

## Chapter 19

# Transforming Continuing Healthcare Education with E-Learning 2.0

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### **ABSTRACT**

*The e-learning 2.0 transformation of continuing education of healthcare professionals (CE/CME) will be characterized by a fundamental shift from the delivery of static information online to a seamless, digital operation in which all users have the ability to access, create, and share knowledge in a multidimensional, instantaneous, collaborative, and interactive manner. This transformation will be disruptive, blurring existing boundaries between CE/CME professionals, content experts, and student learners, and modifying the traditional structured learning process to a more informal one. While the opportunities are unlimited, the transformation will present not only technology challenges but also social and educational challenges. Recent experiences with similar disruptive technologies show that a meaningful transformation can be achieved only if the application of technology is accompanied by strategic operational changes. This chapter offers a conceptual framework to guide CE/CME professionals interested in transforming their operations with new e-learning 2.0 technologies. Employing several usage scenarios, a new e-learning 2.0-based model of CE/CME operation is introduced. We also present several examples of approaches adopted by our academic group to address the various challenges discussed in this chapter.*

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## INTRODUCTION

The threats of disruptive approaches to management education, CME, and probably to higher education as a whole are real. But so are the opportunities. Disruptive innovations – such as personal computers, photocopiers, helical scan video recorders, and microwave ovens – generally have brought useful technologies to much larger groups of people than previously had enjoyed access to them. Disruptive approaches to continuing education are likely to have a similar impact. Based on new models for learning, they are likely to be increasingly effective in delivering relevant knowledge to larger audiences than are reached by current programs. The lessons learned by private sector companies that have succeeded and failed in the face of disruptive technologies can provide useful models for directors of CME as they formulate strategies for the future (Clayton M. Christensen & Armstrong, 1998).

E-learning 2.0 technologies have the potential to profoundly impact continuing education for healthcare professionals (CE/CME). The evolution of CE/CME over the years can be characterized as a move from **old-fashioned didactic lectures** over coffee and donuts to **online instruction closely resembling the traditional counterparts** to a **digital enterprise of high-tech, interactive, global, instantaneous, and collaborative exchange of information**. For years, the tradition and culture of continuing medical education (CME) assumed that physician learning and performance improvement would result from a simple one-way delivery of information. Over the last decade, as it did with other learning groups, the Internet has stimulated significant changes. Healthcare educators now are able to leverage the Internet to overcome healthcare professionals' lack of time for traditional learning activities and to reach a broader audience, such as those working in more remote and underserved areas.

E-learning 2.0 technologies, such as Web services, semantic Web, social networks, and

rich Internet technologies, have the potential to bring continuing healthcare education into a new era as a digital enterprise. However, like so many other disruptive technologies, they also can lead to significant failures. Building on several e-learning experiences (Casebeer, Allison, & Spettell, 2002; Casebeer, Bennett, Kristofco, Carillo, & Centor, 2002; Wall et al., 2005; Casebeer et al., 2006; Houston et al., 2007; Houston & Ford, 2008; Houston et al., 2008), our goal in this chapter is to provide a conceptual guide for early adopters of e-learning 2.0 technologies in CE/CME. While we discuss many opportunities presented by e-learning 2.0, we also recognize the need to modify current operations to facilitate the new opportunities. The chapter goes on to discuss two categories of barriers to adopting e-learning 2.0, and we describe several approaches in use by our academic CME group to develop best practices approaches for e-learning 2.0 adoptions in CE/CME operations.

## E-LEARNING 2.0 OPPORTUNITIES FOR CONTINUING EDUCATION OF HEALTHCARE PROFESSIONALS

### Defining E-learning 2.0

Before adopting e-learning 2.0, it is important to understand that it involves much more than technology (Downes, 2005; Ebner, 2007; Toub & Kostic, 2008). E-learning 2.0 is a cultural change, and it also has been referred to as social learning (Hart, 2008). This represents a key shift over e-learning 1.0. In e-learning 1.0, information flows “unidirectionally” from content creators to content consumers with the roles of the content creator and consumer generally fixed. In contrast, in e-learning 2.0 paradigms, information is socially and dynamically generated, meaning that a content creator in one instance becomes a content consumer in another instance involving the same learning activity. Accordingly, Ferretti et al. note

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