Chapter 29
Preparing Online Learning Readiness with Learner-Content Interaction:
Design for Scaffolding Self-Regulated Learning

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ABSTRACT

Online learning readiness is fundamental to student successful participation, presence, and interaction in online courses. Effective facilitation of these key components depends on sound instructional design. In self-directed online environments, learner-content interaction and scaffolding self-regulated learning have been found of primary importance to generate meaningful learning. To provide a solution to the challenges of interoperability of various functions in synchronous online learning environments, this chapter presents a case study about the design and development of a self-paced orientation to help students acquire online learning readiness. Learner-content interaction is strategically utilized in the design to scaffold self-regulated learning. The results of the case study demonstrate that this orientation positively prepares students to be ready for learning in a synchronous online environment. The approach can be of practical use to individuals and groups.

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INTRODUCTION

As the enrollment in online courses continues to increase, higher education is faced with a paradigm shift in managing teaching and learning practices in immersed physical and online environments. According to the Babson Survey Research Group's report, there were 7.1 million students enrolled in the universities and colleges in the United States taking at least one online course in the fall of 2012, which reached a historic peak with an increase of 411,000 (Allen & Seaman, 2014). To meet the demand of rising enrollment in online learning, there is a need to provide training and support that are instrumental to student success in technology-mediated and self-directed online environments (Allen & Seaman, 2014). Thus, the preparation for student online learning readiness becomes an integral part of the strategic management of online programs and classes (Rufai, Alebiosu, & Adeakin, 2015).

In online learning, strategies are applied to manage a wide variety of resources, concepts, procedures, and techniques that are related to the access and needs of diverse stakeholders (Burgelman, Christensen, & Wheelwright, 2004; O'Neil, Fisher, & Rietschel, 2014; Sawyer & Howard, 2007). Grounded in sound instructional design, these strategies are integrated in online courses and programs to moderate the interaction, presence, and participation, which have been found closely associated with student satisfaction and learning experience (Alsharif & Roche, 2010; Baker, 2011; Salmon, 2011; Shea & Bidjerano, 2010).

Developing student readiness has been suggested to capitalize on the potential offered in online learning environments (Jones, 2013; Wozniak, Pizzica, & Mahony, 2012). Readiness manifests as a combination of basic technology skills, proactive access to and use of technology, attitude toward information and computer technologies, competency of online communication, formulating learning strategies, and capability of seeking help (Dray, Lowenthal, Miszkiewicz, Ruiz-Primo, & Marczynski, 2011; Hung, Chou, Chen, & Own, 2010). Lack of readiness preparation is found related to perceived barriers to success in online classes (Barbour & Reeves, 2009). Orientation programs that are focused on increasing students' readiness need to accommodate various technology competency levels and previous online learning experiences (Cho, 2012; Ullmann, 2009). In self-directed online environments, students are expected to have meaningful interaction with instructional content to generate learning (Moore & Kearsley, 2012).

The purpose of this chapter is to explore instructional design and development strategies in preparing students' online learning readiness with learner-content interaction. The exploration is based on the role that interaction plays in online courses, and designing the instructional product to scaffold student self-regulated learning. The presentation of a case study on designing an orientation for online learning readiness is intended to investigate strategies to facilitate learner-content interaction.

Participation, Presence, and Interaction in Online Courses

Participation, presence, and interaction are fundamental to engage students in online courses (Shea, Li, & Pickett, 2006). Strategic management of these core components consists of the analysis, decisions, and course of action that an organization or individual that operates online programs or classes needs to create and sustain to ensure the quality of learning (Nag, Hambrick, & Chen, 2007).

In online courses, instructors play important pedagogical, managerial, social, and technological roles (Liu, Bonk, Magjuka, Lee, & Su, 2005; O'Neil et al., 2014). To be able to effectively teach an online class, an instructor needs to first understand the transformation of pedagogy to online environments with concepts such as interaction and presence, and gain the ability of operating technologies. When managing an online class, an instructor monitors student-content interaction, models communication flow, mediates