The Use of Virtual Worlds for Developing Intercultural Competences

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ABSTRACT

In this research, the authors present a framework for developing Intercultural Competence (IC) and use Tridimensional Digital Virtual Worlds (3DVW) as environments for developing Intercultural Competence. 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 authors’ 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.

KEYWORDS

Competences Development, Design Research, Experiential Learning, Intercultural Competence, Virtual Worlds

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.

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) 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.

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THEORETICAL FOUNDATIONS

Working in intercultural contexts requires the individual ability to learn from new and different experiences. It is aligned with the concept of experiential learning, which can be defined as “the process whereby knowledge is created through the transformation of experience” (Kolb, 1984, p. 41). By transformation of experience Kolb means that experiential learning is a process of constructing knowledge that involves a creative tension among four learning modes - experiencing, reflecting, thinking, and acting - that is responsive to contextual demands. This process can be depicted as a learning cycle or spiral where the learner touches all the learning modes in a recursive process that is responsive to the learning situation and what is being learned (Kolb, 1984).

Experiential Learning Theory

In the experiential learning model proposed by Kolb (1984), learning is conceived as a four-stage cycle in which immediate concrete experience is the basis for individual observation and reflection, followed by the development of abstract concepts and generalizations from these experiences, which form “theories” that will be tested in new situations, to make decisions and solve problems. As Kolb (1981) states, learning is a process involving the resolution of dialectical conflicts between opposing modes of dealing with the world - action and reflection, concreteness and abstraction.

The Experiential Learning Theory (ELT) has been applied in a variety of learning contexts with distinct objectives (see for instance: Friar & Eddleston, 2007; Pittaway & Cope, 2007; Cook & Olson, 2006; Hardless, 2005; Hoover et al, 2010). However, despite the acceptance of ELT, it tends to be problematic from a relational point of view (Shotter, 1993), since Kolb’s cycle emphasizes individual, cognitive understanding and adaptation to a real world.

A Relational-conversational Perspective of Experiential Learning

Considering Kolb’s cycle limitations, Ramsey (2005) proposes a learning cycle that is more consciously communal, and centered on narrative and action. In her framework, the focus moves away from adapting action to match a given “real” world, towards a collectively produced activity. Also using principles of the ELT, but following a conversational perspective, Baker (2005) argues that conversation is a meaning-making process whereby understanding is achieved through the interplay of opposites and contradictions, encompassing the relational aspects of social, experiential learning, as people strive to increase understanding together.

Therefore, we consider experiential learning as a process that is relational, the individuals are not alone, they interact, negotiate and create common understanding of reality.

Three-Dimensional Virtual Worlds (3DVW) Affordances

In this sense, we have the assumption that 3DVW can provide a space for conversational, interactional experiential learning, because they are immersive digital environments, with rich 3D graphics, high-fidelity audio and animation, in which individuals can interact with each other with a strong sense of presence. In 3DVW, users can create a digital identity in the form of an avatar, which allows them to express themselves, to move, talk, socialize and perform actions (Schultze & Orlikowski, 2010).

3DVW have a set of affordances, which are defined as properties of action between an artifact and an actor (Andreas et al., 2010). Warburton (2009), Warburton and Perez-Garcia (2009) and Baker et al. (2009) summarize these affordances:

- **Immersion and Sense of Presence:** By incorporating a virtual digital persona in the form of an avatar.
- **Interaction:** Among individuals and communities, subject-object, and between objects.
- **Community Presence:** A sense of belonging and common goals among groups and subcultures inside the 3DVW.
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Denis Rudd and Carianne Bernadowski (2015). *International Journal of Distance Education Technologies* (pp. 80-97).

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