

A Case Study Exploring Quality Standards for Quality E-Learning

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INTRODUCTION

In order to satisfy the needs of growing numbers of adult learners, the availability of well-designed, effectively implemented, and efficiently delivered online courses is essential (MacDonald, Stodel & Casimiro, 2006; Palloff & Pratt, 2001). Despite the demand and prevalence of e-learning, there are still concerns regarding the quality and effectiveness of education offered online (Carstens & Worsfold, 2000; Noble, 2002). Too often, in an “effort to simply get something up and running” (Dick, 1996, p. 59), educators have been forced to compromise quality and design.

Intensive competition among educational institutions has resulted in quality assurance becoming a critical issue for promoting learning and learning programs. Within this economically motivated environment, online learning has not escaped the scrutiny of *quality standards*. Quality in online programs is generally defined in terms of the design of the learning experience, the contextualized experience of learners, and evidence of learning outcomes (Jung, 2000; Salmon, 2000). However, the plethora of online learning courses and programs with few standards to ensure the quality of content, delivery, and/or service creates a challenge. The resulting variance in quality makes it difficult for an organization or learner to choose a program that meets their needs and is also of high quality.

One indicator of a quality online learning experience is the evaluation process. However, there is a dearth of online evaluation efforts which may be, in part, a result of competing priorities. In her three-year study of distance learning initiatives, Robinson (2001) reports that evaluation efforts were limited due to lack of time and expertise. Funding for the development and deployment of novel programs may be emphasized, while resources are not tagged to support evaluation (Breithaupt & MacDonald, 2003; Wills & Alexander,

2000). Concern over the lack of rigorous evaluation studies of e-learning programs has been voiced (i.e., Arbaugh, 2000; Howell, Saba, Lindsay, & Williams, 2004). McGorry (2003) emphasizes that “theory-driven empirical research is necessary so that criteria for developing effective Internet-based programs are established” (p. 160).

This chapter explores the issue of quality in e-learning programs in higher education by sharing findings from a case study research project. This is followed by suggestions for how one quality model, the Demand-Driven Learning Model, could be enhanced by considering the function of learning communities and blended learning approaches—two increasingly popular notions in the e-learning literature.

BACKGROUND

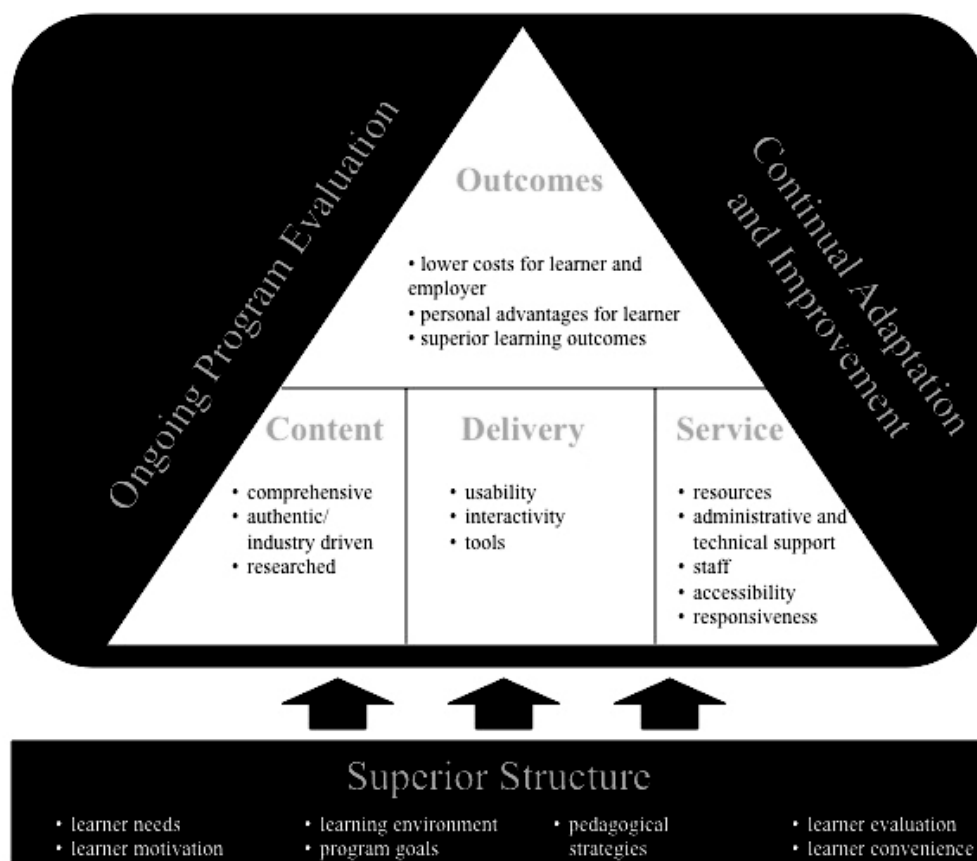
The need for *quality standards* to ensure the academic integrity of e-learning programs has been tackled by several researchers (Benson, 2003; Carstens & Worsfold, 2000; DeBard & Guidera, 2000). However, establishing quality standards is marked by contestation. In her qualitative study with participants from six different stakeholder groups engaged in developing an online degree program, Benson found that although everyone wanted quality courses, stakeholders brought different definitions of quality, which impacted the planning process and shaped the learning experiences. These challenges point to the need for *evaluation* as an integral part of program design to assure quality in e-learning programs. Rovai (2003) notes that evaluation is critical for program improvement and long-term success. Similarly, Marquardt and Kearsley (1998) suggest that “evaluation is particularly important in the context of technology use because it [technology] is highly susceptible to fads and marketplace trends” (p. 246).

In response to the call for quality standards and sound pedagogical models for e-learning, MacDonald, Stodel, Farres, Breithaupt, & Gabriel (2001) published the *Demand-Driven Learning Model (DDLM)* as a quality standard to guide the design, development, delivery, and evaluation of e-learning (see Figure 1). The DDLM is grounded within a constructivist framework and defined by five inter-related dimensions (structure, content, delivery, service, and outcomes) that, in concert, create a high-quality e-learning experience. In the *DDLM*, the *structure* of an e-learning course provides the necessary foundation for quality content, delivery, and service. Structure includes anticipating learner needs, using appropriate pedagogical strategies, creating a positive learning environment, and conducting regular learner evaluations. The *delivery* of an e-learning course includes usability, interactivity, and tools. The *content* of an e-learning course should be comprehensive, authentic, and researched. *Service* includes resources,

administration and technical support, accessibility, and responsiveness. Finally, the *outcomes* of an e-learning course should include lower costs for the learner and employer, personal advantages, and achievement of learning outcomes.

An evaluation tool that aligns with the DDLM model was also developed to assess the quality of e-learning against this standard (Breithaupt & MacDonald, 2003; MacDonald, Breithaupt, Stodel, Farres, & Gabriel, 2002). These tools have been used to guide e-learning initiatives across Canada and the United States, including an online dementia care program for caregivers in long term care and an online interprofessional education program for physicians, nurses, nurse practitioners, and pharmacists (MacDonald, Stodel & Casimiro, 2006; MacDonald, Stodel & Chambers, under review). In the case study described next in this chapter, the DDLM is applied as both a design and evaluation tool to an online Masters level course.

Figure 1. The Demand Driven Learning Model (DDLM). From MacDonald et al. (2001)



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