ASCILITE 2024
Navigating the Terrain:
Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

Utilizing Virtual Reality Tours in Language Learning

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Virtual reality (VR) has been recognized as a revolutionary technology in education, providing a multitude of benefits that enhance learning experiences and outcomes. By immersing students in interactive and engaging environments, VR can make abstract concepts tangible, foster deeper understanding, and accommodate diverse learning styles. With VR, students can be fully engaged in dynamic and stimulating environments, which can transform abstract concepts into concrete experiences. This immersive approach can promote a deeper grasp of the subject matter. An example demonstrated how VR may engage students and foster interactive learning by enabling them to investigate intricate systems and surroundings that would be unfeasible or inconvenient (Freina & Ott, 2015). In addition, VR was shown to provide affordances that are believed to enhance learning, such as the first-person experience and the sense of being present in a particular location, also known as presence or spatial presence (Mikropoulos & Natsis, 2011). Although these advantages have been documented, the implementation of this technology has proven challenging or unfeasible for many teachers and learners due to financial constraints.

VR photos and videos, which are commonly referred to as 360-degree media, have become readily available resources that can be utilized to create low-cost immersive experiences for people who are learning. Researchers have claimed that previous research has demonstrated the usefulness of these tools in boosting spatial presence and interest among participants in virtual reality tours that were conducted as part of one-off investigations (Petousi et al., 2023). However, these findings need to be supported by research over extended periods of time in a variety of educational settings to gain an understanding of the intricacies and limitations of this technology-based instructional approach.

This poster describes two initiatives in which VR tours have been integrated into language learning settings. The first initiative employed a design-based research methodology to assess the efficacy of VR tours among online learners in France and Japan while the second initiative is an ongoing project that focuses on teaching the Filipino Language in a Japanese classroom using blended learning.

This poster showcases the results of research conducted as part of the initiatives. The findings demonstrate the positive impact of virtual reality tours on student motivation and highlights the role of various factors, including instructional material, learners' personal traits, and the physical environment in which they engage in online learning, in addition to spatial presence and technological novelty. Moreover, this poster presents information regarding the process of improving the tours and lessons, as well as the platforms and technologies that were utilized to address concerns regarding usability and sustainability.

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References

Freina, L., & Ott, M. (2015,). A literature review on immersive virtual reality in education: State of the art and perspectives. *Proceedings of the 11 th International Scientific Conference "eLearning and Software for Education", 1*(1)*,* 10-1007. Carol | National Defence University Publishing House. https://10.12753/2066-026X-15-020

Mikropoulos, T. A., & Natsis, A. (2011). Educational virtual environments: A ten-year review of empirical research (1999–2009). *Computers & Education*, *56*(3), 769-780. https://doi.org/10.1016/j.compedu.2010.10.020

Petousi, D., Katifori, A., Boile, M., Kougioumtzian, L., Lougiakis, C., Roussou, M., & Ioannidis, Y. (2023). Revealing unknown aspects: Sparking curiosity and engagement with a tourist destination through a 360-degree virtual tour. *Multimodal Technologies and Interaction*, *7*(5), 51. https://doi.org/10.3390/mti7050051