Chapter 14

Using Second Life® to Teach Collaboration Skills to Pre-Service and In-Service Special Educators

Melissa D. Hartley West Virginia University, USA

Barbara L. LudlowWest Virginia University, USA

Michael C. DuffDiscover Video Productions, USA

EXECUTIVE SUMMARY

Second Life®, an online virtual world, is currently used at West Virginia University for simulation activities and role-playing exercises in teacher education programs in special education. The purpose of this chapter is to describe a design experiment in a pilot case study, explain the rationale for using virtual reality, describe how learning activities were developed, implemented, and evaluated, discuss plans for future research and practice, and offer suggestions for using virtual simulations in other teacher education programs.

DOI: 10.4018/978-1-4666-2815-1.ch014

INTRODUCTION

Virtual reality has been widely used for technical training in engineering and medicine and is now being adopted for leadership training by business and industry, but it still represents a new frontier in education and in teacher education. Recognizing that virtual reality offers exciting opportunities for creating educational simulations, faculty in the Department of Special Education at West Virginia University (WVU) began using Second Life®, a virtual world that allows free and easy global access, to design and test learning activities that would help pre-service and in-service teachers develop the interpersonal communication and professional collaboration skills needed for success as special education practitioners. The objectives of this chapter are 1) to describe the use of Second Life for learning experiences at WVU, and 2) to discuss the challenges and opportunities of using this virtual reality application for teacher education.

BACKGROUND

West Virginia University is a major public research university and the land grant institution for the State of West Virginia. The Department of Special Education offers both campus-based undergraduate programs and online graduate programs designed to prepare prospective and practicing special educators in multiple areas of specialization. Campus-based courses are offered using hybrid delivery, with a combination of face-to-face class sessions and Web-based learning activities and assessments. Online courses are offered through both synchronous and asynchronous formats, combining live interactive class sessions in real time using a virtual classroom with multimedia modules, threaded discussions, and online assignments available on demand. This department has been a leader in incorporating emerging technologies into teacher education programs and faculty are currently experimenting with a variety of virtual reality applications to see how they can enhance teaching and learning at the undergraduate and graduate levels. A major focus of this effort has been on the use of Second Life for simulation activities and role-playing exercises in both campus and online courses to support teacher education students in developing skills for collaboration and communication among professionals working in schools.

Simulation and role-play have a long history in education and in teacher education. These activities are grounded in the theories of constructivism (Piaget, 1952), discovery learning (Bruner, 1961), experiential learning (Kolb, 1984), and situated learning (Lave & Wenger, 1991). A recent study of role-playing in education found that it increased motivation and skill acquisition (Poling & Hupp, 2009). Yet, only now are educators considering how to use new technologies to support these learn-

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart"

button on the publisher's webpage: www.igi-

global.com/chapter/using-second-life-teach-

collaboration/74416

Related Content

Enhancing Web Search through Web Structure Mining

Ji-Rong Wen (2009). Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 764-769).

www.irma-international.org/chapter/enhancing-web-search-through-web/10906

Association Rule Mining

Yew-Kwong Woon (2009). Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 76-82).

www.irma-international.org/chapter/association-rule-mining/10801

Privacy Preserving OLAP and OLAP Security

Alfredo Cuzzocreaand Vincenzo Russo (2009). *Encyclopedia of Data Warehousing and Mining*, Second Edition (pp. 1575-1581).

www.irma-international.org/chapter/privacy-preserving-olap-olap-security/11029

Data Confidentiality and Chase-Based Knowledge Discovery

Seunghyun Imand Zbigniew W. Ras (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 361-366).*

www.irma-international.org/chapter/data-confidentiality-chase-based-knowledge/10845

Matrix Decomposition Techniques for Data Privacy

Jun Zhang, Jie Wangand Shuting Xu (2009). *Encyclopedia of Data Warehousing and Mining*, Second Edition (pp. 1188-1193).

www.irma-international.org/chapter/matrix-decomposition-techniques-data-privacy/10973