Chapter 2
Measuring and Profiling Self–Regulated Learning in the Online Environment

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ABSTRACT

While the presence of technology-enhanced learning environments (TELEs) will only increase in higher education, this book chapter examines current literature concerning the measurement of online SRL behaviors and the application of this online SRL measurement with regard to profiling SRL behaviors in TELEs. The methodologies and issues associated with the measurement of SRL behaviors in TELEs is discussed in view of extant research. The organization of SRL behaviors into five, distinct profiles is then discussed in view of a social cognitive perspective concerning the development of SRL (e.g. Zimmerman & Schunk, 2001). The book chapter concludes with recommendations for future research concerning the presence of SRL profiles and their relationship to other metacognitive factors and academic achievement.

INTRODUCTION

The latest U.S. report on development of distance education (Parsad & Lewis, 2008) describes the rapid growth of distance education at the post-secondary level. Data from the Postsecondary Education Quick Information System (PEQIS) survey indicate that:

...during the 2006-07 academic year, 66% of 2-year and 4-year Title IV degree-granting post-secondary institutions reported offering online, hybrid/blended online, or other distance education courses for any level or audience. Sixty-five
percent of the institutions reported college-level credit-granting distance education courses, and 23% of the institutions reported noncredit distance education courses. (Parsad & Lewis, 2008, p. 2)

The report estimates that during the academic year of 2006-2007, 12.2 million students enrolled in college-level credit granting distance education courses, and 77% of these students were enrolled in online courses. Compared to an estimate of 2.8 million students who were enrolled in distance education in the PEQIS report six years ago in 2000-2001 (Waits & Lewis, 2003), it is apparent that the growth of distance education, especially online education, is exponential. For the purposes of the current book chapter, online learning refers to the delivery of typical course curriculum via the medium of the Internet.

Among the modalities used for distance education, online instruction was reported as the most popular mode of course delivery: 61% of the institutions that offered distance education courses reported offering online courses, 35% reported offering hybrid/blended courses that at least had an online component. Sixty-two percent of the institutions that offered online courses required the online courses be 100% delivery online (Parsad & Lewis, 2008). Asynchronous internet-based technology was cited as the most widely used technology for delivery of distance education courses: 75% of institutions reported that they used the technology to a large extent and 17% used it to a moderate extent. Compared with only 43% of the institutions that used online delivery four years ago (Waits & Lewis, 2003), online instruction and learning is playing an increasingly significant role in distance education.

One of the characteristics of online learning, or TELEs in general, is the autonomy students experience in the learning environment. Online instruction eliminates the limitation of place, time, and physical materials and to a great degree gives students the control over when, what, and how to study (Cunningham & Billingsley, 2003). Some researchers believed that the online environment allowed instructors to present information in a nonlinear fashion that gave students the freedom to unrestrictedly move from one topic to another “without concern for predetermined order or sequence” (McManus, 2000, p. 221). These researchers (McManus, 2000) believed information obtained from online instruction was more personally relevant than what they learned from traditional classroom. Other researchers (Bowen, 1996) found the autonomous online environment was the most beneficial for the students with an internal locus of control who believed they had control over things that happened to them: students with internal accountability beliefs performed better than students with an external locus of control in online courses. When having options, students chose online courses over traditional face-to-face courses mostly because they valued the autonomy to determine the pace and timing of learning (Roblyer, 1999). A considerable body of literature also supported the importance of SRL behaviors in TELEs (e.g. Ally, 2004; Barnard, Lan, Crooks, & Paton, 2008; Barnard, Lan, To, Paton, & Lai, 2009; Barnard, Paton, & Lan, 2008; Fisher & Baird, 2005).

Because the online environment is characterized with autonomy, self-regulation becomes a critical success factor for online learning. This book chapter asserts that it is important not only to measure self-regulated learning in the online learning environment but to profile learners according to the self-regulated skills and strategies that they endorse. While the reliable and valid measurement of self-regulated learning skills and strategies is indeed important because it depicts the current developmental level of self-regulation of students, it is just one half of the challenge of helping learners to succeed in the online learning environment. The other half of this challenge is to understand the trajectory of the development of online self-regulation and profile these learners in order to help them become self-regulated in the online learning environment. All learners...