

## Chapter 13

# Virtual Worlds for Developing Intercultural Competence

**Lisiane Machado**

*Unisinos University, Brazil*

**Angilberto Freitas**

*Universidade do Grande Rio (Unigranrio), Brazil*

**Eliane Schlemmer**

*Unisinos University, Brazil*

**Cristiane Drebes Pedron**

*Universidade Nove de Julho (Uninove), Brazil*

### ABSTRACT

*The authors present a framework for developing intercultural competence (IC) and use tridimensional digital virtual worlds (3DVW) as environments for developing IC. They developed an artifact, via design research, constituted by an educational method using the 3DVW Second Life® as the place for a virtual exchange program between 92 Brazilian and Portuguese master students. The results of the study indicate that the 3DVW can be used for the development of IC because it allows rich experiential and relational/conversational learning opportunities, especially due to the affordances of immersion/sense of presence, social interaction, content production, and knowledge sharing. The students involved in the virtual exchange inside Second Life® had to practice a set of attitudes and skills such as communication skills; culture-specific knowledge; understanding others' worldviews; skills to analyze, evaluate, and relate; skills to listen, observe, and interpret; respect, openness; tolerance for ambiguity, among other, that are all attributes of IC.*

## INTRODUCTION

Intercultural Competence (IC) can be understood as an individual's capacity to effectively and appropriately act and communicate in intercultural situations based on intercultural knowledge, skills and attitudes (Deardorff, 2006, 2008).

The latest advances on Information and Communication Technologies (ICT) and the use of digital Three-Dimensional Virtual Worlds (3DVW) in business processes, games and education (Schultze & Orlikowski, 2010), can provide rich three-dimensional graphic spaces with audio, video, animation, and interactivity, in which individuals can live experiences via an avatar (Schultze & Orlikowski, 2010). These environments can allow people from different cultures to develop common projects and activities at low cost, with no need for physical transportation. We live in a global world where information and communication technology is changing the manner in which businesses create and capture value, how and where we work, and how we interact and communicate, for example (Cascio & Montealegre, 2016).

Thanks to their great potential, 3DVW gained legitimacy in business and educational settings for their use in activities such as multimedia meetings and training, virtual teamwork, distributed collaboration and real-time simulation (Schultze & Orlikowski, 2010). They also provide an interesting environment for innovation and experimentation among educators, scientists and software teams (Bainbridge 2007, Schultze et al., 2008).

Educators and educational institutions point the potential of the use of virtual environments for teaching and learning, as they provide the possibility of learner engagement, together with the ability to explore, construct and manipulate virtual objects, structures and metaphorical representations of ideas (Dalgarno & Lee, 2010). Dickey (2003; 2005) found that a Virtual World can support a constructivist learning environment for geographically distant learners. Communication features such as the possibility of establishing a unique identity (through the use of an avatar) and several tools for conversation provide opportunities for collaborative and cooperative learning. These opportunities are demonstrated in the studies of Hanewald (2013) and Cho & Lim (2015), for example.

Therefore, we propose the research question: *How can a 3DVW be used as an environment for the development of intercultural competence?* We propose a theoretical framework based on IC and virtual worlds, considering a relational and conversational view of experiential learning (Kolb, 1984; Kolb & Kolb, 2005; Ramsey, 2005; Baker, 2005). Based on this framework, we developed and tested an artifact, via Design Research, constituted by an educational method using a 3DVW (Second Life® - [www.secondlife.com](http://www.secondlife.com)) as the environment for a virtual exchange program between 92 Brazilian and Portuguese master students. Different educational affordances of 3DVW (Warburton, 2009) and the dynamics of experiential and conversational learning of IC were explored during the empirical application of the artifact.

The next section will present a literature review on experiential learning theory, a relational-conversational perspective of experiential learning, three-dimensional virtual worlds and affordances, and intercultural competence. This will be followed by the research methodology, and finally the results, conclusions and references of this research will be presented.

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