Chapter 9
Using Digital Communities to Enhance Student Persistence and Retention

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EXECUTIVE SUMMARY
Achieving student persistence and retention at the University of Houston has often been a challenge for the university. This chapter concerns using Second Life to develop a digital community of students from a single academic department to enhance student persistence toward graduation. It was postulated that the development of a digital community could strengthen the social cohesion of the students and thereby promote academic persistence. Students joined Second Life voluntarily or as part of their course requirements and then were invited to participate in various social and educational activities led by their classmates. The amount of time spent in Second Life was tracked and will be compared to academic performance.

BACKGROUND
As of February 2009, there were over 26,500 members of the University of Houston’s Facebook digital community according to the network statistics provided by Facebook. Over 30,000 individuals with profiles on MySpace identify themselves as affiliated with the University of Houston and approximately 3000 videos about the university and/or its student’s activities have been
posted on *YouTube* according to each website’s statistics. Participation of this magnitude indicates both the interest and comfort level that today’s students have with Internet technology as a means to develop and maintain relationships that until very recently have been conducted primarily through face-to-face interactions. The rise of the Internet has substantially modified the form of interpersonal relationships for students who have grown up with the world literally at their fingertips through digital means. These students are often comfortable sharing relatively personal or intimate knowledge with millions of people, but may be uncomfortable interacting with their classmates or professors in a face-to-face setting. This face-to-face discomfort, busy schedules, family obligations, and job responsibilities, are a few of the reasons why the development of traditional learning communities are becoming more and more difficult to foster. This is particularly true of universities, where a large percentage of the student population commute, such as at the University of Houston (UH). At commuter campuses this may cause challenges to the development of strong communities that, in the past, have been based upon solid interpersonal interactions – a key factor contributing to student persistence (Astin, 1993).

Student persistence, the degree to which students are able to complete all of the requirements necessary to achieve a college degree, is of great importance not just to educators but to many local and state governments interested in developing well educated workforces and productive citizens. For instance, the Texas Higher Education Coordinating Board (THECB) is organized around two themes, one of which is participation and success in higher education (THECB, 2008). At commuter campuses, innovative strategies are needed to foster active and nurturing communities with regular student interaction with faculty, and mentoring (Braxton, 2000) in order to achieve student persistence (i.e., participation and success). The development of technologically innovative programs designed to improve student persistence and retention is consistent with the need to develop an educated and successful citizenry. We are using Second Life as a platform to develop a digital community composed of majors from the Department of Health and Human Performance (HHP) at the University of Houston, monitor their involvement in the community during their time at UH and examine the relationship between their involvement in the Second Life community and their academic performance.

**University of Houston**

The University of Houston currently enrolls approximately 34,000 undergraduates (or 27,000 full-time-equivalent students). Among those, approximately 3,200 enter each year as first-time-in-college freshmen (University of Houston Office of Institutional Research, 2008). Figure 1 indicates that the fraction of first-time University of Houston freshmen requiring remediation in 2002 (the most recent year for which public data are available) exceeds the need for remediation at other Texas four-year postsecondary institutions across all race/ethnicity categories. Remediation rates for White, Hispanic, and Black UH freshmen are 25, 39, and 48 percent, respectively. In the context of the retention and persistence literature, such data suggest that a reasonable proportion of students entering the University of Houston likely do so at a disadvantage.

In particular, much research suggests the number of developmental classes a student is required to take – a strong proxy for academic preparedness – negatively relates with the likelihood of completion (Bettinger & Long, 2004; Rosenbaum & Person, 2003), a conclusion perhaps not surprising given that typically the most academically underprepared students are enrolled in such courses. There is some evidence pointing to the benefit of a structured open access model, though, where mandatory sorting strategies determine the extent to which a student must participate in remedial