Chapter 5

Immersive Language Learning in Collaborative Virtual Environments: The Current Status and Possible Trends

Ya-Chun Shih
National Dong Hwa University, Taiwan

ABSTRACT

This chapter explores the role of collaborative virtual environments (CVE) in the language learning immersion experience. Despite the lack of strong empirical evidence, CVE assisted language learning has become an interesting point in recent research on technology-supported language learning. The current work reviews specific issues in the context of CVE assisted language learning: (a) current research, theory and practice; (b) virtual reality assisted language learning; (c) link between CVEs and Web 2.0.

OVERVIEW

Language is best learned and acquired in immersive environments where the learners experience significant target language and cultural immersion. Collaborative virtual environments (CVEs) facilitate the immersion experiences. The popular three-dimensional CVEs such as Second Life and Active Worlds enrich expression, communication and sophisticated interaction through incorporating different modalities, including written, spoken, avatar movement and gesture, objects, images and videos. The combination of different modalities in the virtual environments allows multimodal communication, and facilitates the language and cultural immersion.

The idea for this chapter originates from the Krashen’s (1987, 1988) theory of second language acquisition, which has informed the author’s belief that natural language acquisition occurs in context, in authentic communication, in immersion and never divorced from social activities. Previous studies (e.g., Warschauer, 1996) indicate that computer-mediated communication and interaction create favorable premises for a language learning environment. I also agree that, “People
do not learn languages and then use them, but learning languages by using them” (as cited in CARLA, n.d., ¶ 4). This belief has brought a wide range of in-world events via computer-mediated communication in which language is used and language acquisition occurs into virtual worlds.

This chapter offers an overview of the issues involved in immersive language learning in CVEs and the status of CVE learning. The aspects of immersive experiences in language learning, such as negotiation of meaning, intercultural communication and understanding, as well as interactional strategies are available in the popular CVEs. This study reviews the research investigating the previous issues based on observation of language learners’ interactions and the analysis of discourse occurring in CVEs to explore pedagogical possibilities. However, the systematic investigation, including development, testing, evaluation, and research of the related issues is still in its infancy despite many project teams’ efforts to conduct it.

The chapter is also devoted to the discussion of the current studies and implications of the related research conducted in the VEC3D (3D Virtual English Classroom) system launched in 2003. The curriculum adheres to collaborative, interactive and immersive language learning. The study focuses on developing and implementing the computer-assisted language learning (CALL) tasks and, concurrently, exploring English as a Foreign Language (EFL) issues and implications: communicative competence, vocabulary acquisition, reading comprehension, verbal and nonverbal communication, cross-cultural understanding and awareness in the context of 3D CVEs.

The latter part of the chapter explores the possible future trends in incorporating Web 2.0 tools such as blogs and other social networking sites with virtual environments in the context of language learning. Experiences in incorporating these technologies into the language teaching and learning process are addressed to indicate research challenges and possibilities for future interdisciplinary implementation and research in technology and language learning.

The chapter headings are: Current CVEs for Language Learning, Research Projects, Interactive and Immersive Language Learning and Acquisition in CVEs, Conceptual Framework of CVE Assisted Language Learning, Beyond CVEs: Incorporating Modalities in VEC3D, Connection between CVEs and Web 2.0 for Language Learning, Conclusion and Future Trends.

**CURRENT CVES FOR LANGUAGE LEARNING**

This chapter focuses on three-dimensional collaborative virtual environments (CVEs), also referred to as virtual worlds, multi-user virtual environments (MUVE), such as Second Life (Linden Research, Inc., n.d.), Active Worlds (Activeworlds, Inc., n.d.), Project Wonderland (Sun Microsystems, Inc., n.d.), and There (Makena Technologies, Inc., 2010). Tomek (2001) defines CVE as “a software environment that creates a configurable universe which emulates a number of serviceable aspects of physical reality, such as space, movable objects, navigation, and communication between (representations of) humans” (as cited in Schmeil & Eppler, 2008, p. 1). CVEs, in which people embodied as avatars gather, interact with others, embodied agents, virtual objects and environments, offer an ideal atmosphere for language learning.

3D CVEs allow users to experience and perceive information in a dynamic interactive way, have a “feeling of immersion, a perceptual and psychological sense of *being in the digital environment*” (McLellan, 1996; as cited in Schmeil & Eppler, 2008, p. 2) and good “for model building and problem solving” (Schmeil & Eppler, 2008, p. 3). According to the survey (Eduserv, 2008), the most popular educational 3D CVE that has been increasingly used in educational settings is Second Life, which incorporates interaction, immersion,