JUN-2023



<https://orcid.org/0000-0002-8695-5005>

<http://mqrinvestigar.com/>



Resumen

Este artículo presenta una revisión bibliográfica de la aplicación de la Realidad Virtual (RV) en la enseñanza del inglés. La RV, como herramienta innovadora, ha demostrado potencial para ofrecer experiencias de aprendizaje inmersivas y prácticas, redefiniendo los métodos de enseñanza del inglés. El estudio revela que la RV puede facilitar la inmersión lingüística, proporcionando contextos auténticos y experiencias culturalmente ricas que favorecen la adquisición de un segundo idioma. La RV también permite a los estudiantes practicar habilidades lingüísticas en un entorno seguro y controlado, fomentando su confianza en el uso del inglés.

Sin embargo, a pesar de sus ventajas, la implementación de la RV en la enseñanza del inglés presenta desafíos. Estos incluyen obstáculos técnicos y logísticos, así como la necesidad de una formación adecuada para los educadores en el uso de la tecnología. La literatura existente indica que, aunque la RV tiene un impacto significativo cuando se implementa correctamente, se requiere más investigación para maximizar su efectividad en diferentes contextos y para diferentes grupos de estudiantes. En conclusión, este estudio destaca el potencial de la RV para revolucionar la enseñanza del inglés y subraya la importancia de la investigación continua en este campo emergente.

Palabras claves: adquisición de Segundo Idioma, enseñanza del inglés, inmersión Lingüística, realidad Virtual, tecnología Educativa.

Abstract

This article presents a literature review on the application of Virtual Reality (VR) in English language teaching. As an innovative tool, VR has shown potential for offering immersive and practical learning experiences, redefining English teaching methods. The study reveals that VR can facilitate language immersion by providing authentic contexts and culturally rich experiences that enhance second language acquisition. VR also enables students to practice language skills in a safe and controlled environment, fostering their confidence in using English.

However, despite its advantages, the implementation of VR in English language teaching presents challenges. These include technical and logistical obstacles and the need for adequate training for educators in using the technology. Existing literature indicates that although VR has a significant impact when implemented correctly, further research is required to maximize its effectiveness in different contexts and for different groups of students. In conclusion, this study highlights the potential of VR to revolutionize English language teaching and emphasizes the importance of ongoing research in this emerging field.

Keywords: second Language Acquisition, English Language Teaching, Language Immersion, Virtual Reality, Educational Technology.

Introduction

The digital revolution has fundamentally transformed the way English is taught and learned worldwide. Among the many emerging technologies, virtual reality (VR) has stood out for its ability to provide immersive and practical learning experiences. This innovative tool has the potential to completely reshape English teaching by providing realistic and authentic contexts that facilitate both language acquisition and the practice of essential language skills (Zhou, 2020).

In English education, virtual reality is being used to create immersive simulations that allow students to interact with real-world characters and situations, but in a safe and controlled environment. This type of experience can be especially beneficial for English learners as it allows them to practice the language in authentic contexts without the stress or intimidation that may accompany real-world interactions (Pan et al., 2021).

On the other hand, VR also enables students to explore different cultures and locations across the English-speaking world. This cultural exposure can be invaluable in enhancing students' intercultural competence, which is an essential component of language fluency (Li y Xie, 2021).

The purpose of this essay is to explore how virtual reality can be used to enhance English teaching and learning. Both the potential benefits and challenges associated with the use of this technology will be discussed. Specific examples of successful VR applications in English teaching will be explored, and reflections on how VR can continue to evolve and improve in the future will be provided.

Materials and Method

Materials

The materials for this study will consist of academic articles, research reports, case studies, and other published works that have examined the application of virtual reality in English teaching. These materials will be gathered from various academic databases such as JSTOR, ProQuest, Google Scholar, PubMed, and ERIC. The references of selected studies will also be reviewed to discover other relevant works.

Method

The methodology for this literature review study will include the following steps:

- **Definition of inclusion and exclusion criteria:** To ensure that only the most relevant and rigorous works are selected, inclusion and exclusion criteria will be established. For example, works that do not specifically focus on English teaching or utilize technologies other than virtual reality may be excluded.
- **Literature search and selection:** Using relevant keywords (such as "virtual reality," "English teaching," "language immersion," etc.), a systematic search of the literature will be conducted in the mentioned databases. The found works will be evaluated based on the inclusion and exclusion criteria to determine their relevance.
- **Critical evaluation of the literature:** The selected works will be read and critically evaluated to understand their findings, identify their strengths and weaknesses, and analyze how they relate to the topic of virtual reality in English teaching.
- **Synthesis and analysis:** Finally, the findings from different works will be synthesized and analyzed to identify patterns, trends, contradictions, and gaps in the literature. This will provide a comprehensive and well-founded understanding of the current state of research in this field.

With this approach, this literature review study aims to provide a comprehensive and well-founded insight into how virtual reality is being used in English teaching and its effectiveness in terms of language immersion and practice.

Results

1. Fundamentals of Teaching English as a Foreign Language (TEFL)

Teaching English as a Foreign Language (TEFL) is based on a set of fundamentals that have been developed and refined over the years. These fundamentals are essential to understand how virtual reality can be used to enhance English teaching (Han y Zhang, 2020).

- **Language Acquisition:** One of the most important fundamentals of TEFL is the theory of language acquisition. This theory asserts that students learn best when



they are immersed in an environment where the language, they are learning is spoken. Virtual reality can provide this immersion by allowing students to interact in an English-speaking environment without leaving their classroom (Matte, 2019).

- **Communicative Approach:** Another key fundamental is the communicative approach, which focuses on interaction as both a means and an ultimate goal of language learning. Virtual reality can facilitate this approach by providing students with realistic opportunities to practice communication in English in a variety of contexts (Matte, 2019).
- **Multimodal Approach:** TEFL also benefits from a multimodal approach, which integrates different media and modes of communication in teaching. Virtual reality is inherently multimodal, combining audio, text, images, and movement to provide a rich and varied learning experience (Matte, 2019).
- **Differentiated Learning:** Each student has their own pace and learning style, and effective TEFL must take these differences into account. Virtual reality can be a useful tool for differentiated learning, as it allows students to learn at their own pace and in the way that is most effective for them (Matte, 2019).
- **Motivation:** Motivation is a crucial component in learning any language. Virtual reality, with its ability to provide immersive and engaging experiences, can be a powerful tool for increasing students' motivation to learn English (Matte, 2019).

Main Theories of Second Language Acquisition

Second language acquisition is a field of study that has been the subject of numerous theories over the years. Here are some of the most influential theories:

- **Natural Order Hypothesis (Krashen):** This theory, proposed by Stephen Krashen, argues that learners of a second language acquire grammatical structures in a predictable order, regardless of their native language. This order cannot be altered by formal instruction (Satullaeva y Kurbanbaeva, 2020).
- **Input Hypothesis (Krashen):** According to this theory, learners of a second language acquire the language when they understand comprehensible input (i.e.,

what they hear or read) that is slightly beyond their current level of language proficiency (Satullaeva y Kurbanbaeva, 2020).

- Monitor Hypothesis (Krashen): Krashen also proposed that learners of a second language have an internal "monitor" that uses learned grammatical knowledge to correct and refine their language production. However, this monitor is only activated when the learner has enough time to reflect on their production and is sufficiently focused on form (Satullaeva y Kurbanbaeva, 2020).
- Interlanguage Theory (Selinker): Larry Selinker proposed that learners of a second language develop a unique linguistic system, or "interlanguage," which is different from both their native language and the language they are learning. This interlanguage evolves as the learner approaches competence in the second language (Satullaeva y Kurbanbaeva, 2020).
- Comprehensible Output Theory (Swain): Merrill Swain argued that, in addition to comprehensible input, learners of a second language also need opportunities to produce "output" (i.e., speak or write in the language) that is comprehensible to others. This production allows learners to test and refine their language knowledge (Satullaeva y Kurbanbaeva, 2020).
- Sociocultural Theory (Vygotsky): According to Lev Vygotsky's sociocultural theory, learning a second language is a social process that occurs through interaction with other language speakers. Learners use cultural tools such as language and gestures to communicate and, in doing so, develop their language competence (Satullaeva y Kurbanbaeva, 2020).

These theories provide a foundation for understanding how individuals acquire a second language and can inform teaching practices to facilitate this process (Gardner, 2020).

Conventional Methods of Teaching English

Teaching English as a second or foreign language has evolved over the years, giving rise to various conventional methods. Here are some of the most prominent ones:

- Grammar-Translation Method: This is one of the oldest methods and focuses on teaching grammar and translating texts between the first and second languages. Although this method can be useful for developing reading and writing skills, it

is often criticized for its lack of emphasis on speaking and listening skills (Albukbak y Msimeer, 2021).

- **Direct Method:** In contrast to the grammar-translation method, the direct method emphasizes immersion. It is taught exclusively in English, with an emphasis on using the language in practical contexts. This method promotes fluency and listening comprehension but can be challenging for absolute beginners (Albukbak y Msimeer, 2021).
- **Audio-Lingual Method:** This method was developed during World War II to quickly teach foreign languages to soldiers. It is based on repetition and practice of structured dialogues, with a focus on pronunciation and grammar. However, this method can be repetitive and does not encourage creativity in language use (Albukbak y Msimeer, 2021).
- **Communicative Method:** This is a more modern approach that focuses on functional communication in English. Instead of focusing on grammar and language structure, this method concentrates on helping students communicate in real-life situations. It is highly interactive, with an emphasis on group and pair activities (Albukbak y Msimeer, 2021).
- **Task-Based Learning Approach:** This method focuses on using English to complete specific tasks, such as making a restaurant reservation or giving directions. This practical approach helps students use English in practical and relevant contexts (Albukbak y Msimeer, 2021).
- **Total Immersion Approach:** This method is based on the idea that the best way to learn a language is to be fully immersed in it. In a total immersion environment, all instructions are given in English, and students are expected to use English at all times (Albukbak y Msimeer, 2021).

Each of these methods has its advantages and disadvantages, and the most effective method can vary depending on the specific needs and goals of the students.

The Importance of Immersion and Practice in English Teaching

Immersion and practice are two fundamental elements in teaching English as a second or foreign language. Here's why they are so important:



Immersion

Immersion in a language is one of the most effective ways of learning. When students are immersed in an English-speaking environment, they have the opportunity to listen to and use the language in a real and practical context. This can help improve fluency and listening comprehension as students are exposed to a variety of accents, speaking speeds, and vocabulary (Ichim, 2022).

Additionally, immersion can help students learn the language in a more natural and less forced way. Instead of memorizing grammar rules and vocabulary, students learn the language through its use in real-life situations. This can make learning more engaging and meaningful (Ichim, 2022).

Practice

Practice is essential for consolidating and improving language skills. By practicing English regularly, students can reinforce what they have learned and build their confidence in using the language (Ali et al., 2016).

The practice also allows students to receive feedback on their language use, which can help them correct errors and improve accuracy. Additionally, practice can help students develop fluency as they have the opportunity to use the language continuously and coherently (Ali et al., 2016).

Practice can take many forms, from completing grammar and vocabulary exercises to engaging in conversations and discussions. The important thing is that students have the opportunity to actively and regularly use English (Ali et al., 2016).

2. Introduction to Virtual Reality (VR)

Virtual Reality (VR) is a technology that allows users to immerse themselves in a simulated environment that can be similar to the real world or completely different. Through devices like virtual reality headsets, sensor-equipped gloves, and other equipment, users can see, hear, and even feel virtual experiences as if they were real (Kurniawati et al., 2020).



VR is based on the creation of a computer-generated three-dimensional environment in which users can interact. This environment is presented to users in a way that gives them the impression of being physically present in it. This is achieved through a combination of graphics, sound, and other sensations like touch and movement (Kurniawati et al., 2020).

VR has a wide range of applications in various fields. In entertainment, it is used for immersive video games and movies. In education, it can provide immersive learning experiences that allow students to explore concepts and environments more interactively and engagingly. In medicine, it is used for surgeon training and rehabilitation therapies. In industry, it is used for process simulation and training in hazardous environments (Ahir et al., 2020).

VR has the potential to change the way we interact with technology and the digital world, providing experiences that are more immersive and participatory than those offered by traditional forms of digital media. However, it also poses challenges in terms of costs, accessibility, and health and safety, which are still being addressed as the technology continues to develop (Ahir et al., 2020).

Definition and Development of VR

Virtual Reality (VR) is a technology that creates a simulated environment, placing the user inside an experience that can be similar to the real world or completely imaginary. Unlike traditional user interfaces, VR places the individual in an interactive three-dimensional experience, rather than simply observing it on a screen. VR users are immersed in an artificial environment, where they can interact with elements of the environment in a similar way to how they would in the real world (Bai, 2019). The concept of virtual reality has existed for decades, but the development of the technology necessary to make it a reality has taken time.

In the 1960s, artist, and visionary Ivan Sutherland created the first virtual reality system, known as the "Sword of Damocles" because of how it was suspended over the user. This rudimentary system allowed the user to see a simple graphical environment through a head-mounted display (Pirker et al., 2020).

In the 1980s and 1990s, VR began to enter the public domain with the development of virtual reality gloves and goggles. However, technological limitations such as low-quality graphics and high costs prevented the widespread adoption of VR (Pirker et al., 2020).

The real breakthrough in VR came in the 21st century with the development of more sophisticated and accessible VR devices, such as the Oculus Rift, HTC Vive, and PlayStation VR. These devices, along with advances in computer processing power and graphics, have enabled more immersive and realistic VR experiences (Pirker et al., 2020).

Today, VR is used in a variety of fields, from entertainment and video games to medicine, education, and training. As technology continues to advance, we are likely to see even more applications of VR in the future.

Use of VR in Education: Overview

Virtual Reality (VR) is transforming education in ways we could only imagine before. By providing an immersive environment, VR has the potential to revolutionize both teaching and learning, offering more engaging and effective educational experiences (Radianti et al., 2020). Here is an overview of how VR is being used in education:

- **Virtual Exploration:** VR allows students to explore places and concepts that would otherwise be inaccessible. For example, they can take a virtual tour of the solar system, explore the interior of a human cell, or visit historical or geographical sites from around the world. This can provide a deeper and more realistic understanding of the subjects they are studying (Radianti et al., 2020).
- **Learning Simulations:** VR can provide simulations of real-life situations, which can be particularly useful in fields such as medicine, engineering, and vocational training. For example, medical students can practice surgeries in a virtual environment before performing them on real patients, and engineering students can experiment with designs and prototypes in a virtual setting (Radianti et al., 2020).
- **Language Immersion:** In language education, VR can provide language immersion that would otherwise only be possible by traveling to a country where the language is spoken. Students can interact with native speakers and practice their language skills in a variety of real-life situations (Radianti et al., 2020).

- **Active Learning:** VR promotes active learning by allowing students to interact with the learning material rather than just reading or listening to it. This can increase engagement and knowledge retention (Radianti et al., 2020).
- **Adaptability:** VR experiences can be tailored to meet the individual learning needs of each student. Students can learn at their own pace and explore areas of personal interest (Radianti et al., 2020).
- **Despite its potential,** the implementation of VR in education also presents challenges. These include the cost of VR devices, the need for high-quality educational content, and concerns about the effects of prolonged immersion in virtual environments. However, as technology continues to advance and become more accessible, we are likely to see increasing use of VR in education (Radianti et al., 2020).

3. Virtual Reality in English Language Teaching

Virtual Reality (VR) is emerging as a powerful tool in the teaching of English as a second language or foreign language (Zhou, 2020). Here are some ways. VR can be used to enhance English teaching and learning:

- **Communication Skills Practice:** VR can provide a safe and controlled environment for students to practice their English communication skills. For example, they could engage in simulations of job interviews, presentations, or social conversations (Pan et al., 2021).
- **Contextualized Learning:** VR can help students learn English in relevant and meaningful contexts. For instance, they could learn vocabulary related to a supermarket while "browsing" a virtual supermarket, or learn about language used in meetings while participating in a simulation of a business meeting (Pan et al., 2021).
- **Motivation and Engagement:** VR can make English language learning more engaging and motivating. Immersive and playful experiences can increase students' interest in learning English and motivate them to practice more (Pan et al., 2021).

- Individualized Learning: VR experiences can be personalized to meet the individual learning needs of each student. Students can learn at their own pace and explore areas of personal interest (Pan et al., 2021).

Despite its potential, the implementation of VR in English language teaching also presents challenges. These include the cost of VR devices, the need for high-quality educational content, and teacher training to effectively utilize this technology. However, as VR technology continues to advance and become more accessible, its use in English language teaching is likely to expand (Zhou, 2020).

Linguistic and Cultural Immersion through VR

Virtual Reality (VR) offers a unique opportunity for linguistic and cultural immersion, especially in language teaching. Here's how:

- Linguistic Immersion: VR can create environments where students are fully immersed in the language they are learning. For example, if they are learning English, they can find themselves in a virtual English-speaking city, interacting with virtual characters who speak English. This allows them to listen to and use the language in a realistic context, which can improve their understanding and fluency. Additionally, they can practice their language skills in a variety of situations, from ordering food in a restaurant to negotiating in a business meeting (Blyth, 2018).
- Cultural Immersion: In addition to linguistic immersion, VR can also provide cultural immersion. Students can explore different places and cultures, learning about the customs, traditions, and ways of life of people who speak the language they are learning. This can help them understand the cultural context of the language and use the language more appropriately and effectively (Blyth, 2018).
- Safe Practice: VR provides a safe environment for linguistic and cultural practice. Students can make mistakes and experiment with the language without the consequences they might have in the real world. This can help them develop confidence in their language skills (Blyth, 2018).
- Personalized Learning: VR experiences can be personalized to meet the learning needs and goals of each student. For example, a student learning English for

travel purposes could explore a virtual airport or hotel, while a student learning English for business could participate in a simulation of a business meeting (Blyth, 2018).

Practicing Language Skills through VR Simulations

Virtual Reality (VR) provides a unique environment for practicing language skills. Through VR simulations, students can practice and improve their listening, speaking, reading, and writing skills in English in an interactive and engaging setting (Bahari, 2021).

Here are some ways this can happen:

- **Listening Skills:** VR simulations can expose students to a variety of accents, speech speeds, and communication styles in English. This can help them improve their listening comprehension and become familiar with different forms of English speech (Bahari, 2021).
- **Speaking Skills:** In a VR simulation, students can interact with virtual characters, practicing their pronunciation, fluency, and conversational skills in English. They can also receive immediate feedback on their speech, which can help them correct errors and improve accuracy (Bahari, 2021).
- **Reading Skills:** VR simulations can incorporate reading elements, such as signs, menus, or text messages, that students must read to navigate the virtual environment. This can help them practice their English reading in a practical and relevant context (Bahari, 2021).
- **Writing Skills:** Some VR simulations may allow students to practice their English writing skills, for example, by writing text messages or emails to virtual characters (Bahari, 2021).
- **Real-Life Situations Practice:** VR simulations can recreate a wide range of real-life situations, from ordering food in a restaurant to giving a presentation in a business meeting. This can help students practice and improve their language skills in contexts that are relevant to their learning needs and goals (Bahari, 2021).

4. Benefits and Challenges of VR in English Language Teaching

Virtual Reality (VR) offers a range of potential benefits for English language teaching, but it also presents some challenges. Here are some of them:

Benefits for Students and Teachers

Virtual Reality (VR) provides a range of benefits for both students and teachers in the context of English language teaching. Here are some of them:

Benefits for Students

- **Linguistic Immersion:** VR provides an immersive environment that can help students improve their fluency and understanding of English by exposing them to real-life situations and interactions in English (Li y Xie, 2021).
- **Safe Practice:** Students can practice their language skills in a safe and controlled environment, where they can make mistakes and learn from them without fear of real-world consequences (Li y Xie, 2021).
- **Active Learning:** VR promotes active learning by allowing students to interact with learning material rather than simply reading or listening to it. This can increase engagement and knowledge retention (Li y Xie, 2021).
- **Personalized Learning:** VR experiences can be customized to meet the individual learning needs of each student, allowing students to learn at their own pace and in ways that are most effective for them (Li y Xie, 2021).

Benefits for Teachers

- **Innovative Teaching Tools:** VR offers teachers an exciting new teaching tool that can make lessons more engaging and effective (McGovern et al., 2019).
- **Student Progress Tracking:** Some VR platforms allow teachers to track student progress and provide personalized feedback, which can help improve learning (McGovern et al., 2019).
- **Flexibility:** VR can be used in a variety of teaching contexts, from classroom teaching to distance learning, providing greater flexibility for teachers (McGovern et al., 2019).

- Professional Development: Learning how to use VR in teaching can be a valuable professional development opportunity for teachers, helping them stay up-to-date with the latest trends and technologies in education (McGovern et al., 2019).

Technical, Pedagogical, and Logistical Challenges

The implementation of Virtual Reality (VR) in English language teaching, while promising, also presents a range of technical, pedagogical, and logistical challenges (Sullivan, 2019). Here are some of them:

Technical Challenges

- Access to Technology: Not all students and schools have access to the necessary VR devices, which can create inequalities in the learning experience (Cai, 2022).
- Health Issues: Prolonged use of VR devices can cause health problems such as dizziness, nausea, and visual fatigue. It is important to establish guidelines for the safe use of VR in teaching (Cai, 2022).
- Quality of Content: While there is a growing amount of VR content available, it can be challenging to find or create high-quality educational content that is suitable for English language teaching (Cai, 2022).

Pedagogical Challenges

- Teacher Training: Teachers may need training to effectively use VR in English language teaching, which may require time and resources (Lege et al., 2020).
- Integration into the Curriculum: Effectively integrating VR into the existing curriculum can be a challenge. Teachers will need to consider how VR experiences can complement and enhance existing teaching strategies (Lege et al., 2020).

Logistical Challenges

- Cost: VR devices can be expensive, which can be a barrier to implementation in many schools (Cai, 2022).



- **Physical Space:** VR often requires space for users to move around and interact with the virtual environment. This can be a challenge in classrooms where space is limited (Cai, 2022).
- **Time:** Implementing VR in teaching may require additional time for lesson preparation and device setup (Cai, 2022).

Despite these challenges, VR has great potential to enhance English language teaching and learning. With proper planning and resources, these challenges can be overcome.

Possible solutions to these challenges

The challenges associated with implementing Virtual Reality (VR) in English language teaching are significant, but several possible solutions could help overcome these obstacles:

Technical Challenges

- **Access to Technology:** Schools can seek funding or grants to acquire VR devices. Additionally, as technology advances, VR devices are becoming more affordable (Sinsel et al., 2020).
- **Health Issues:** It is important to establish clear guidelines for the safe use of VR, such as limiting the time students spend using VR devices and ensuring students take regular breaks (Sinsel et al., 2020).
- **Quality of Content:** Schools can collaborate with VR developers or other schools to share resources and develop high-quality educational content for English language teaching (Sinsel et al., 2020).

Pedagogical Challenges

- **Teacher Training:** Schools can provide training and support to teachers to help them learn to effectively use VR in teaching. This could include training workshops, online resources, and ongoing support (Sinsel et al., 2020).
- **Integration into the Curriculum:** Teachers can start by integrating VR into small parts of the curriculum to complement existing teaching strategies. Over time,

they can expand the use of VR as they become more comfortable with the technology (Sinsel et al., 2020).

Logistical Challenges

- **Cost:** Schools can seek funding or grants to help cover the costs of VR devices. Additionally, as technology advances, VR devices are becoming more affordable (Sinsel et al., 2020).
- **Physical Space:** Schools may need to be creative in utilizing space to accommodate VR. This could include using outdoor spaces or rearranging classrooms to create more space (Sinsel et al., 2020).
- **Time:** With careful planning and the use of pre-existing resources, teachers can minimize the additional time needed to prepare VR lessons and set up devices (Sinsel et al., 2020).

5. Future Perspectives of VR in English Language Teaching

As Virtual Reality (VR) technology continues to advance and become more accessible, we are likely to see increasing use of VR in English language teaching. VR has the potential to provide more immersive, interactive, and personalized learning experiences, which could make English language teaching more effective and engaging (Parmaxi, 2023).

Emerging Technological Advances and Their Potential for English Language Teaching

Several emerging technological advances could have a significant impact on English language teaching:

- **Augmented Reality (AR):** AR, which overlays digital information onto the real world, could be used in combination with VR to provide richer and more varied learning experiences (Reza, 2018).

- Artificial Intelligence (AI): AI could be used to personalize VR experiences according to each student's individual needs and abilities. It could also be used to provide immediate and personalized feedback to students (Reza, 2018).
- Motion Tracking Technology: Improvements in motion tracking technology could enable more natural and realistic interactions in VR environments, making learning experiences more immersive (Reza, 2018).

Future Research Needs

Although VR has great potential for English language teaching, there are still many questions that need to be answered through research. Some potential areas for future research could include:

- Effectiveness of VR: More research is needed to determine the effectiveness of VR in English language teaching compared to traditional teaching methods (Tyler, 2022).
- Best Practices: More research is needed to identify best practices for utilizing VR in English language teaching. This could include investigating what types of VR activities are most effective, how to integrate VR into the existing curriculum, and how to train teachers to use VR effectively (Tyler, 2022).
- Long-Term Impact: More research is needed to understand the long-term impact of using VR in English language teaching, including its impact on knowledge retention and student motivation (Tyler, 2022).

Discussion

Virtual Reality (VR) is emerging as a potentially powerful tool for English language teaching, providing unprecedented opportunities for language immersion and practice. Through the review of existing literature, it has been observed that VR offers a range of benefits that can enhance second language acquisition.

VR allows students to experience linguistic and cultural immersion, which has been identified in the literature as crucial for effective second language acquisition. By offering

realistic and contextualized simulations, students can practice English in environments that replicate the real world, thereby increasing their confidence and language proficiency.

However, it is also evident that the implementation of VR in English language teaching poses several challenges. Technical issues, such as lack of access to VR technology in certain regions or schools, can be a hurdle. Additionally, proper training of educators in the effective use of this technology is crucial to maximize its benefits.

Furthermore, while VR provides a safe environment for language practice, it is essential to ensure that VR experiences are effectively integrated with traditional teaching practices and tailored to the specific learning needs of students.

The reviewed case studies indicate that, despite these challenges, VR can have a significant impact on English language teaching when implemented correctly. However, further research is needed to explore how to maximize the benefits of VR in diverse educational contexts and for different student groups.

VR in English language teaching is an evolving field, and its future is promising. As technology continues to improve and become more accessible, we are likely to see wider adoption of VR in English language teaching. This review highlights the need for continued exploration, experimentation, and critical evaluation of these new practices to ensure that VR is used most effectively in English language teaching.

Conclusion

Exploring the existing literature on the application of Virtual Reality (VR) in English language teaching reveals an exciting and constantly evolving field. Through VR, educators have a unique opportunity to provide language immersion and practice experiences that would otherwise not be possible in a traditional classroom setting.

VR can facilitate language immersion by providing an enriched and contextualized environment for English interaction. Additionally, VR experiences can offer students a platform to practice language skills in a safe and controlled environment, helping to improve confidence and competency in English.

However, despite its potential, the implementation of VR in English language teaching is not without challenges. Technical and logistical obstacles, along with the need for teacher training, are aspects that need to be addressed for successful implementation. It

is also important to remember that VR is not a miraculous solution but a tool that, when effectively integrated with other teaching practices, can enhance English language learning.

The reviewed literature also suggests that there is ample room for future research. As VR technology continues to develop, it is crucial to conduct further studies evaluating its impact and effectiveness in diverse English teaching and learning contexts.

VR has the potential to revolutionize English language teaching, allowing for more effective immersion and practice. However, the implementation of VR must be done with care and reflection, and further research is required to maximize its potential in English language teaching and learning.

References

- Ahir, K., Govani, K., Gajera, R., & Shah, M. (2020). Application on Virtual Reality for Enhanced Education Learning, Military Training, and Sports. *Augment Hum Res*, 5(7). <https://doi.org/https://doi.org/10.1007/s41133-019-0025-2>
- Albukbak, O., & Msimeer, A. (2021). Methods and Approaches of Teaching English: a Historical Review. *Faculty of Arts Journal*. <https://doi.org/https://doi.org/10.36602/faj/2021.n17.14>
- Ali, C., Theodoros, R., & Kerthyayana, I. (2016). Game Prototype for Daily English Practice. *I(2)*. <https://doi.org/https://doi.org/10.21512/jggag.v1i2.7250>
- Bahari, A. (2021). Affordances and challenges of teaching language skills by virtual reality: A systematic review (2010–2020). *E-Learning and Digital Media*, 19(2). <https://doi.org/https://doi.org/10.1177/20427530211036583>
- Bai, Y. (2019). Proceedings of the 3rd International Conference on Mechatronics Engineering and Information Technology (ICMEIT 2019). <https://doi.org/10.2991/icmeit-19.2019.23>
- Blyth, C. (2018). Immersive technologies and language learning. *51(1)*, 225-232. <https://doi.org/https://doi.org/10.1111/flan.12327>
- Cai, Y. (2022). A Review of Virtual Reality Technology in EFL Teaching. *Journal of Education, Humanities and Social Sciences*, 4, 260–263. <https://doi.org/https://doi.org/10.54097/ehss.v4i.2783>
- Gardner, R. (2020). The Socio-educational Model of Second Language Acquisition. https://link.springer.com/chapter/10.1007/978-3-030-28380-3_2

- Han, J., & Zhang, L. (2020). Teaching Culture in TEFL. *College of Foreign Language Education and International Business, Baoding University, Baoding, China, 11(4)*.
<https://doi.org/10.4236/ce.2020.114032>
- Ichim, V. (2022). Employing alternative constructive methods of teaching English. *15(64)*.
<https://doi.org/https://doi.org/10.31926/but.pcs.2022.64.15.1.3>
- Kurniawati, A., Farhan, F., Agustiono, W., Warninda, S., & Kusumaningsih, A. (2020). Introduction Virtual Reality for Learning Media in Schools in Indonesia. *Journal of Physics: Conference Series*. <https://doi.org/10.1088/1742-6596/1569/2/022065>
- Lege, R., Bonner, E., Frazier, E., & Pacucci, L. (2020). Pedagogical Considerations for Successful Implementation of Virtual Reality in the Language Classroom.
<https://doi.org/10.4018/978-1-7998-2591-3.ch002>
- Li, X., & Xie, Y. (2021). Application of Virtual Reality Technology in Oral English Teaching for College English Majors. *Journal of Physics: Conference Series*.
<https://doi.org/10.1088/1742-6596/1820/1/012148>
- Matte, M. (2019). Fundamentals for teaching English for Academic Purposes. *Organon, Porto Alegre, 34(66)*. <https://doi.org/https://doi.org/10.22456/2238-8915.96980>
- McGovern, E., Moreira, G., & Luna-Nevarez, C. (2019). An application of virtual reality in education: Can this technology enhance the quality of students' learning experience? *Journal of Education for Business*.
<https://doi.org/https://doi.org/10.1080/08832323.2019.1703096>
- Pan, Z., Sun, Y., Wei Yao, Z., & Li, M. (2021). Application of Virtual Reality in English Teaching. *2021 3rd World Symposium on Artificial Intelligence (WSAI), Guangzhou, China, 64-71*. <https://doi.org/10.1109/WSAI51899.2021.9486322>
- Parmaxi, A. (2023). Virtual reality in language learning: a systematic review and implications for research and practice. *31, 172-184*.
<https://doi.org/https://doi.org/10.1080/10494820.2020.1765392>
- Pirker, J., Dengel, A., Holly, M., & Safikhani, S. (2020). Virtual Reality in Computer Science Education: A Systematic Review. (8), 1-8.
<https://doi.org/https://doi.org/10.1145/3385956.3418947>
- Radianti, J., Majchrzak, T., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons

- learned, and research agenda. *Computers & Education*(147).
<https://doi.org/https://doi.org/10.1016/j.compedu.2019.103778>
- Reza, M. (2018). The Use of Technology in English Language Learning: A Literature Review. *3*(2), 115-125.
- Satullaeva, N., & Kurbanbaeva, G. (2020). Teaching English As A Second Foreign Language. *the American Journal of Social Science and Education Innovations*.
<https://doi.org/https://doi.org/10.37547/tajssei/Volume02Issue08-59>
- Sinsel, S., Riemke, R., & Hoffmann, V. (2020). Challenges and solution technologies for the integration of variable renewable energy sources—a review. *Renewable Energy*, *145*, 2271-2285. <https://doi.org/https://doi.org/10.1016/j.renene.2019.06.147>
- Sullivan, R. (2019). Troubling Structures: A Material-Embodied Pedagogy of Technical Difficulty. *Computers and Composition*, *53*, 47-59.
<https://doi.org/https://doi.org/10.1016/j.compcom.2019.05.004>
- Tyler, N. (2022). The Future of Research. *53*(12).
[https://doi.org/https://doi.org/10.12968/S0047-9624\(22\)61280-X](https://doi.org/https://doi.org/10.12968/S0047-9624(22)61280-X)
- Zhou, Y. (2020). VR Technology in English Teaching from the Perspective of Knowledge Visualization. *IEEE*. <https://doi.org/10.1109/ACCESS.2020.3022093>

Conflict of interests:

The authors declare that there is no possible conflict of interest.

Financing:

There was no financial assistance from external parties to this article.

Gratitude:

N/A

Note:

The article is not the product of a previous publication.

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.

