











## Abstract

Integrating Google Street View into a three-dimensional virtual environment in which users control personal avatars provides these said users with access to an innovative, interactive, and real-world context for communication and culture learning. We have selected London, a city famous for its rich historical, architectural, and artistic heritage, as the location of choice for culture learning. Using avatars, learners walk the virtual streets of London under the guidance of a native English-speaking instructor, and interact with each other using text and voice chat functions. The study examines the effects of this virtual environment on culture learning. Specifically, a qualitative case study combined with a time-series design is used to investigate the virtual context's impact on culture learning in terms of learner knowledge and attitudes, and to track associated change processes across the three research phases (baseline, treatment, and maintenance). The results show that all four English learners involved in the study

benefitted from their cultural immersion, to varying extents, in the virtual environment. Four contributing learner factors, namely linguistic proficiency, motivation, character traits, and attitudes were found to correspond to the learners' levels of acquaintance with the target culture.

## Keywords:

culture learning case study time-series design virtual environment

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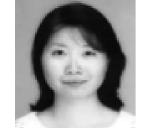
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## Notes on contributors



Ya-Chun Shih

Ya-Chun Shih was born in Taiwan. She received her MA and PhD degrees in curriculum and instruction (bilingual education emphasis) from Pennsylvania State University in 1997 and 2000, respectively. In 2001, Dr Shih joined the Faculty of National Hualien University of Education, located near the world-famous Taroko Gorge, as an assistant professor of English language teaching. In 2009, the University was renamed as National Dong Hwa University. She is currently an assistant professor in the Department of English at National Dong Hwa University, Hualien, Taiwan and one of the computer-assisted language learning practitioners. She has pursued a wide range of technology-supported language learning issues, including serving as an instructor, instructional designer, researcher, journal reviewer, guest speaker, advisor, and committee member on related issues. Under Dr Shih's leadership, the VEC3D (three-dimensional Virtual English Classroom), an interdisciplinary research team of instructional designers and computer science experts, designed and developed a variety of innovative languagelearning platforms. Dr Shih and her research team are expanding beyond the traditional language-learning environments and methods by incorporating technology into daily lessons and communicative activities. Her current research focuses on integrating virtual reality technologies and language learning in education. She has investigated the effect of virtual reality assisted language learning on students' achievement of English as a foreign language. She has also explored issues related to the use of threedimensional collaborative virtual environments within a social and cultural context. The central research issues for the VEC3D project include research on (non)verbal communication, developing communicative competence, and cultural awareness.



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