

Examining the Synergistic Impact of Cross-Cultural Communication and Virtual Reality on Young Adults' English Language Proficiency

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Abstract: The demand for English language proficiency has developed significantly as the world gets interconnected nowadays. In the meantime, a variety of technological tools such as Virtual Reality (VR) have emerged to help increase the demand for learning and business experiences. This review study synthesized existing literature in the relevant field and examined the synergistic impact of implementing VR tools and cross-cultural communication (CCC) in developing the English language skills of young adult learners. This review paper explores the benefits, challenges, and limitations of VR and CCC intersection in the language learning context concentrated on young adults. It also showcased that young adult learners are highly engaged and motivated in expanding their English language skills when they are exposed to the world that counterparts the one real. However, alongside the positive impact of CCC and VR in the language teaching setting, some challenges and limitations such as accessibility, the need for pedagogical frameworks, and ethical implications have been highlighted.

Keywords: Virtual Reality, Cross-Cultural Communication, English Language Skills, Young Adult Learners, The EFL Context

1. Introduction

The interactions and information exchange process among individuals from various backgrounds create a web connection called cross-cultural communication. It also refers to sharing ideas, viewpoints, beliefs, and even languages through the integration of technology among people, especially among young adults. The latter ones enjoy finding themselves engaged in multicultural exchanges and exploring the boundaries of different cultures and languages. Edgar (2023) points out that technology has immense potential to enhance communication and collaboration by providing individuals with great opportunities for virtual and cultural exchanges and collaboration. He also states that with the rapid development of technological tools, it has become far easier for language learners to reach educational purposes.

Alongside the non-stop technological advancement, culture interconnection, and language exploration via different interfaces, a powerful tool called Virtual Reality (VR) has been generated.

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Despite its wide usage in the field of gaming and other means of entertainment, it has emerged as one of the prominent nominees in educational, training, and communication settings by enabling people to experience other cultures and languages in a virtual environment confined to the physical world.

This review paper examines existing literature on the impact of Virtual Reality and Cross-communication on the English language skills development of young adults. The article will delve into exploring the relationship between VR technology and the art of cross-communication as well as their immense effects and drawbacks on English language development. Several studies have been carried out on VR and cross-communication integration in different fields such as computer education and language teaching. However, research on VR and cross-cultural communication to enhance English language proficiency has been conducted in a quite general context. This review article aims to extract and single out the impacts of VR and Cross-Cultural Communication (CCC) on English speaking skills development and do a thorough analysis of it.

We will also explore the evolution and potential of VR in navigating the CCC in the English language teaching context. The focus of this review will be on delving into existing and relevant studies that propose the integration of VR and CCC in English language development. Additionally, it will emphasize valuable insights into the advantages as well as limitations of the VR and CCC integration into the English language teaching classroom. This review article aims to offer a refined understanding for EFL teachers of the impacts and limitations of VR tools facilitating effective CCC in the EFL context. The objectives of this paper are to identify the major impacts and challenges of CCC effects and the use of VR in developing English language speaking skills; to explore the limitations of VR tools integrated into the EFL context; to provide recommendations to EFL educators to leverage opportunities of technical tools and CCC and align them to developing English speaking skills proficiency of young adults.

Cross-cultural communication and technology integration plays a major role in serving education to look more engaging, effective, and accessible to everyone nowadays. Although it takes time to get used to challenges technology may initially create to adapt to, it has a significant impact on developing an intellectual and skilled workforce (Edgar, 2023). As cited in the work of Edgar (2023), Baptista (2022) conducted a study about the influence of cross-cultural communication on the performance of virtual teams. The results of their study revealed that cultural intelligence and effective communication had a significant impact on the performance of virtual teams. Another research study performed in China displays a positive outcome of communication skills when performed in virtual teams. In their study, Gong et al. (2019) explored the cultural intelligence and communication skills of people as primary key factors when performing virtually.

Cross-cultural communication through technology has played a significant role in exchanging ideas, culture, and social perspectives among individuals worldwide. Edgar (2023) in his review study states the following: the integration of technology in education can also enhance learning experiences by providing access to a range of learning resources and facilitating collaboration and communication among students and educators (p.12). The author also suggests that integrating technology and cross-communication into a language-learning classroom can generate a collaborative learning environment bringing together the learners not only within the classroom but also from different parts of the globe. "By leveraging technology and internationalization initiatives to overcome language barriers, and cultural differences, and promote

global citizenship, educators can facilitate cross-cultural discussions and exchanges, and prepare students for a globalized world” (Edgar, 2023, p. 14)

Likewise, Li (2022) concluded that technology can enhance language development and promote an encouraging environment for language learners by applying cross-cultural communication and intercultural understanding. The authors examined the immense impact of technology on the development of language skills through cross-cultural communication in the higher educational context.

The literature review was carried out to achieve the aim of the study by reviewing various databases relevant to the research subject, the aim of this review article was to synthesize data on previous studies and their conclusions regarding the impact of CCC and VR on adult learners’ English-speaking skills. The database search involved using multiple academic databases such as Web of Science, Research Gate, and Google Scholar to ensure a comprehensive collection of articles and books. Additionally, the search terms were refined and adjusted based on the initial results to further narrow down the selection of relevant sources. Keywords used in the search included Cross-Cultural Communication (CCC), Virtual Reality (VR), adult, speaking skills, foreign language, and English language.

The inclusion criteria in the article were carefully selected to ensure that only relevant and high-quality papers were included. These criteria included a focus on recent publications that were published between 2018 and 2023 so that they accurately reflected the most up-to-date research on the subject. Also, research studies directly addressed the research question or objective of the article, as well as only articles written in English were considered. Articles and books that didn't fit the research parameters were excluded. Additionally, articles and books published before 2018 were excluded from the review.

2. Analysis of the Reviewed Studies

2.1 Evolution of Virtual Reality Technology

Throughout the course of a range of technological tools development, the need for more advanced hardware and software devices, including VR, has increased significantly. Dzardanova et al. (2018) describe that social VR was first introduced by Facebook Spaces and it functioned as a networking connector among people who uploaded media or who already had social media accounts (as cited in Dzardanova et al., 2022). Jumani et al. (2022) illustrated VR as an assistant that enables people to communicate and experience the exploration of different environments, stimulating the dynamic real world and benefiting professionals in different professional fields such as engineering, architecture, interior design, and even history. Additionally, VR allows multiuser collaboration, encouraging individuals to express their opinions and communicate with other professionals from different parts of the world.

Raja et al (2021) explored the evolution of VR over the years and described several milestones of the growth of VR since 1838. The first version of VR was designed for training military pilots in 1929, and later, in the 1950s, Morton Heilig proposed the idea of creating mechanical multimodal theater Sensorama (Norman, 2023). In 1960, an advanced head-mounted display that had miniaturized cathode-ray tubes fully immersing the user into the 3-D world was featured. One of the realistic virtual worlds displayed through an HMD that included 3-dimensional sound and force feedback was called The Ultimate Display and was

featured in 1965. In the educational context, VR was first used in 1975. Starting in 1982 until 1992, VR tools such as special helmets, goggles, and gloves were mostly produced for pilot training purposes and were used to create a 3-D environment for pilots to experience the real-world content in its analogous world. From 1997 and onwards, VR has mostly developed in the field of gaming products.

As to the educational context, VR was introduced four decades ago in the late 1960s by Ivan Sutherland (Dede C, 2005). One of the previous approaches to teaching language skills without integrating technology was traditional instructional method. A traditional classroom is a term that is used to describe teaching and learning atmosphere with teacher-led approaches. Such classroom practices often involve textbook-based instruction, where teachers play a central role in facilitating learning. No technological tools are usually involved in such classrooms. Educators typically take the lead in delivering lectures, assigning tasks, and evaluating student progress. They provide guidance and direction to students, ensuring that they grasp the content and meet the required learning objectives (Kashinathan and Abdul Aziz, 2021). Learning a language does not ensure fluency since poor conversational skills and is overly rigorous. Teachers should push students to speak up, share their perspectives, and hone their skills via frequent practice. However, this approach does not foster learners' speaking abilities (Toro et al., 2019).

In order to enhance speaking fluency in the English language, one should consider consistency in practicing the language, for it plays a significant role in various aspects of life such as career opportunities, social interactions, and education. In terms of fostering learners to develop their speaking skills in foreign languages, educators used to implement a variety of instructional approaches prior to the introduction of technological tool integration into the learning process. Those old-school, conventional, methods would include storytelling, role-playing, and group discussions within the classroom, allowing learners to engage in conversations and practice their speaking abilities in interactive ways (Kashinathan and Abdul Aziz, 2021). This approach could also be aligned with cross-cultural communication to allow students to experience an authentic environment of an English-speaking community (Wang & Wu, 2020). Additionally, traditional role-playing exercises can be transformed and employed in language teaching classes to promote international understanding and compassion for learning a language. Nevertheless, teacher-centered approaches used to be widely implemented in EFL classrooms before educational technology emerged. The Audio-Lingual Method (ALM) was an efficient approach to language instruction that has been shown to increase students' proficiency in spoken English as a Foreign Language (EFL) using strategies such as repetition, replacement, and question-and-answer sessions. When the words or phrases in the target language are first presented orally rather than in written form, it facilitates more efficient acquisition of those words and phrases (Putra et al., 2022). To foster collaborative learning and individual expression, teachers can use a method called or "Traditional Talking Stick" to foster a classroom discussion (Utami et al., 2020). The potential of classroom discussion to improve students' public speaking skills should be carefully evaluated, as it is a popular and effective form of classroom interaction involving conversational storytelling, humorous anecdotes, and dramatic role-playing and simulation games (Aleksandrak, 2011).

However, there were some limitations to using traditional methods in teaching languages to young adult learners. Physiological considerations, shyness, and nervousness in the classroom are just a few of the obstacles that students confront while using traditional pedagogical methods to improve their English

reading skills. In general, students are reticent because they are afraid of appearing inept when speaking English. Besides, some people experience anxiety and shyness when speaking in public, for fear, shyness, and anxiety are common mental blocks that prevent learners from speaking in public (Aziz and Kashinathan, 2021).

2.2 Applications in Experiential Learning

In the field of learning, Virtual Reality has immensely gathered individuals' attention. It offers significant opportunities for learners to have practical experiences in a protected, safe environment by generating real-world scenarios. For example, Xie et al. (2021) indicated that the implementation of hardware devices such as electronic eyewear to expose an individual to a computer-simulated environment has provided a significant learning atmosphere for people to master both academic and professional skills in a protected environment. Likewise, Jumani et al. (2022) stated that Virtual Reality has provided educators with the opportunity to transfer skills in efficient and innovative ways. For example, Elmqaddem (2019) proposed the implementation of VR in educational environments can enrich the practical knowledge of learners such as technicians learning new procedures in real conditions. Or language learners can overcome speaking anxiety and stage fear by practicing presentations in a virtual setting. Faced with new devices that can create a new environment students discover procedural work step by step by seeing the instructions or the audience in real time analogous to the ones in real life.

Nowadays, to capture students' interests in learning and to create compelling educational experiences, educational materials have been converted into VR interactive models. The advantages of this strategy outweigh the drawbacks for it focuses on involving students in a more realistic and captivating learning environment for learners of all ages, fostering a deeper connection with the subject matter. It also allows students to catch up with the classes they've missed or haven't understood. As to the teachers, VR-integrated teaching materials can serve as a reliable and accessible tool for students to have practical sessions in a real-time.

Figure 1 displays how the use of educational materials has been transformed into an interactive virtual reality model.

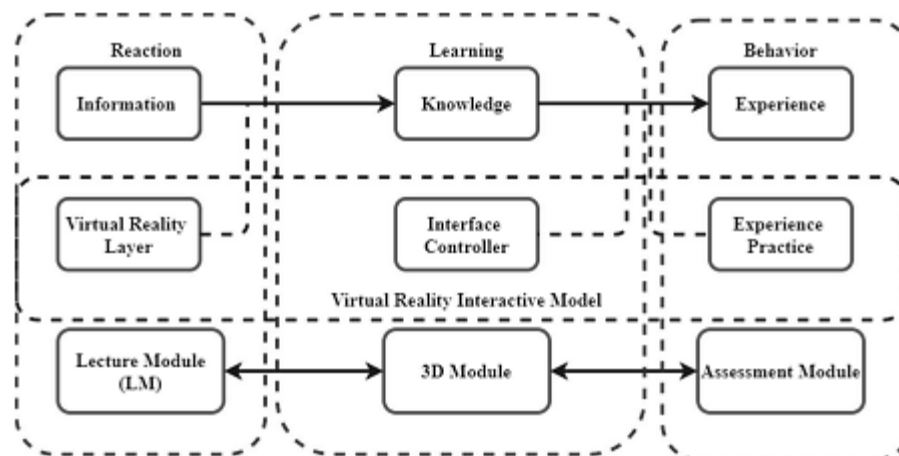


Figure 1: Virtual Reality in the Educational Context (Jumani et al., 2022).

At this juncture, Jumani et al (2022) assert that students can easily access the virtual reality records of lessons the students have missed or failed to learn or repeat the lectures as if they were physically present and even interact with classmates. Additionally, such sessions are also beneficial for teachers as they can gain significant insights into their students' cognitive abilities through the documentation and review of the classroom sessions. As to educational field trips and lab experiences, VR has offered a world of possibilities for both educators and students to experience learned materials in the virtual world. It has vanished all the constraints of expense, distance, and accessibility to organizing educational excursions.

Recent studies (Akdere et al., 2021; Cearley et al., 2017) delve into the advantages of digital technologies integration in education. Cearley et al. (2017) found that among organizations testing immersive learning technologies, 40% exceeded expectations, while 60% considered the technology met expectations. Moreover, in exploring innovative methods for language acquisition and intercultural competencies, scholars (Thorne et al., 2009, as cited in Xie et al., 2021) have documented the effectiveness of Virtual Reality (VR) environments. These environments not only advance cognitive, psychomotor, and communication skills but also foster openness and curiosity, even in large-populated classes (Thorne et al., 2009, as cited in Xie et al., 2021; Seifan et al., 2019). As education embraces VR for interactive sessions, such as virtual field trips and historical sites, learners gain opportunities to actively employ cognitive and psychomotor skills (Seifan et al., 2019).

Moving beyond the classroom, VR extends its benefits to communication and collaboration. Notably, Jumani et al. (2022) highlight the advantages of VR, including accessible learning materials anytime and anywhere, heightened student engagement, and efficient learning processes. VR not only facilitates effective communication and collaboration but also transcends physical distances, enabling virtual meetings and shared workspaces to enhance productivity in remote team projects. Building on these findings, Akdere et al. (2021) emphasize that the integration of VR into the learning context creates a safe and competent environment, enriching learners' understanding of diverse cultural norms and frameworks.

2.3 Cross-Cultural Communication Importance and Its Challenges

Lifintsev and Canavilhas (2017) mentioned different effective factors that cross-cultural communication relies on (as cited in Lifintsev et al., 2019). It requires high competence for individuals from different fields of work to establish successful communication within domestic and international cultures (Friedman et al., 2015). There are also some obstacles such as language barriers, differences in standards of behavior, and lack of knowledge and trust that prevent people from building effective cross-cultural communication. It is essential to be familiar with the cultural and behavioral norms of certain places for individuals who are involved in cross-cultural communication with the purpose of advancing language skills. Otherwise, communication that lacks proper cultural content may lead to ridiculous incidents and misunderstandings (Amirovich et al., 2021).

Also, there are a variety of challenges and complexities in advancing English language skills through cross-cultural communication for language learners. Amirovich et al. (2021) noted in their research that stereotyping and prejudice about individuals from different cultures and continents can leave negative impressions on both parties leading to biases and ineffective dialogues. They also stated that it is essential to provide appropriate and systematic cross-cultural training to language learners before they are involved

in actual conversations with people from different cultures. However, for specific individuals born after 2000, called Generation Z, social and business life has dramatically changed, for they have been born in the era of rapid technological advancement. As Lifintsey et al. (2019) suggest, it has become significantly easier for these 'living online' citizens to develop their communication and language skills without experiencing cultural or behavioral challenges.

Nevertheless, the importance of developing English language skills via cross-cultural communication outweighs the challenges and stereotypes of it. One benefit out of many is cross-cultural communication fosters learners' exposure to different perspectives and ideas and collaboration among language learners, enriching their learning experiences. Students of all levels of English proficiency can suffer from fear of public speaking, which can have a negative impact on their performance (Akmal et. al., 2022). However, when students are assured of their ability to communicate, they are more likely to effectively produce new ideas. Confidence in one's ability to foresee the outcome of a CCC reduces anxiety and facilitates effective communication and adaptation. (Collin, et al., 2023). Edgar (2023) mentions the essence of developing language skills through cross-cultural communication. He states that educators need to practice cross-communication skills in order to support and guide their learners' language learning needs and objectives when communicating with individuals from diverse cultures. It is essential that educators employ technology and cross-cultural communication integration into education, for they significantly promote effective and engaging learning environments specifically for language learners and ultimately contribute to the development of a more knowledgeable and skilled workforce (Edgar, 2023).

2.4 Pros and Cons of Virtual Reality Integration into Education and English Language Skills Development

In education, it is crucial to develop an academic setting that is inclusive and considerate of various cultural viewpoints. The ability to communicate orally is now regarded as the most important of the four main linguistic abilities of learners. Learning to speak a language fluently and accurately through oral practice is crucial. The importance of speaking skills in language training, however, has not always been emphasized. In fact, it was thought that only with modern language teaching methods would it be required to identify instructional methods and learning environments that offer authentic learning chances (Lowell & Yan, 2023).

Since the introduction of smartphones and other ICT apps, traditional classrooms have lost their appeal, and teachers and curriculum developers across the board have realized that they need to modify their approaches to classroom instruction and standardized assessment (Saed et al., 2021). Modern technology such as VR offers a unique opportunity to bridge different cultural gaps by immersing individuals in virtual environments that can simulate different cultures and experiences. VR allows students to virtually visit far-off places and engage with diverse communities, VR has the potential to foster empathy, understanding, and appreciation for different cultures, ultimately promoting global harmony and collaboration (Klimova, 2021). The virtual worlds offer various experiences, from socializing and gaming to educational and professional purposes, they allow young adult learners to interact, collaborate, and explore new possibilities without physical limitations (Lowell & Yan, 2023). VR is a promising technology for learning and training, which provides access to experiences that would not be possible otherwise (Wang and Wu, 2020).

In regard to cross-cultural communication, many scholars in the past paid close attention to the topic of cross-cultural education (Shadiev et al., 2021). Cultural differences and the growing contact between people from various regions of the world potentially cause cultural conflicts and cultural integration (Shadiev et al., 2021). Numerous elements influence how CCC is implemented. For instance, due to the disparate cultural backgrounds of some people or groups, there will inevitably be many cultural disparities in CCC. If the parties involved do not comprehend these differences, communication barriers can easily arise (Wang and Wu, 2020). For this reason, it's crucial to have CCC skills that refer to the capacity to understand and interact successfully with persons from diverse cultural backgrounds in everyday social situations. Integrating VR tools into language learning process to enhance cross-cultural communication among young adult learners, has benefited the learners in terms of language development as well as cultural awareness (Wang and Wu, 2020).

In terms of foreign languages, it is not enough to ensure effective communication among people from diverse cultural backgrounds despite the fact that many young adults are fluent in English as a foreign language. It should be backed up by regular practice in oral interaction with native speakers (Wang and Wu, 2020). Communicating in English language requires supplementary speaking content. Educators are encouraged to create speaking resources that encourage students to view learning and speaking the English language positively (Menggo et al., 2019). In such cases, VR plays a significant role as a successful educational tool to boost language learners' speaking skills. It provides a natural debate setting, lowers speaking anxiety, enhances motivation, increases comprehension learning, and retention, and improves students' ability to communicate. Students report greater interest in VR speaking lessons than in face-to-face settings, finding the authenticity inspiring their learning motivation. VR also allows users to develop skills regardless of concern about social implications (Lowell & Yan, 2023).

Additionally, VR provides a unique opportunity for English language learners to engage in authentic and interactive experiences. By simulating real-life scenarios, learners can practice their language skills in a safe and controlled environment. Besides, virtual worlds offer the advantage of immediate feedback and personalized learning, which can greatly enhance the language acquisition process. However, potential downsides may arise such as technical skills for effective VR integration in the language learning context. Special courses and training sessions need to be organized by institutions and administration staff. Additionally, the higher costs of purchasing VR technology may pose another barrier for educational establishments, limiting access to these tools. (Liaw, 2019).

Speaking about students, VR is one of the most promising and alluring technologies currently available to language learners. According to student reports (Lowell & Yan, 2023), a higher level of interest in virtual reality based speaking lessons was expressed compared to traditional face-to-face settings. The students found it motivational to learn a language by involving in authentic and unique environment created by VR. It allowed them to collaborate and share their perspectives on course materials and inspired the learners to demonstrate exceptional speaking skills. Liaw (2019) reported that students displayed greater interest in VR-based speaking lessons compared to face-to-face settings, finding the authenticity inspiring their learning motivation. However, most nations see the elimination of digital illiteracy as a top priority, and many are working to make that happen through formal policy changes. As a result, few educators deliberately forego using digital tools in their classes (Liaw, 2019).

In the meantime, VR technology has the ability to improve communication and teamwork by providing chances for virtual conversations and cultural switches for language development. Globalization efforts in educational institutions attempt to foster international interaction and encourage learners to employ and reside in a rapidly changing world (Edgar, 2023). VR has been found to offer various benefits for learning speaking skills in a foreign language. One of these is providing more possibilities for students to collaborate and share their thoughts on the course material through innovative and active learning experiences (Lowell and Yan, 2023). It significantly increases young adult learners' engagement in class in comparison to more traditional classroom settings (Wu & Hung, 2022). VR learning that is immersive, interactive, and experience-based can help students hone their communication, interpersonal, and intercultural skills (Lowell and Yan, 2023). There are many VR apps that could be implemented in English language classrooms for young adults. One of the most popular applications is the Mondly VR app (Figure 2) which helps non-native speakers learn 33 different languages by providing them with lessons in vocabulary, dialogue, context-based learning, reading, listening, and pronunciation with immediate feedback (Klimova, 2021). VirtualSpeech-VR Courses-App is another tool that enhances public speaking skills and tracks growth. provides a realistic and immersive learning experience, making it easier for students to engage with the material and retain information (Klimova, 2021). CityCompass VR is one more virtual reality headset available in English, German, and Finnish that facilitates collaborative conversational language learning for young adults through breathtaking cityscapes (Berns, 2021).



Figure 2: Screenshot of using *Mondly VR* for Language Oral Proficiency (Berns, 2021)

The use of virtual reality (VR) to develop the English-speaking skills of young adults presents potential benefits. However, it could also present challenges such as expenditure, mental load, and health issues. Prolonged use of VR tools may lead to physical discomfort, eye strain, or motion sickness. Besides, financial status of some students might be the greatest obstacle for acquiring VR equipment or accessing specialized VR language-learning resources. This might create a divide between students who can afford such tools and those who cannot. Additionally, student-led training courses on using VR tools must be organized by language institutions to prevent unexpected consequences resulted by improper use of this technology

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(Klimova et al., 2021). Above all, the addiction to using VR tools constantly by young adults can affect their physical as well as mental health in terms of developing predominantly lower-cognitive skills. These challenges are related to the abilities and duties involved in VR education and learning (Wu and Hung, (2022).

3. Recommendations

Based on the findings of this review study, it is significant to highlight certain limitations and identify gaps in the research. While the study recognizes the importance of integrating technology into education and understanding different cultures, there are specific areas that require further research that need to be conducted. For example, the current review study tended to take a more general approach on integrating VR and cross-cultural teaching and learning, neglecting the importance of considering specific cultural factors that can have varying impacts on language acquisition. Additionally, this study does not explore potential challenges for teachers and students to integrate VR in the setting where scripted curriculum is dominant. Considering these limitations, it becomes more significant to propose avenues for future research to address these gaps.

The study also suggests to further explore potential solutions to the identified considerations related to speaking English among young adults. First, to encourage educators to include technology in the educational setting while stressing the significance of understanding and appreciating other cultures. To continue to put an emphasis on educating and preparing educators in the areas of technological and cross-cultural exchange. Next, to foster a setting conducive to international collaboration and cross-cultural teaching and learning (Edgar, 2023). Moreover, to invest in the development of educational technologies that cater to the demands of a wide range of students, innovative educational tools can be created for students of all backgrounds. Finally, the study suggests that academic institutions create a setting that encourages instructors and students from different countries to work together and share their cultures as well as collaborate with institutions around the world to set a benchmark for excellence in the use of technology in classrooms. It is important to acknowledge that this review article has solely relied on the synthesis of existing research findings, which could limit the comprehensiveness of the results.

4. Conclusion

It has become significantly easier for young adult learners to acquire English language skills through the constant integration of technological tools both within and outside the school premises. Among other tools, Virtual Reality and cross-cultural communication have been major and powerful catalysts for mastering the English-speaking skills of young adult learners. By a thorough synthesis of relatable research findings, this review study has explored the hands-on possibilities VR and CCC offer for learners to enhance their language skills. They help expose learners to diverse cultural contexts and linguistic nuances with ease, creating an authentic environment that is a counterpart to the existing world. This article has also highlighted the challenges and limitations of integrating VR tools and CCC in developing English language skills. Additionally, it has underscored the significance of pedagogical training on the proper implementation of cross-cultural communication and VR tools in teaching English language skills. Further research could be conducted on exploring the opportunities of VR and CCC integration into foreign language classes in third-world countries. In this digitalized age, educators and institutions should be open to empowering young adult learners with cultural awareness and empathy alongside linguistic proficiency through the integration of technology in language courses.

This review article has delved into exploring the integration of cross-cultural communication and VR tools in developing the English-speaking skills of young adult learners. A thorough synthesis of existing

research from different disciplines has revealed that the integration of CCC and VR in the language teaching context has opportunities and limitations for both teachers and students. The analysis of the relevant research has pointed out that Virtual Reality tools with cross-cultural communication have tremendous promise for fostering foreign language acquisition as well as cultural and global networks among young adult learners. Recommendations have been made for further improvement on fruitful and proper implementation of VR and cross-cultural communication in the language teaching context to empower young adult learners with demanding intercultural and language skills. It is crucial to mention that further research needs to be done to investigate the practical implications and challenges associated with recommendations to contribute to a more comprehensive understanding of effective language learning strategies and interventions.

References:

- Akdere, M., Acheson, K., and Jiang, Y. (2021). An examination of the effectiveness of virtual reality technology for intercultural competence development. *International Journal of Intercultural Relations*, 82, 109-120. <https://doi.org/10.1016/j.ijintrel.2021.03.009>
- Akmal, S., Jannah, R., & Maulida, T. A. (2022). The Perceived Problems and Coping Strategies of Second Grade High School Students in Improving Their Public Speaking's Self-Efficacy. ISBN 978-623-264-684-1
- Aleksandrak, M. (2011). Problems and challenges in teaching and learning speaking at advanced level. *Glottodidactica. An International Journal of Applied Linguistics*, 37, 37-48. <https://doi.org/10.14746/GL.2011.37.3>
- Amirovich, K. S., Gilyazetdinov, E. Z., A. F. L., Nabiyevena, I. Z., and Saliyevna, S. D. (2021). Cross-cultural context of English language teaching. *Annals of the Romanian Society for Cell Biology*, 3737-3750. *Annals of R.S.C.B.*, ISSN:1583-6258, Vol. 25, Issue 2, 2021. 3737-3750.
- Baptista, N. (2022). The Management of Cross-Cultural Virtual Teams. *European Journal of Human Resource Management Studies*, 6 (1) ISSN 26011972. Available at: [doi:http://dx.doi.org/10.46827/ejhrms.v6i1.1364](http://dx.doi.org/10.46827/ejhrms.v6i1.1364).
- Berns, A., & Reyes-Sánchez, S. (2021). A Review of Virtual Reality-Based Language Learning Apps. *RIED. Revista Iberoamericana de Educación a Distancia*, 24(1), pp. 159-177. <http://dx.doi.org/10.5944/ried.24.1.27486>
- Byram, M., Gribkova, B., and Starkey, H. (2002). *Developing the intercultural dimension in language teaching: A practical introduction for teachers*. Language Policy Division, Directorate of School, Out-of-School and Higher Education, Council of Europe.
- Collin C. Ceneciro, Marivic R. Estoque, and Jason V. Chavez. (2023). Analysis of Debate Skills to the Learners' Confidence and Anxiety in the Use of the English Language in Academic Engagements. *Journal of Namibian Studies: History Politics Culture*, 33, 4544-4569. <https://doi.org/10.59670/jns.v33i.2812>
- Dede Int, C. (2005). Introduction to Virtual Reality in Education. *THEMES IN SCIENCE AND TECHNOLOGY EDUCATION* Special Issue, (7-9)
- Dzardanova, E., Kasapakis, V., Gavalas, D. (2022). Virtual reality as a communication medium: a comparative study of forced compliance in virtual reality versus physical world. *Virtual Reality* 26, 737-757 <https://doi.org/10.1007/s10055-021-00564-9>

- Earley, D. W., Burke, B., Searle, S., and Walker, M. J. (2017). Report on top 10 strategic technology trends for 2018. Retrieved online from https://www.gartner.com/doc/3811368?refval=&pcp=mpe#dv_17_gartner_conducted.
- Edgar, E. (2023). Optimizing Cross-Cultural Communication and Technology Integration in Education: A Global Perspective with Recommendations for World Leaders and Education Stakeholders. <https://doi.org/10.13140/RG.2.2.17481.52323>
- Friedman, S. D., and Westring, A. (2015). Empowering individuals to integrate work and life: Insights for management development. *Journal of Management Development*, 34(3), 299-315. ISSN: 0262-1711
- Gong, Z., Chen, Y., & Wang, Y. (2019). The influence of emotional intelligence on job burnout and job performance: Mediating effect of psychological capital. *Frontiers in psychology*, 10, 2707. <https://doi.org/10.3389/fpsyg.2019.02707>
- Hamad, M. M., Metwally, A. A., and Alfaruque, S. Y. (2019). The Impact of Using YouTubes and Audio Tracks Imitation YATI on Improving Speaking Skills of EFL Learners. *English Language Teaching*, 12(6), 191. <https://doi.org/10.5539/elt.v12n6p191>
- Jumani, A. K., Siddique, W. A., Laghari, A. A., Abro, A., and Khan, A. A. (2022). Virtual Reality and Augmented Reality for Education. *Multimedia Computing Systems and Virtual Reality*, 189–210. <https://doi.org/10.1201/9781003196686-9>
- Kashinathan, S., and Abdul Aziz, A. (2021). ESL Learners' Challenges in Speaking English in Malaysian Classroom. *International Journal of Academic Research in Progressive Education and Development*, 10(2), 983-991. <https://doi.org/10.6007/ijarped/v10-i2/10355>
- Klimova, B. (2021). Use of Virtual Reality in Non-Native Language Learning and Teaching. *Procedia Computer Science*, 192, 1385–1392. <https://doi.org/10.1016/j.procs.2021.08.141>
- Li, R. (2022). New Path of Stranger Interaction Platform and Network Cross-Cultural Communication in the Omnimedia Era. *Wireless Communications and Mobile Computing*, 2022. <https://doi.org/10.1155/2022/6796160>
- Lifintsev, D., & Canhavilhas, J. (2017). Cross-cultural management: obstacles for effective cooperation in multicultural environment. *Scientific bulletin of Polissia*, 2(10). 195-202. Available at: http://journals.uran.ua/nvp_chntu/article/view/110415
- Lifintsev, D., and Wellbrock, W. (2019). Cross-cultural communication in the digital age. *Estudos em Comunicação*, 1(28). <http://doi.org/10.25768/fal.ec.n28.a05>
- Lowell, V. L., and Yan, W. (2023, March 23). Facilitating Foreign Language Conversation Simulations in Virtual Reality for Authentic Learning. ResearchGate. Retrieved September 9, 2023, from https://www.researchgate.net/publication/368570511_Facilitating_foreign_language_conversation_simulations_in_virtual_reality_for_authentic_learning.
- Menggo, S., Suastra, I. M., Budiarsa, M., & Padmadewi, N. N. (2019). Needs Analysis of Academic-English Speaking Material in Promoting 21st Century Skills. *International Journal of Instruction*, 12(2), 739–754. <https://doi.org/10.29333/iji.2019.12247a>
- Norman., M. J. (2023). The Sensorama: One of the First Functioning Efforts in Virtual Reality. Retrieved September 2023 from The Sensorama: One of the First Functioning Efforts in Virtual Reality: History of Information

- Noureddine, E. (2019). Augmented reality and virtual reality in education. Myth or reality?. *International journal of emerging technologies in learning* 14 (3) <https://doi.org/10.3991/ijet.v14i03.9289>
- Putra, M. A., Fridayanto, D., Aji, B. P., Karim, S. A., and Sudiro, S. (2022). ENHANCING EFL LEARNERS' SPEAKING SKILLS THROUGH THE AUDIO-LINGUAL METHOD. *Journey: Journal of English Language and Pedagogy*, 5(1), 30–38. <https://doi.org/10.33503/journey.v5i1.1818>
- Raja, M., & Priya, G. G. (2021). Conceptual Origins, Technological Advancements, and Impacts of Using Virtual Reality Technology in Education. *Webology*, 18(2). <https://doi.org/10.14704/web/v18i2/web18311>
- Saed, H. A., Haider, A. S., Al-Salman, S., and Hussein, R. F. (2021). The use of YouTube in developing the speaking skills of Jordanian EFL university students. *Heliyon*, 7(7), e07543. <https://doi.org/10.1016/j.heliyon.2021.e07543>
- Sally Wu, Y. H., and Alan Hung, S. T. (2022). The Effects of Virtual Reality Infused Instruction on Elementary School Students' English-Speaking Performance, Willingness to Communicate, and Learning Autonomy. *Journal of Educational Computing Research*, 60(6), 1558–1587. <https://doi.org/10.1177/07356331211068207>
- Seifan, M., Dada, D., & Berenjjan, A. (2019). The effect of virtual field trip as an introductory tool for an engineering real field trip. *Education for Chemical Engineers*, 27, 6–11. <https://doi.org/10.1016/j.ece.2018.11.005>
- Shadiev, R., Wang, X., Wu, T. T., and Huang, Y. M. (2021). Review of Research on Technology-Supported Cross-Cultural Learning. *Sustainability*, 13(3), 1402. <https://doi.org/10.3390/su13031402>
- Thorne, S. L., Black, R. W., and Sykes, J. M. (2009). Second Language Use, Socialization, and Learning in Internet Interest Communities and Online Gaming. Available at <https://doi.org/10.1111/j.1540-4781.2009.00974.x>
- Toro, V., Camacho-Minuche, G., Pinza-Tapia, E., and Paredes, F. (2018). The Use of the Communicative Language Teaching Approach to Improve Students' Oral Skills. *English Language Teaching*, 12(1), 110. <https://doi.org/10.5539/elt.v12n1p110>
- Utami, A. R., Yulianto, B., and Agustina, R. K. (2020). Fostering Students' Speaking Ability through Traditional Talking Stick. *English Language in Focus (ELIF)*, 2(2), 71. <https://doi.org/10.24853/elif.2.2.71-78>
- Wang, J., and Wu, L. (2020). How to cultivate students' Intercultural communicative competence in College English Teaching. *Proceedings of the 2019 International Conference on Education Science and Economic Development (ICESED 2019)*, 88 (91). doi:10.2991/icesed-19.2020.92
- Xie, B., Liu, H., Alghofaili, R., Zhang, Y., Jiang, Y., Lobo, F. D., and Yu, L. F. (2021). A review on virtual reality skill training applications. *Frontiers in Virtual Reality*, 2, 645153. <https://doi.org/10.3389/frvir.2021.645153>