Case Study of a Secondary Online Program in a Large, Diverse Midwestern Public School District

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i

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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.

Table of Contents

Acknowledgmentsi
Dedication ii
Abstract iii
List of Tablesxiii
List of Figures xvii
Chapter 1: Case Study Framework
Overview 1
Background Need
Historically high dropout rates associated with distance education 3
Technologies used in mediating communication affect the distance
education experience
Social contexts and communities of practice vary
Competition among online learning programs increased in more recent
years 5
Research Problem
Theoretical Perspective 9
Relevance of the Study
Online learning as a growing, global phenomenon
Online learning becoming part of the lifelong learning phenomenon 13
A need to learn more about the experiences of secondary online learners.

Questions	18
Purpose	22
Delimitations	22
Technological infrastructure and adequacies left unexamined.	23
Course design left unexamined.	23
Only one researcher and interviewer.	23
Only student data from school year (SY) 2007-2008 was colle	cted 24
Assumptions	24
Differences exist between adult learners and high-school stude	ents that
can impact course-completion outcomes.	25
High-school students' online learning experiences differ from	
traditional face-to-face classroom learning experiences	26
Online course design and technology can impact course	
success/non-success.	26
Assumptions exist about students and the social construction of	of meaning
and cognitive activity.	27
Assumptions accepted about Vygotskian constructivist theory.	28
The high cost of developing and teaching online courses	28
Summary	30
Chapter 2: Literature Review	33
The History of Distance Education	33

Distance education serves democratic values.	34
Distance education served needs of the Industrial Revolution	35
Distance education declined during the Great Depression.	37
Distance education grew to meet the needs of nations in war time	40
Distance education grew with advancements in new communications	3
technology.	41
Distance education grew with advent of the Internet	43
New content areas in online learning.	47
New reasons to expand online learning in schools.	48
Two Theoretical Perspectives for the Research	50
Social/cognitive theories in education.	50
Motivational theory, self-regulation, and self-efficacy	58
Distance Education Studies.	61
Indicators of success.	61
Supporting online learning students.	66
Supporting at-risk students.	67
Summary	72
Chapter 3: Methodology	75
Quantitative Methodology	76
District archival data.	76
District's online pre-course survey.	77
History of the survey: "Is Online Learning Right for Me?"	78

Technical description of the survey "Is Online Learning Right for	Me?" 81
Student sample.	81
Data sources.	83
Database	85
Factor analysis of pre-course survey	89
Qualitative Methodology	98
Summary of Methodologies	102
Chapter 4: History of the District's Online Program	106
History and Evolution of the District's Online Program	106
Early online hybrid courses.	107
Summer 2002 pilot for the online program	107
The State offered online AP courses in 2002-2003.	108
District-offered AP-and-hybrid online courses in 2002-2003	109
The District became a State-approved Online Learning Provider i	n 2003.
	110
The first year of the online learning program in 2003-2004	110
Online program missions.	115
Factors That Introduced Change into the Online Program	121
The position of the online program changed within the District	121
Online courses and vendors changed over time	123
District online courses moved down into the lower grades	124
District summer school courses became web based	124

	The State increased online testing.	127
	Future changes considered for the online program.	129
The	District as an ALC District with ALC and Online Programs Closely	
Asse	ociated	131
Cou	rse Requirements Needed for High School Graduation in the District	133
The	Online Program's Support of Online Teachers	136
	The teacher role in creating online courses	136
	Choosing which courses would be taught online	138
	Online program teacher training.	139
	Planned Moodle training for all District teachers.	141
	Difficulties with teacher-created courses.	141
	Teacher burn out	145
	District efforts to retain health and PE courses.	147
Leg	islated Programs, Funding, and State Requirements	152
	Title I and II, E-Rate, and referendum funding.	153
	State's general education funding.	154
	Different State regulations for ALC and online programs	155
	Credit by assessment law.	157
	The District's concern for timely graduation rates.	158
Sum	nmary of Historical Findings	163
Chapter 5:	Findings	166

Research Question 1: What are some of the factors motivating secondary						
students in the District to take an online course?						
District online course frequencies						
Student demographics in the District's seven largest high schools						
Relationship of students' ethnicity with course selection and outcome. 180						
Relationship of students' year in school with course selection and						
outcome						
Relationship of students' gender with course selection and outcome 189						
Relationship of online course title with course outcome						
Student course-format preferences. 198						
Research Question 2: What attributes and social capital might a secondary						
student bring with them to meet the challenges of a secondary online course that						
will make successful online course completion for credit more likely within the						
District's activity domain? 200						
Student antecedent characteristics, attributes, and attitudes						
Student online course expectations of difficulty						
Students' computer skills and knowledge						
Student access to technology as part of a community of practice 204						
Students' social supports for taking an online course						
Research Question 3: What are the District and its stakeholders, as a community						
of practice (COP) and large inner-city school district, currently doing in an						
attempt to assist its diverse body of secondary students taking online courses? 211						

Sources recommending online courses to students	211
Communication with parents.	213
Online program moving the District toward a standardized cu	ırriculum. 217
District concern for its own viability in an environment of sci	hool-choice
competition.	223
Summary of Findings	226
Chapter 6: Summary, Conclusions, and Recommendations	231
Background for Study and Rationale	231
Summary of Background Literature	233
Summary of Methodologies	236
Summary of Historical Findings	238
Summary of Findings	240
Interpretation Using Activity Theory	244
Conclusions	254
Research question 1.	254
Research question 2.	257
Research question 3.	258
Recommendations	262
Recommendations for practice.	262
Recommendations for further research.	266
References	270
Appendix A: Definition of Terms	297

Successful Course Completion	. 297
Unsuccessful Course Completion	. 297
Online Course (or Instruction)	. 298
Online Learning (or Education)	. 298
Distance Learning (or Education)	. 298
E-Learning	300
Virtual Classroom	300
Virtual High School (VHS)	300
Virtual Tutoring	301
Cyberschools	301
Hybrid or Blended Courses	301
Corporate Universities	301
Correspondence Technology	302
Appendix B: District's 20 Question Online Survey	. 304
Appendix C: IRB Letters and Consent Forms	. 306
Appendix D: Note for Parents	310
Appendix E: Interviewees and One of Their Many Roles in School Year 2007-2008	313
Appendix F: Stakeholder Questionnaires	314
Questionnaire 1: Student Pre-Course/During-Course Questionnaire	315
Questionnaire 2: F-2-F Instructor General Questionnaire	. 326
Questionnaire 3: F-2-F Administrator Questionnaire	. 336
Questionnaire 4: F-2-F Online Administrator Questionnaire	. 347

Running head: CASE STUDY OF A SCHOOL DISTRICT'S ONLINE PROGRAM	xii
Questionnaire 5: F-2-F Counselor, Social Worker, and School Psychologist	
Questionnaire	359



List of Tables

Table 1:	Frequency of Unique Students Completing Quarter-Length Courses in	
	Database School Year 2007-2008.	86
Table 2:	Frequency of Online Program's Required Pre-Course Surveys Taken by	
	Students Between September 1, 2007 to April 15, 2008	. 87
Table 3:	Frequencies by Quarter with Pass/Fail Grades of All Completed Online	
	Courses in School Year 2007-2008	. 88
Table 4:	Factor Analysis on Eight Likert Items from the Pre-Course Survey with Total	al
	Variance Explained	91
Table 5:	KMO and Bartlett's Test of Assumptions to Validate Using Factor Analysis	
	for the Pre-Course Survey	95
Table 6:	Factor Analysis of Pre-Course Survey: Rotated Structure Matrix Supports	
	Two Theorized Concepts	96
Table 7:	Factor Analysis of Pre-Course Survey: Rotated Pattern Matrix Confirms	
	Eight Likert Variables Are a Good Fit Within the Two Concepts	97
Table 8:	Interviewees and One of Their Many Roles in School Year 2007-2008	101
Table 9:	School Year 2003-2004 Online Student Enrollment	113
Table 10	Student Enrollment in Online Courses for 2004 Summer School	114
Table 11	: Course Requirements Needed for High School Graduation in the District	
	in School Year 2007-2008	134
Table 12	: State's Weighting of Students ADM General Education Funding in School	
	Year 2007-2008	155

Running l	nead: CASE STUDY OF A SCHOOL DISTRICT'S ONLINE PROGRAM xiv
Table 13:	Frequency of Completed Online Courses by Course Title and Pass/Fail in
	School Year 2007-2008
Table 14:	Frequency of Completed Online Courses and Students Taking Them Based on
	School Site in School Year 2007-2008
Table 15:	Frequency of Completed Online Courses by Course Title and School Code
	Number in School Year 2007-2008
Table 16:	Frequency of Completed Online Course Pass/Fail Rates by School Site in
	School Year 2007-2008
Table 17:	District's Demographics Compared with Seven Large High Schools'
	Demographics in School Year 2007-2008
Table 18:	Frequency of Completed Online Courses by Course Title and Ethnicity Based
	on Pass/Fail in School Year 2007-2008
Table 19:	Frequency of Completed Online Courses by Unique Students' Ethnicity and
	Their Pass/Fail Outcomes in School Year 2007-2008
Table 20:	Chi-Square Analysis including Actual and Expected Frequencies of Completed
	Online Courses by Unique Students' Ethnicity and Their Pass/Fail Outcomes
	in School Year 2007-2008
Table 21:	Completed Online Course Pass/Fail Frequencies Based on Year-in-School
	(YIS) in School Year 2007-2008
Table 22:	Unique Students' Completed Online Course Pass/Fail Frequencies Based
	on Year-in-School (YIS) in School Year 2007-2008187

	Running head:	CASE STUDY	OF A	. SCHOOL	DISTRICT'S	S ONLINE PROGRAM
--	---------------	------------	------	----------	------------	------------------

Table 23:	Chi-Square Analysis including Actual and Expected Frequencies of Unique
	Students' Completed Online Course Pass/Fail Frequencies Based on Year-in-
	School (YIS) in School Year 2007-2008
Table 24:	Frequency of Completed Online Courses by Title and by Gender in School
	<i>Year 2007-2008</i>
Table 25:	Pass-Fail Frequencies of Online Courses Completed Based on Gender in
	School Year 2007-2008
Table 26:	Frequency of Completed Online Courses Based on the Gender of
	Unique Students and Their Pass-Fail Frequencies Outcomes in School Year
	2007-2008
Table 27:	Chi-Square Analysis including Actual and Expected Frequencies of Completed
	Online Courses Based on the Gender of Unique Students and Their Pass-Fail
	Frequencies Outcomes in School Year 2007-2008
Table 28:	Frequency of Online Courses Taken by Unique Students When Smaller
	Courses Grouped into Departments in School Year 2007-2008
Table 29:	Frequency of Online Courses and Departments Taken by Unique Students
	Based on Pass/Fail Outcomes in School Year 2007-2008
Table 30:	Chi-Square Analysis including Actual and Expected Frequencies of
	Online Courses by Unique Students and Departments Based on Pass/Fail
	Outcomes in School Year 2007-2008
Table 31:	Unique Students With/Without Computer and Internet Access at Home and
	Online Course Pass/Fail Frequency During School Year 2007-2008205

Running head: CASE STUDY OF A SCHOOL DISTRICT'S ONLINE PROGRAM x	vi
Table 32: Chi-Square Analysis including Actual and Expected Frequencies for Unique	
Students With/Without Computer and Internet Access at Home and Online	
Course Pass/Fail Frequency During School Year 2007-200820	06
Table 33: Students With/Without Computer and Internet Access at Home and Pass/Fail	
Frequency Based on Ethnicity During School Year 2007-200820	09

Running head: CASE STUDY OF A SCHOOL DISTRICT'S ONLINE PROGRAM xvii

List of Figures

Figure 1:	An Education Activity Theory Model Based on Yrjö Engeström's Activity	
	Theory Model	53
Figure 2:	Scree Plot on Eight Likert Items	92
Figure 3:	The District's Online Program Activity Theory Model Based on Yrjö	
	Engeström's AT Model	246

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