

## Chapter 3

# Simulation to Enhance Interactivity in E-Learning: The Capella Story

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### ABSTRACT

*This chapter examines the planning, process, and application of Riverbend City – an example of rich media developed by Capella University to enhance student interactivity in e-learning environments. Riverbend City is multidisciplinary scenario-based simulation project focusing on the disaster response of public service agencies in a fictional city. The ultimate goal of the project was, and continues to be, to empower learners to envision their ability to combine collaboration and leadership when working with multiple disciplines in a real-life situation.*

*The primary focus of this chapter is how to provide a real-world scenario where skills and new knowledge can be applied in a safe practice situation, how rich media can be used to supplement existing course content, or be used as a means of initial content delivery. The focus for utilizing rich media in the Riverbend City project was to: (1) enhance learning; (2) challenge learners to have a multidisciplinary perspective; and (3) increase engagement with real-world scenarios.*

*This chapter explores how rich media can be used in these three types of applications using the Riverbend City Simulation project for Capella's School of Public Service Leadership as a case study example. Riverbend City is a scenario-based simulation that provides a multidisciplinary, rich media experience*

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*to learners in an online, asynchronous university setting. The simulation provides real-world scenarios where student skills and knowledge can be applied and tested on specific subjects. The ultimate goal of the project is to empower learners to envision their ability to combine collaboration and leadership when working with multiple disciplines in a real-world situation.*

## **INTRODUCTION**

*Welcome to Riverbend City, where a chemical spill has interrupted the day of medical personnel, school children, city officials, and about 200 other “residents” of this simulated metropolis. Based loosely on Minneapolis, Riverbend City has been developed at Capella University to enrich School of Public Service Leadership courses. (Riverbend City introduction, Rockler-Gladen, N. personal communication, February, 2011, Media Course Developer).*

The Riverbend City Simulation Project at Capella University provided a vehicle by which rich, interactive media was used as the best solution for a multidisciplinary approach where learners would greatly benefit from real world scenarios. The fact that Capella is an online university added to the challenge. This chapter will present an overview of the use of rich media as a means to enhance learner engagement with a focus on the experience of the Riverbend City Simulation project from Capella University

Concerns that have been voiced by faculty and accrediting agencies related to “How does one translate knowledge and skills into practice in an e-learning environment?” “How do we really know if they ‘get it’?” In today’s virtual and technology-rich social networks and environments, the public has grown accustomed to the inclusion of media (particularly rich media) as a part of daily life and interaction. Since these technological resources are so applicable to the content and curriculum of online courses, to not include such tools would be questionable not only to today’s learners, but also to faculty and regulatory agencies.

We had originally targeted 19 courses to include Riverbend City simulation missions. The 19 courses quickly expanded to 29 and current plans are to soon include Riverbend City in more than 60 courses. Our original intent was to develop the core storyline, assets and locations up front, and then customize the simulation as necessary for each individual course later on. It was a surprise to the project team to discover early on that this approach would not work. The challenge with this approach is that each course would be developed separately over 2010 and 2011.

Through the use of rich media, it is possible to critique a student’s application of knowledge as well as provide an environment where students can engage with real world problems in a manner that is exciting, stimulating, and congruent with learner needs and expectations.

## **BACKGROUND**

### **The Role of Rich Media and Simulation in E-Learning**

Changes in technology, societal expectations, globalization and ability to pursue academic goals through an expansion of funding (Kantrowitz, M., 2010, February 4; Lauerma, 2011, February 14) have changed the way we approach course development and design. Students and accrediting agencies (AACN, 2008; Boller & Jones, 2008) expect more than lecture, testing and discussions in both traditional face-to-face and online environments. Academic learning can take a variety of forms such as active learning, cooperative / collaborative learning, and technology, but one key method of knowledge and skill delivery that

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