Case Study of a Secondary Online Program

in a Large, Diverse Midwestern Public School District

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Dedication

To my children: Catherine, Steven, and Brian Cruzan

and

To my brother: Craig Overhouse



Abstract

In a time of growth in secondary education online programs, there have been few studies directed at understanding secondary online programs and the students they serve. That is particularly true for large, inner-city public school districts with a diverse student body. This is a mixed methods case study which identified that students' primary motive for taking online courses in school year 2007-2008 was to take courses in order to fulfill graduation requirements and graduate from high school on time. Considering the online course outcomes for 854 unique students, chi-square tests show that four factors were significant predictors of either a pass or fail outcome for a completed online course: (a) course titles, (b) student ethnicity, (c) student home computer and Internet access, and (d) year-in-school. Gender was not found to be a significant factor. Course frequency data were available for 1,995 courses taken by the 854 students, indicating that approximately two-thirds of courses completed were four core health and physical education online courses that students passed 90 percent of the time. The online program was in the forefront of leading the district toward a more standardized curriculum after many years of site-based management in its seven largest high schools. This case study indicated several areas that may prove beneficial if further research were conducted, including: (a) discovering why more young women than young men took online PE courses, and (b) discovering ways in which to identify at-risk online students who could benefit from additional support.

Keywords: secondary online learning, area learning center (ALC), credit recovery, credit make up, at risk, school choice, standardized curriculum, physical education.



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Chapter 1: Case Study Framework

This is a mixed-methods case study of a large urban Midwestern public school district's online learning program that describes the program using both quantitative statistics derived from a pre-course online survey and qualitative interview data. Five chapters follow this chapter, including chapters on a background literature search, methodology, history of the District's online program as part of research sub-question three, a chapter on all three of the sub-research questions, and a concluding chapter containing chapter summaries, conclusions, and recommendations.

Overview

Today's online learning was anteceded by earlier distance education endeavors. Earliest instances of distance education occurred during the Industrial Revolution when correspondence courses were developed to meet the need for new skills and knowledge. Today, more than a billion people in the world have adopted digital technologies (Palfrey & Gasser, 2008). The rapid advances in information technology and the Internet have led to an explosion, internationally, in online distance education, and the trend shows no signs of slowing. In the United States (U.S.) alone, 3.9 million post-secondary students and over one million K-12 students took an online course in 2007 (Allen & Seaman, 2008, November; Picciano & Seaman, 2007). Given the exponential growth in the number of people of all ages taking online courses, there has been a growing need to better understand how U.S. secondary online learners and their inner-city public school districts, as communities of practice, have been experiencing the new phenomenon of online distance education.



Background Need

In 2009, two-thirds of U.S. universities and colleges were offering online courses (Imsande, 2009, October). Four years earlier in 2005, 42 states had K-12 online learning programs (Greenway & Vanourek, 2006) and there were 85 virtual charter schools (Coffey, 2009, August 18; Greenway & Vanourek, 2006).

Whether looking at the long history of distance education or at today's online learning phenomenon, empirical studies have primarily focused on the experience of adult learners (Roblyer & Marshall, 2002-2003; Roblyer, Mills, Marshall, & Davis, 2007, April 11; Sherow & Wedemeyer, 1990). There was a lack of similar studies of secondary online courses. In a recent U.S. Government meta-analysis of literature published on studies of online learning, it was stated that "An unexpected finding was the small number of rigorous published studies...for K-12 students" (U.S. Department of Education, 2009, May, p. ix). This case study attempted to add to the understanding of secondary online learners and to their inner-city online program.

For the purposes of this case study, the Midwestern school district will henceforth be referred to as the District and its Midwestern state as the State.

There are a number of problem areas associated with distance education in general that may be affecting the nature of secondary online education, even as those problems have been shown to affect adult online education. These include:

- Historically high dropout rates associated with distance education courses.
- Technologies used in mediating communication affect the distance education experience.



- Social contexts and communities of practice vary in that some activity domains function more effectively than others.
- Competition among online learning programs increased in more recent years.

Historically high dropout rates associated with distance education.

One of the more common criticisms of adult distance education over the years has been that of high learner dropout rates in comparison to traditional classroom courses (Herbert, 2006; Liu, 2007; Noble, 1999, November; Roblyer & Davis, 2008). According to Pape (2004), "online course completion rates of 50 percent are considered acceptable" (Course completion rates, para. 2). This is a primary concern, because the more a secondary student experiences failure when taking courses, the more likely they are to drop out of high school altogether (Roblyer & Marshall, 2002-2003). Therefore, successful completion rates of students in online courses is deemed important to overall school success and improved high-school graduation rates (Roblyer & Marshall, 2002-2003).

Historically, criticism of high dropout rates led to studies that focused on factors associated with successful course completion rates. A number of studies focused on learner characteristics (Coussement, 1995; Hardy & Boss, 1997). However, according to Roblyer and Marshall (2002-2003), until they conducted their own research, there had been no similar studies conducted on the learner characteristics of secondary students. They found that "student interest in taking online courses does not translate consistently to success in such courses" (p. 241). Therefore, it was necessary to look closer at learner characteristics in an attempt to find predictive instruments and models in order to identify



students likely to be at-risk in an online course with the objective of providing the appropriate support and scaffolding rather than recommending they not take an online course (Cummings, 2009; Herbert, 2006; Liu, 2007; Roblyer & Davis, 2008).

Successful secondary online course completion is important to all concerned stakeholders given the large expenditures in terms of both time and money, stakeholders such as public policy makers, school districts, teachers, parents, and students. It is important that as many registered students as possible successfully complete their online courses (Florida Tax Watch, 2007; Liu, 2007; Paulson, 2004, May 4; Roblyer & Marshall, 2002-2003).

Technologies used in mediating communication affect the distance education experience.

Mediating communication technologies affect the distance education experience. In earlier decades, when correspondence technology was used, the experience between instructor and learner was very different from that occurring in today's computer-mediated communications environment. Today's online course programs have found that providing learners with a sense of community and social presence helps improve course satisfaction and reduce online course dropout rates (Ludwig-Hardman & Dunlap, 2003, April; Richardson & Swan, 2003; Wang & Newlin, 2002, May). Wang and Newlin (2002, May) define "social presence" as the degree to which "another individual will enter into a meaningful dialogue" (p. 7). Using software such as Skype permits course participants to engage in video conference calls as a planned, synchronous course event. Webinars, a web-based seminar, are used in larger venues. In addition, online learners