

City University of New York (CUNY)

CUNY Academic Works

All Dissertations, Theses, and Capstone
Projects

Dissertations, Theses, and Capstone Projects

2-2018

A Democratic Conundrum: A Study of Online Student Performance at Community Colleges

Lavita McMath Turner

The Graduate Center, City University of New York

[How does access to this work benefit you? Let us know!](#)

More information about this work at: https://academicworks.cuny.edu/gc_etds/2517

Discover additional works at: <https://academicworks.cuny.edu>

This work is made publicly available by the City University of New York (CUNY).
Contact: AcademicWorks@cuny.edu

A Democratic Conundrum: A Study of Online Student
Performance at Community Colleges

By

Lavita McMath Turner

A dissertation submitted to the Graduate Faculty in Urban Education
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
The City University of New York

2018

© 2018
Lavita McMath Turner
All Rights Reserved

A Democratic Conundrum: A Study of Online Student Performance at Community
Colleges

By

Lavita McMath Turner

This manuscript has been read and accepted for the Graduate Faculty in Urban Education
in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.
The City University of New York

Date

Nicholas Michelli
Chair of Examining Committee

Date

Wendy Luttrell
Executive Officer

Supervisory Committee:

Stephen Brier

Terrie Epstein

Abstract

Online education at community colleges has the potential to further democratize education by expanding access through the availability of anytime/anywhere courses for people who might be unable to attend college otherwise. However, the literature reveals the existence of performance gaps between online and face-to-face courses at community colleges, ones that can have negative consequences on the upward mobility of its diverse student population. This study investigates such a trend at one urban university. The study shows complexities in the relationship between online learning at community colleges through a mixed methods study of online performance at a community college. The findings indicate that inequitable outcomes exist for some online learners, particularly along racial lines, with student of color not performing as well as white students. The implications from these disparities are explored, and examples of equitable online educational policies and practices at community colleges suggested.

Dedication

This dissertation is dedicated to the beloved maternal grandmother who raised me, Tommie Lee McMath. She was a sharecropper from Mississippi who, like so many others during the Great Migration, moved as a child to Chicago for a better life. Although she was only able to attend school through the sixth grade, she knew the importance of education. Granny would read the *Chicago Sun-Times* to the best of her ability almost every day and practice her writing skills whenever she could. My grandmother died less than a year after I earned my master's degree. Since she passed away, I have tried to live every day honoring her memory and sacrifices. Her "better life" in the north never quite materialized the way she dreamed. I remember how proud my grandmother was at both my graduations, in 1992 and 1995. I know she is proud again, 23 years later--smiling, clapping, and bragging in heaven about having a doctor in the family.

I also dedicate this study to the innumerable students who enter the doors of community colleges across the country every day, hoping to earn a degree and improve their lives. As a community college administrator for nearly 12 years, I have witnessed students who are parents to young children, those who are primary caregivers of sick parents; those who are high achieving; and those in need of remediation; those who have documented and undocumented disabilities; those who are homeless and hungry--all pursuing the American Dream despite the odds that many of them do not even realize exist.

Although I did not graduate from a community college, I was the first in my family to attend college. I qualified for every type of financial aid available and was required to take developmental English and math at the University of California-

Berkeley. I have no doubt that community colleges serve a purpose in our society. And in the spirit of my grandmother, who would have begun her college career at a community college, if she had had the chance, I try to disrupt the policies and practices that stand in the way of educational equity in any way I can.

This dissertation is one such way.

Acknowledgments

There are so many people to thank for this long journey toward completing a doctorate, 23 years after finishing a master's program. I will begin by acknowledging my chair, Dr. Nicholas Michelli, who allowed me to take his policy course in order to get my feet wet as an older graduate student. From that moment on, Dr. Michelli became one of my biggest supporters and encouraged me to apply to the Urban Education Program. Completing this dissertation would not have happened without his constant cheerleading. Thank you, Nick.

I also want to acknowledge my dissertation committee members, Dr. Terrie Epstein and Dr. Stephen Brier. It has been a long process, and I am grateful for your support and patience as I balanced work and family during this pursuit.

A very special acknowledgment goes to Dr. Regina Peruggi, former president of Kingsborough Community College where I started my career in higher education in 2006. Pursuing a doctorate began with a random conversation with President Peruggi, and the rest is history. I found my calling in higher education working for her. She told me I had a voice and point of view that was different and needed to be heard. Thank you for your friendship and support, Regina.

There are so many extended family members and friends to acknowledge that I cannot name them all, but you know who you are. Your encouraging text messages, hugs, and prayers meant the world to me during this seven-and-a-half year process. I am beyond grateful and blessed for your presence in my life.

To my mom, Yvonne McMath Brevard, who has always allowed me to speak my mind and follow my heart in pursuit of justice and fairness since I was a young girl, with

Granny's help you taught me values and principles that guide me daily. Thank you, Mom.

Finally, I want to thank my husband, Charles Turner, and daughter, Makenna Grace. Charles, thank you for your support, flexibility and patience as I embarked on this journey while raising a four-year-old child. I know there were challenges along the way, but I am grateful for the love and faith we share that allowed us to overcome them. Makenna, although it is my job as your mom to inspire you (and I pray every day that I do), you will never know how much you inspire me with your confidence, courage, creativity, and compassion for others. I hope you are as proud of me as I am of you. I love you both very much!

Table of Contents

	Page
Chapter 1. Statement of Problem	1
The Rise of Distance Education	3
Online Learning at Public Colleges	8
Online Learning at For Profit Colleges and Universities	9
The Neoliberal Influence	10
Massive Open Online Courses (MOOCs)	12
Expanding Access	16
Research Questions	18
Purpose of the Study	18
Chapter 2. Literature Review	19
Student Performance in Online Learning	22
Course Grades	22
Persistence	23
Factors Affecting Online Course Performance	23
Social Distance	24
Lack of Structure	25
Technical Difficulties	26
Lack of Self-directed Learning	28
Definitions of Key Terminology	29
Chapter 3. Theoretical Framework	31
Pierre Bourdieu (Habitus, field)	31

John Rawls (Justice)	33
Thea Renda Abu El-Haj (Equity)	34
Deborah Stone (Policy Paradox)	36
Chapter 4. Methodology	38
Online Learning at CUNY	40
Population	44
Data Collection and Analysis	46
Delimitations	49
Chapter 5. Findings and Discussion	51
Student Characteristics	51
Limitations	56
Discussion	56
Implications for Research	58
Implications for Administration	59
Implications for Faculty	62
Implications for Students	64
Implications for Public Policy	65
Chapter 6. Recommendations	65
California Community Colleges Online Equity Initiative	68
Wake Technical Community College (EPIC)	70
Conclusion	72
References	72
Appendices	75

List of Tables

	Page
Table 5.1. Spring 2015 English 12 Demographics	52
Table 5.2 Student Performance in English 12 Combined Online & Hybrid Formats	53
Table 5.3 Student Performance in English 12 - Face to Face Format	55
Table 5.4 Student Performance in English 12 - All Formats	55

List of Figures

	Page
Figure 1.1 Total Online Enrollment in Degree-granting Postsecondary Institutions- Fall 2002- Fall 2011	5
Figure 1.2 Percentage of Undergraduates Enrolled in a Distance Education Course of Degree Program by Type of Institution: Fall 2012	7
Figure 1.3 Online Learning by Type of Institution, Selectivity	8
Figure 1.4 MOOCs, Expansion, 2012-2017	15
Figure 4.1 Percentage of Instructional FTEs Offered Partially or Totally Online, CUNY Comprehensive Colleges	41
Figure 4.2 Percentage of Instructional FTEs Offered Partially or Totally Online, CUNY Community Colleges	41
Figure 4.3 Percentage of Instructional FTEs Offered Partially or Totally Online, CUNY Senior Colleges	42
Figure 4.4 Percentage of Instructional FTEs Offered Partially or Totally Online, CUNY CUNY Total	42
Figure 4.5 Spring Enrollment 2015 Enrollment Percentage	45
Figure 4.6 Spring Enrollment 2015 Enrollment Percentage	45
Figure 6.1 California Community College Online Equity Initiative Framework	68

Chapter 1

Statement of the Problem

Here's the cruel part: The students from the bottom tier are often the ones who need face-to-face instruction most of all.

Chronicle of Higher Education, December 17, 2012

Undergraduates attending public two-year institutions enroll in online course more often than those attending other types of institutions. According to the most recent nationally representative student-reported data from the National Center of Education Statistics (NCES), 17.3% of students at public two-year institutions enrolled in some form of distance education courses compared with 15.1% of students at public four-year institutions, 6.5% of students at private non-profit institutions and 6.6% of the students at private for-profit institutions (U.S. Dept. of Education, 2014). The disproportionate numbers of online learners in the community college sector have continued, and present a paradox for our post-secondary system, and, on a broader scale, the country. Such an imbalance in higher education is of interest, given it requires not only specific student characteristics for success, but institutional practices that support student success. Nationally, community college demographics reveal a population consisting largely of first-generation, immigrant, and working students with dependents, who often enter college with significant academic challenges. In addition to being the least selective institutions, public community colleges are the lowest funded sector, yet are asked to do more for the large, diverse populations they serve (Carnevale & Strohl, 2010). Much of the literature has focused on student satisfaction and access to online learning, a growing acceptance by faculty and

administration reflected in strategic plans, and improvement in online learning, particularly at four-year institutions. Some studies have shown online student outcomes that are comparable to traditional classroom instruction. However, research conducted by the Community College Research Center has questioned the effectiveness of online learning, particularly for community college students (Jaggars, 2011; Xu & Jaggars, 2014)

Additional studies found that the greatest beneficiaries of online learning tended to be white women who are English-fluent, academically prepared, independent from parents, and had dependents of their own (Jaggars & Xu, 2010). Carpenter, Brown, and Hickman (2004) found similar evidence in a study of online community college students. This demographic does not represent the typical community college student. Thus, although online learning is important in terms of increasing access to higher education, it may not be an effective pedagogical tool for community colleges, where persistence and retention present significant challenges.

The test for two-year colleges is to insure equitable outcomes for students who choose to enroll in online courses and degree programs designed to achieve upward mobility. When online education at a community college does not aid student success, it contradicts the original goals for which community colleges were created and the reason for their partnership in online education—greater college access, leading to improved social mobility. Such a breach of the social contract could result in further stratification of our higher education system, raising the question of online learning's efficacy when it comes to "reclaiming the American dream" for community college students.

The Rise of Online Education

The term *distance education* is the historical name for teaching and learning, where instructors and students are in separate locations. Moore and Kearsley (2013) offer a definition

of distance education that highlights the multifaceted nature of the field: "Distance education is teaching and planned learning in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as special institutional organization" (p. 2).

Distance education began as a way of providing access and learning opportunities to students without the constraints of time and space; research reveals an evolution spanning five generations. The first generation—correspondence, home or independent study—began in the late nineteenth century and catered to people who wanted to study at home or work. This approach employed print-based correspondence education through the postal service or teaching by mail. The second generation, focused on broadcast radio instruction, took place in the 1920s, followed by educational television. During this time distance education evolved to integrate printed materials such as textbooks and study guides, as well faculty and administrator guides to be used with television courses, along with audio and videocassettes and increased student support.

In the late 1960s and early 1970s, the third generation of distance education arrived, with improvements in technology and human resources that led to new instructional techniques and educational theories. Two notable developments were the University of Wisconsin's Articulated Instructional Media (AIM) project and the first single-mode distance learning institution, the Open University, in the United Kingdom.

During the 1980s, teleconferencing inaugurated the fourth generation of distance learning. Teleconferencing was similar to traditional education, in that teaching and learning took place in classrooms that fostered interaction between students and teachers. Finally, the 1990s brought the arrival of the internet and web-based education, the fifth generation of

distance education.

Anthony Picciano (2017) chronicles the development of online education technology from the 1990s to the 2020s in five waves:

- The First Wave: Beginnings (1993-1999). Online courses that were text-based and mostly asynchronous learning.
- The Second Wave: Blending Into the Mainstream (Early 2000s). High-speed cable modems and digital subscriber lines allowed the incorporation of multimedia into online learning. As a result, the concept of blended learning expanded and replaced some of the seat-time in traditional face-to-face courses.
- The Third Wave: The MOOC Phenomenon (2008-2013). Advancement in technology led to the rapid growth of Massive Open Online Courses (MOOCs).
- The Fourth Wave: The Reconciliation of Blended and MOOC Technologies (2014-2020) combines blended learning and MOOCs and incorporates various pedagogies using various formats and instructional tools including interactive media, open educational resources (OER), and adaptive learning.
- The Fifth Wave: Maturation (2021-2029). Online learning technologies become incorporated into most college instruction in various forms and degrees.

For those who may not have educational access due to physical disability, geographic and cultural challenges, family or employment obligations, as well as personal cognitive and psychological disposition, distance education would seem an ideal way to increase access.

American community colleges were also created with the goal of expanding access for students who would be unable to attend a post-secondary institution. This shared mission of college access supports the dominance of distance learning in higher education, particularly at

community colleges. Today, given tremendous advancements in technology, distance education (commonly referred to as online learning or education) includes courses that are completely online, partly online and partly classroom instruction, and various combinations thereof. Figure 1.1 shows the rate of growth in online learning from 2002–2011.

	Total Enrollment	Annual Growth Rate Total Enrollment	Students Taking at Least One Online Course	Online Enrollment Increase over Previous Year	Annual Growth Rate Online Enrollment	Online Enrollment as a Percent of Total Enrollment
Fall 2002	16,611,710	NA	1,602,970	NA	NA	9.6%
Fall 2003	16,911,481	1.8%	1,971,397	368,427	23.0%	11.7%
Fall 2004	17,272,043	2.1%	2,329,783	358,386	18.2%	13.5%
Fall 2005	17,487,481	1.2%	3,180,050	850,267	36.5%	18.2%
Fall 2006	17,758,872	1.6%	3,488,381	308,331	9.7%	19.6%
Fall 2007	18,248,133	2.8%	3,938,111	449,730	12.9%	21.6%
Fall 2008	19,102,811	4.7%	4,606,353	668,242	16.9%	24.1%
Fall 2009	20,427,711	6.9%	5,579,022	972,669	21.1%	27.3%
Fall 2010	21,016,126	2.9%	6,142,280	563,258	10.1%	29.2%
Fall 2011	20,994,113	-0.1%	6,714,792	572,512	9.3%	32.0%

Allen, E.I. & Seaman, J. (2013). *Changing Course: Ten Years of Tracking Online Education in the United States*. Retrieved from <http://www.onlinelearningsurvey.com/reports/changingcourse.pdf>

Figure 1.1 Total and Online Enrollment in Degree-granting Postsecondary Institutions Fall 2002 through Fall 2011

During that time, online learning as a percentage of total enrollment grew almost 13%. Although 2011 saw the largest percentage of online learning (32%), that number represented the lowest rate of growth over the same period, at 9.3%. Since the height of enrollment, overall patterns of online learning enrollment in higher education appear to have changed.

Undergraduate enrollment at two-year institutions declined by nearly 10%, from 2012-2015,

while undergraduate enrollment at four-year institutions remained steady, and graduate enrollment increased only slightly, by 1% (Allen & Seaman, 2017).

Statistics (NCES) reveal additional facts about undergraduate enrollment in distance education courses and degree programs. A 2008 report included the following statistics: 1) students studying computer science and business enrolled in distance education classes and programs at higher rates, 40.8% and 39.3%, respectively; 2) enrollment in distance education programs was most prevalent at for-profit institutions; 3) independent students who were married with dependents enrolled in greater numbers; and 4) students with disabilities enrolled at greater numbers than able-bodied students.

Such data would seem to indicate that students want access to online courses, and that college and university administrators should make offering them a priority. By some accounts, they certainly have. Increasingly, colleges and universities now include online learning in their strategic plans, with 65% of chief academic officers reporting that they find them to be crucial parts of their long-term plans (Allen & Seaman, 2011). The Pew Research Center compared college presidents' views of online learning with that of the general public, and found that 51% of college presidents valued online courses as much as they did traditional classroom instruction (2011). However, less than a third of the general public felt that way. Not only did college presidents view online courses as equally valuable as traditional courses, it was their belief that in ten years nearly half the student population would be taking online courses, compared to the 15% taking them today.

Most interesting was the disproportionate enrollment of online learners across higher education sectors. Figure 1.2 shows that taken together, two- and four-year institutions enrolled the greatest number of students in online courses or programs, followed by for-profit programs.

*Private for-profit estimates include less-than-2yr, 2-yr, and 4-yr institutions.

**Private for non-profit estimates include less-than-2yr, 2-yr, and 4-yr institutions.

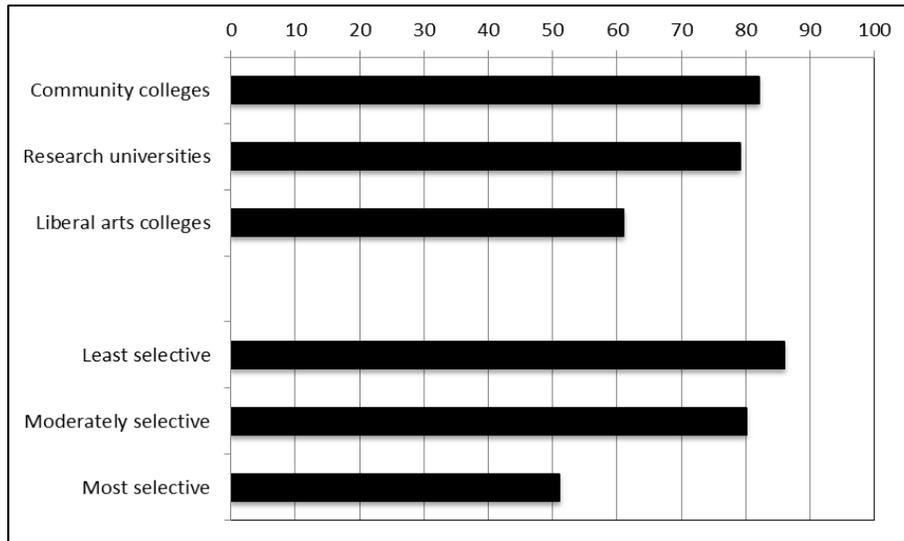
Source: U.S. Department of Education, National Center for Education Statistics, IPEDS, Spring 2013, Fall Enrollment Component

Figure 1.2: Percentage of undergraduates enrolled in distance education courses by institution type: Fall 2012

A review of online learning by the Pew Research Center (2011) revealed the uneven impact across institutions. However, this survey examined online learning by institutional selectivity, providing a different perspective of its acceptance among post-secondary institutions. Highly selective liberal arts colleges were least likely to offer online courses, while public community colleges were most likely. Figure 1.3 displays the inverse relationship between selectivity and online course offerings.

Online Learning at Public Community Colleges

Historians cite the dawn of the twentieth century as the start of a movement to broaden access to higher education and training opportunities for students who might not otherwise be able to participate, due to economic, mobility or social barriers (Cohen, 1989). Today 1200 community, junior and technical colleges, with the mission of open access, educate nearly half of all college students nationwide, and lie within driving distance of more than 90% of the population (National Commission, 2008). It is no surprise that community colleges have earned



Percentage of college presidents saying their institution offers online classes

Note: Based on survey of college presidents. Selectivity categories based on Barron's Profile of American Colleges 2011. Parker, K., Lenhart, A., & Moore, K. (2011). *The Digital Revolution and Higher Education*. Retrieved from <http://www.pewinternet.org/~media/Files/Reports/2011/PIP-Online-Learning.pdf>

Figure 1.3: Online Learning by Type of Institution, Selectivity

the name "Democracy's College," once bestowed on land-grant colleges and universities.

Community colleges challenge the traditional view of college students: those who attend a residential four-year institution and graduate from the same college where they first matriculated. As the gateway to opportunity for many, community colleges represent a broad range of economic, social, ethnic, and academic backgrounds. They are particularly important for students who must balance school and such commitments as work and family. Advocates of online learning have pushed for its growth because its inherent flexibility may increase access for students who are least able to attend traditional four-year colleges..

Online Learning - For-Profit Colleges and Universities (FPCU)

Although they have been around for almost two hundred years, since the 70s for-profit

enrollment has been attributed to inclusion of nontraditional students, reflecting demographics like those at community college (Hentschke, Lechuga, & Tierney, 2010). According to Hentschke and colleagues, these programs attract a share of the higher education market, not by competing for students at traditional colleges and universities, but by pursuing those unlikely to be recruited at traditional institutions. For-profit colleges tend to attract students who have the following characteristics: financially independent (without parental support); income levels in the lowest quartile; parents whose educations ended at high school; ethnic minorities; and those academically under-prepared.

The for-profit sector also appeals to working-class adult learners with families to support, who need a flexible schedule when seeking to improve their skills and obtain higher paying jobs. For-profit schools directly compete with community colleges in providing access to so-called "marginal students," who are not well served by traditional higher education. The prevalence of online learning found in public community college and for-profit sectors becomes more understandable in light of their targeted populations.

The Neoliberal Influence

The influence of neoliberalism on colleges and universities can be seen in the disproportionate growth of online education at community colleges. David Harvey (2011) argues that neoliberalism emphasizes the significance of contractual relations in the marketplace, and holds that social good is maximized in the reach and frequency of market transactions. For Harvey, neoliberalism is in constant pursuit of information technologies that can aid this maximization of market transactions, and that "these technologies have compressed the rising density of market transactions in both time and space" (p. 4). Online education, with its ability to increase educational access, is an example of one such technology.

The important democratic issue of access addressed by online learning would seem to make it a suitable partner for community colleges. However, students should be cautious when viewing it as a means of achieving equal educational opportunities. Research on the efforts of community colleges to positively affect the mobility of its students raises the question of whether online education is an appropriate pedagogy and/or instrument of empowerment for community college students. Levin (2007) states that

Educational institutions have a responsibility to insure substantive equality opportunity, regardless of the potential economic benefits of unequal access. Disadvantaged students must not be subjected to an educational system or degree program in which their individual agency and self-purpose are neglected in favor of the economic benefit to a local industry. . . . National or indeed local economic competitiveness cannot justify the commodification of students, in which their rights to equality of opportunity are sacrificed for a larger good" (p. 192).

Scholars studying the impact of neoliberalism on higher education also report the growing use of technology in higher education which includes online education as a way to address numerous issues, especially financial ones. The uses of various technologies in higher education institutions have been marketed as a social justice rationale for increasing access. This rationale becomes more common as financial constraints on public institutions push them to find new revenue streams. Public community colleges, already the most poorly resourced sector of higher education, are typically the hardest hit by government disinvestment. For them, online enrollments become a way to replace dwindling government resources without the need to allocate resources for physical space, with more money saved by using adjunct rather than full-time faculty.

As a result, increasing use of technology in higher education has disproportionately affected those students who need the most support. In their work on austerity policies and higher education, Fabricant and Brier (2016) eloquently state the inequities and injustices resulting from such policies:

Poor students of color, including first-generation immigrants, who disproportionately attend publicly supported institutions facing the most pressing austerity problems, have borne the brunt of technological solutions through their higher failure and lower completion rates in online courses they are often required to take. (p. 198).

The neoliberal influence on higher education, community colleges, and online education can be seen in a new federal program that threw a lifeline to nontraditional providers of online education. In August of 2016, the Obama administration announced the Educational Quality through Innovation Partnerships (EQUIP) experiment, which partnered eight post-secondary institutions with non-traditional providers. It was aimed at low-income students who enroll in non-traditional training programs, tasked with allowing them access to federal student aid.

The non-traditional programs involved included online courses, coding boot camps, and employer organizations. The stated goals of the experiment were to test new ways of allowing Americans from all backgrounds to access innovative learning and training opportunities that lead to good jobs, and which fall outside the current financial aid system; and to strengthen approaches to the outcomes-based quality assurance process that focuses on student learning and other outcomes. (www2.ed.gov). To no one's surprise, one of the selected institutions was a community college—or rather, the entire Dallas community college system, which partnered with the online course provider StraighterLine. Through this neoliberal policy “experiment,” community colleges and online education are yet again being promoted as a joint option for

economically disadvantaged students to find jobs leading to upward mobility.

Massive Open Online Course (MOOC)

Any discussion of online learning and neoliberalism would not be complete without mentioning Massive Open Online Courses (MOOCs). The MOOC movement began in 2011 with courses offered by Stanford professors. MOOCs facilitate "social learning" through the use of social networking wikis, blogs, cognitive tutors, virtual learning, and learning management systems. The word "open" is significant, suggesting that a MOOC is open to anyone free of charge (except for certain credit-bearing courses), where participation takes place in cyberspace and a participant's work is shared freely with others. Participants not seeking college credits may designate the extent to which they wish to participate, and may choose to participate in activities they find useful.

These online courses are similar to traditional classroom instruction in that they are aimed at designated participants (i.e., students), and offer course materials and a specific timeframe for completion. However, they differ in other respects: there are no assignments, and participants are not required to follow a traditional syllabus or designated path. Such courses also differ from mainstream online courses in their reliance on the use of Web 2.0 technology such as tweets, tags, video lectures, blog posts, and discussion boards. Such technology also allows faculty from a handful of institutions to reach huge audiences across the globe.

The cost of designing mass online courses is, however, significant, which limits their use to star professors from such well-endowed institutions as Stanford, Harvard, MIT, and UC Berkeley. Many of the courses are developed in partnership with for-profit entities (e.g., Coursera, Udacity, Udemy), or a nonprofit like EdX, founded by faculty from elite higher education institutions. Offering prestigious online courses has generated both interest and

concern on the part of smaller institutions. In a 2012 article in the *Chronicle of Higher Education*, Greg Graham asserted that "ironically, although the move toward online education is being advanced by some of the nation's most elite universities, in the end it will be the lower half of the student population that will be forced out of the traditional classroom, widening the gap between the haves and have-nots." The article goes on to quote Joseph E. Aoun, president of Northeastern University, who substantiates the notion that online courses further stratify higher education. Aoun acknowledges that new technology could promote a two-tier system with "one tier consisting of a campus-based education for those who can afford it, and the other consisting of low- and no-cost MOOCs" (Carlson & Blumenstyk, 2012). What little research there is shows low completion rates and few if any support services for MOOC students. A recent survey found that average student enrollment in a mass online course was 33,000, with a 7.5 percent pass (or completion) rate.

The potential for democratization in online courses is unquestionable, given how they have expanded educational opportunities for millions, especially in remote parts of the world. Students from low-income communities or developing countries can now learn from some of the world's best faculty for free. Because of their global reach, mass online courses have the ability to bridge cultural divides by bringing together diverse opinions on a broad range of topics.

MOOCs have changed since they began in 2011, moving from a virtual classroom format to one that is more self-service or self-paced. Courses that used to be offered once or twice a year are now available on demand, as they are offered regularly throughout the year with new sessions often starting on a biweekly or monthly basis.

Although MOOCs no longer garner the attention they once did and still have low completion rates, they continue to grow (Figure 1.5). According to data collected by Class

Central, a website dedicated to tracking online courses, 23 million people registered for courses in 2016. That year 2,600 new courses were announced (up from 1,800 the previous year) for a total of 6,850 MOOCs offered by over 700 universities (www.class-central.com), while the “Big Three” MOOCs providers, Coursera, Udacity, and EdX, earned nearly \$100 million.

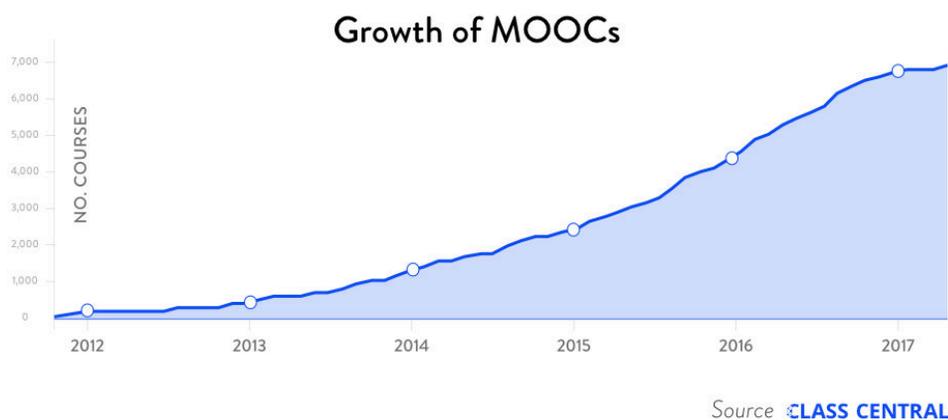


Figure 1.4 MOOC Expansion

In addition, some of the newer MOOC providers have begun to offer credentials and degree programs. Coursera launched a master’s degree in data science at the University of Illinois at Urbana-Champaign. Kadenze, another newer MOOC provider that focuses on arts and creative education, offers a credential that is more than a single course certificate but not quite a degree or diploma (www.class-central.com).

All of these changes led the vice president of Udacity to declare that MOOCs are “dead.” In an interview with *The Economic Times*, Clarissa Shen stated that “MOOCs are a failed product, at least for the goals we had set for ourselves. . . . Our mission is to bring relevant education which advances people in careers and socioeconomic activities, and MOOCs aren’t the

way” (October 6, 2017). Udacity, which began in 2012, will now focus on curated online education for companies like Google, Amazon, and IBM designed for individual student projects. It is clear that as a type of online education, MOOCs were unable to achieve the democratizing effect they once championed.

Expanding Access

Community colleges were created with the daunting mission of providing vocational training, transfer credits to four-year colleges, general education classes, citizenship development, and adult and continuing education. In his examination of the credentials race in American education, sociologist and educational historian David Labaree (1997) explains how American education has pursued three goals: democratic equality, social efficiency; and social mobility. Labaree views the rise of community colleges as an expansion of higher education, especially in the context of social efficiency, which he defines as the "perspective of the taxpayer and the employer, from which education is seen as a public good designed to prepare workers to fill necessary market roles" (p. 208). He argues that at every point in history, a new type of college has risen to provide more access to students who never attended traditional colleges, and as a result has served a specific function in the postsecondary system. Labaree goes on to state that “the resulting system of higher education would be able to play a social efficiency role, allocating this differentially to train graduates to positions in a stratified job” (p. 210). Using Labaree’s definition community colleges have fulfilled the role of a new type of college that pulls enrollment from increasing numbers of students while not directly competing with existing traditional constituencies. As a result, it has become the lowest level of higher education, designed to prepare students for less skilled jobs. Since large numbers of students lack basic college readiness and are in need of remediation, the role of the community college in

maintaining social efficiency is affirmed by its position on the lowest rung of the education system.

According to Carnevale and Strohl (2010),

The postsecondary hierarchy mimics and then reinforces the workforce hierarchy. The most selective institutions provide an onramp to the graduate professions, finance, and other elite private sector occupations. The state colleges provide seats for those in the middle ranges of socioeconomic status and test scores, and prepare students for careers in the rank and file professions, especially in the public sector—including schoolteachers, the uniformed services, accountants, health care professionals (except doctors), and public and private administrators. The mass of the remaining students are allocated to community colleges, where they have access to associate degrees and certificates that prepare them for roles as technicians, state-licensed occupations, and support functions in both the public and private sectors. (p. 106)

Labaree's assessment of higher education expansion regarding community colleges sheds light on the recent growth in online education, especially so-called "online-only" institutions. Since they do not compete with the traditional college constituency, the access promised by online learning is appealing to the community college population, and may explain why online education has grown disproportionately at community colleges rather than more traditional or selective institutions.

The nature of the post-secondary education system in America lays the responsibility for educating academically disadvantaged students at the doorstep of the community college. Given its mission of open access for specific student populations, we must consider whether the ever-growing, least-funded sector of higher education should use online learning to shoulder the

burden of advantaging the disadvantaged. Carnevale and Strohl (2010) argue against that philosophy when they state "strategies for improving access and completion are inextricably bound up in questions of fairness" (p. 88).

Research Questions

The following research question will guide and inform this study: How does online learning support or hinder the democratic mission of public community colleges?

Sub-questions include: Do community college students perform differently in online courses compared to face-to-face courses? Does ethnicity, gender, or student status impact student performance in online courses compared to face-to-face courses? How do community college students view their experience taking online courses?

What resources are provided to support student success in online courses?

Purpose of the Study

Given the democratic mission of community college and distance education, to expand access to higher education to people who would otherwise be left out, this research aims to examine the impact of online education on student success at the community college level. The disproportionate growth of online learning at community colleges tasked with educating students from some of our most economically disadvantaged communities is worthy of closer examination because of its impact on social mobility. Contradicting its perceived democratic potential, evidence suggests that online learning's ability to deliver equitable outcomes, especially for community college students, remains questionable. The complexities of this relationship form the basis of this examination of online learning at public community colleges. Findings may be used to improve online course delivery in order to insure equitable outcomes for students.

Chapter Two

Literature Review

Much of the existing research on online learning has focused on elite universities. Studies found relatively few differences in student outcomes between online and face-to-face courses (Bailey & Jaggars, 2010). Another widely cited study that examined online learning was a meta-analysis conducted in 2009 by the U.S. Department of Education (DOE), which was also supportive of online learning. The meta-analysis of online learning concluded that in many cases, student learning outcomes from fully online and hybrid courses were equal to or better than face-to-face courses. Online learning outcomes were strongest in hybrid courses, and even stronger when additional materials or time on task was incorporated into the course.

A response to the DOE meta-analysis (Jaggars & Bailey, 2010) summarized some of the study's limitations: only 7 of 50 studies rigorously addressed online semester-length college level courses, the typicality of courses was unclear; and withdrawal rates were not discussed. In addition, the meta-analysis did not compare live versus online delivery mechanisms in settings that could be directly compared, such as courses taught by the same instructor using similar materials.

A study by Figlio et al. (2010) did compare live and online learning versions of a microeconomics course at a large doctorate-granting university. Students were randomly assigned to either a live section, where they received lectures in a classroom, or an online section, where they watched a taped lecture online (2010). The study found that those students enrolled in the live section performed only slightly better than those in the online section. Hispanics, males, and students with a lower GPA yielded the largest performance gaps.

The DOE report led some educators to push for utilization of technology-based educational programming to increase academic access and outcomes for those least likely to graduate from college, i.e., low-income and under-prepared students (Bowen, 2009). However, numerous studies challenge this proposition as well as the implications for two-year colleges that enroll academically challenged students in online courses and programs. Research on online learning at community colleges show lower persistence rates and course grades (Beatty-Guenter & Cox, 2006; Carr, 2000; Kaupp, 2012, Xu & Jaggars, 2014). In fact, large-scale studies of community college systems in Virginia and Washington reveal performance gaps even after controlling for student and course characteristics (Xu & Jaggars, 2011, 2013, 2014).

According to a study of online learning by the Virginia and Washington community college systems, almost half of the student body take at least one course online during four or five years of enrollment (Xu & Jaggars, 2011). The research reveals that students enrolled in online courses are more likely to be white, live in higher-income neighborhoods, and be academically prepared and proficient in English. These demographics run contrary to the general community college population, i.e., first-generation students of color from low-income communities who are academically under-prepared, with limited English proficiency.

Although students often prefer to mix classroom instruction with online courses based on subject matter (interviews with students who participated in online courses at two Virginia community colleges showed a distinction between courses taken onsite versus online) (Jaggars, 2012), few community college students take all of their courses online. The percentage of students who took all courses online at Virginia community colleges was similar to the national average, indicating a general preference for a combination of online and classroom instruction.

Online learning advocates claim that the availability of online courses has not kept pace

with the demand. However, it was unclear if students are demanding online courses because they prefer them to traditional classroom instruction. Cox's (2005) study indicates that a significant number of students enrolled in online courses only after traditional sections were filled. In this instance, a student may enroll in an online course simply out of necessity.

In addition to limited research on online learning at community colleges, even less research has examined subgroup performance in this format. In their study of performance gaps in online and face-to-face courses, Xu and Jaggars (2014) contribute much needed data in this area. They found differences in outcomes across all student types, with the largest occurring among males, younger students, black students, and students with lower prior GPAs. They also found online performance gaps were wider in the social sciences and applied professions programs.

A study of community college students in California looked at what was termed the "online penalty" (Kaupp, 2012). With broad knowledge that California community college students perform less well in the aggregate on online courses, Kaupp's study focused on Latino students using disaggregated data. It found that achievement gaps were exacerbated when Latino students enrolled in online courses; they experienced a lower success rate, lower grades, and higher withdrawal rates than Latino students in face-to-face courses.

Student Performance in Online Learning

Course completion is the bellwether of student performance. Findings from studies that compared face-to-face and online community college course completion rates indicate that rates tend to be lower for online courses. Studies support the argument that withdrawal rates from online courses stem from the characteristics of non-traditional students and are unrelated to course format (Howell, Laws, & Lindsay, 2004; Hyllegard, Deng, & Carla, 2008). Jaggars and

Xu (2010) conducted studies in Virginia and Washington to examine withdrawal rates and to control for the characteristics of online students. Their research looked at students who enrolled in at least one online course in their community college career, in order to omit the possibility that results were influenced by "preexisting" differences between students who enroll in an online course and those who do not. In Virginia, face-to-face course completion rate was 81%, compared to an online completion rate of 68%. In Washington, completion rates were 90% for classroom instruction and 82% for online courses.

Course Grades

Another important component of student performance is grades. Studies of community college online performance have concluded that online and face-to-face students have a similar chance of earning good grades if they persist to the end. Jaggars (2011) notes, however, that many studies share a methodological problem in that courses may have very different completion rates due to a change in class composition over the semester. When Xu and Jaggars (2011) performed additional analyses to eliminate the potential effect of "unequal withdrawal," they found that online students who completed a course were significantly less likely to earn a grade of C or above than students in face-to-face classrooms.

Persistence

Decades of research on student performance have shown the significance of persistence, but few studies have examined the impact of online enrollment on subsequent course enrollment and college completion. However, Jaggars and Xu (2010) made several key findings:

- Students who took online courses early in their community college careers were less likely to reenroll in subsequent semesters;
- Students who took online developmental English and mathematics courses were less

likely to subsequently succeed at college-level English and mathematics;

- Students who took more online courses were less likely to attain a credential or transfer to a four-year institution.

Findings from the Virginia and Washington studies highlight the possibility that online learning may stymie community college students' academic progress. Some students decide to repeat a course in an attempt to complete it, while others give up altogether, which will have an impact on completing a degree or certificate. Even repeating a course can affect chances of completion, when students spend time and resources trying to complete a course until they pass.

Factors Affecting Online Course Performance

A 2011 review of the literature conducted by Jaggars concluded that online course performance by community college students was not simply a case of prior skills (or lack thereof), but of the format itself presenting challenges. Research revealed several reasons for why students struggle in online courses: technical difficulty, increased "social distance," lack of structure, and the fact that student support services are often based on campus, making it hard for online students to access support when they need it. These issues, along with lack of practice in self-directed learning, have been suggested as reasons for poor online course performance.

Jaggars (2011) concluded that low-income and under-prepared students would not flourish in this type of environment, leading to greater withdrawal and lower student retention rates. She suggested three possible reasons: increased social distance, relative lack of structure inherent in online courses, and technical difficulties.

Social Distance. Theories on student success highlight the importance of social relationships in persistence and retention of college students. This is especially critical for non-traditional students, who don't have as many opportunities to develop social ties with other

students, due to the demands on their time. Creating a social presence for online learners is even more challenging, as it depends on such factors as course design, instructors, and participant skills (Aragon, 2003). Social distance may be the greatest detriment to online environments, given little interaction between instructor and participant.

The literature shows that distance education courses must create purposeful interactions for students and instructors. To that end, a sense of "social presence" has been shown to correlate with online student course satisfaction, performance, and retention. However, studies also confirm that community college students often lack such a social presence in online courses. A 2001 study of the Virginia community college system indicated that 43% of online learners expressed inadequate levels of interaction. Another study examined the social presence of students enrolled in high-risk online courses (HRCs), so-called because 30% or more students withdraw or end up with a grade of D or F. Researchers found the primary complaint was the feeling of social isolation in the course (Bambara et al., 2009).

Lack of Structure. For many students, flexibility is the most attractive aspect of online learning. However, some would argue that what this population needs more than structure is the flexibility to increase their chances of success. That is, students from the least selective schools were often the ones who might benefit the most from on-campus instruction. In a *Chronicle of Higher Education* article entitled "For Whom Is College Being Reinvented," Trinity Washington University president Patricia A. McGuire states that "the idea that they can have better education and more access at lower cost through massive online courses is just preposterous. . . . Getting to and through college takes advisers, counselors, and learning-disability experts" (Carlson & Bluenstyk, 2012).

Moore and Kersley's (2013) account of the state of learning highlights the complexity of

online education for academically vulnerable students:

We are in the middle of a Copernican revolution as it becomes ever more apparent that the learner constitutes the center of the universe, and that teaching no longer drives learning; instead, teaching responds to and supports learning. Such freedom and opportunity, however, means that students must accept the consequence of assuming more responsibility for managing their own learning such as deciding when they will study, how much they want to learn, and seeking out information and resources. Some students will need help making the necessary adjustments in their expectations of the teaching institution and in their competence as students. (p. 20)

Some suggest that community college students, many of whom are first-generation and low-income, need more guidance than higher income students, who may attend selective institutions like Harvard, and receive intensive guidance and support from the moment they arrive. Ann Hulbert opined about this practice in a December 2013 *Atlantic Monthly* article:

If you stop and think about it, the existing postsecondary educational hierarchy could hardly be more perverse. Students at the bottom, whose life histories and social advantages make them most likely to need clear guidance and structure, receive astonishingly little of either. Meanwhile, students at the super-selective top, prodded toward high ambitions and disciplined habits by attentive parents and teachers ever since preschool, encounter solicitous oversight every step of the way. (p. 69).

Technical Difficulties

Asked about their experiences with online courses, students have reported system-based

problems as well as lack of familiarity with particular learning platforms (Jaggars, 2010). In a 2008 study, Zavarella examined computer-based instruction in remedial mathematics, where students indicated technical and computer-based learning issues as primary reasons for course withdrawal. Faculty in another study suggest that even younger students, who are familiar with mobile devices, particularly smart phones, are not as technologically prepared for online courses as they may think. One instructor remarked, "They can text; they can do the thumb think, but as far as navigating on a computer, they are not comfortable" (Borks & Rucks-Ahidana, 2013, p. 10).

A study of rural community colleges reported slow internet access as another major problem in the area (Hurt, 2008). These findings demonstrate that low-income populations are less tech savvy than higher-income populations. Hurt reports that initially faculty believed that students' lack of technical skills was not a problem, but after further examination, had changed their minds. According to Hurt, one instructor stated that "those people drop out," referring to students who had technical difficulties.

Research on technical support available at colleges estimates that only a third of the two- and four-year institutions surveyed provided 24-hour technical support (Green, 2010). Because comprehensive online technical support may be costly in terms of time and money, some institutions establish screening mechanisms that allow only those students with a good chance of success to enroll in online courses without comprehensive support. Washington state colleges ask students to take a voluntary assessment in order to determine their technical ability (Xu & Jaggars, 2011). The goal of these assessments is to establish the realities of online coursework, so that students can decide whether this type of learning environment is suitable for them. However, another study found these type of assessments to be problematic, since they rely on the

student's own awareness of computer competency, which may be flawed (Millward, 2008).

Finally, research indicates that a digital divide exists in America. A 2013 Department of Commerce report revealed that only 55% of African American households had broadband internet access, compared to 74% of white households and 84% of Asian households. Similarly, only 58% of rural households, compared to 72% of urban households, had internet access. Research conducted by the Pew Research Center reported similar gaps in broadband or wireless access, based on not only race/ethnicity and geographic location but household income and educational attainment levels (2009). These students must use the school library, local library, and free Wi-Fi access where available in order to access courses and supplement spotty home access.

Lack of Self-directed Learning

The literature on online learning reports lack of self-directed learning or help-seeking behavior as a major factor in student success, placing the responsibility for achievement primarily on the student. Research has identified discipline, self-regulation, and motivation (also referred to as self-directed learning) among the skills required for online course success (Azevedo, Cromley, & Seibert, 2004; Borks & Rucks-Ahidana, 2013; Moore, 1987). Students also acknowledged the need for self-discipline and time management (Borks & Rucks-Ahidana, 2013; Public Agenda, 2013). However, they also hold faculty responsible for online course success through good communication and feedback, as well as online presence and pedagogy (Borks & Rucks-Ahidana, 2013).

Analysis of the literature on online education and student performance provides a background for the study's central research question: how does online learning support or hinder the democratic mission of public community colleges? Answers to the sub-questions below call

for a deeper analysis of the broader question:

- Do community college students perform differently in online courses compared to face-to-face courses?
- Does ethnicity, academic preparedness, gender, or student status impact student performance in online courses compared to face-to-face courses?
- How do community college students view their experience taking online courses?
- What resources are provided to support student success in online courses?

Definitions of Key Terminology

Distance learning is any type of learning that takes place with student and instructor geographically distant from one another.

Online learning (also known as e-learning) refers to use of the internet for the most current medium of delivering education.

Virtual learning is any learning that occurs where either instructor or student attend an educational event virtually rather than physically.

Blended learning, sometimes referred to as hybrid, is a formal education program in which a student receives online delivery of content and instruction at least in part, with some element of control over time, place, path, and/or pace from a supervised brick-and-mortar location away from home.

Asynchronous learning occurs with a time lag between the presentation of instructional material and student responses.

Synchronous learning occurs in real time, at a physical or virtual location.

Web 2.0 encompass such internet technologies as blogs and wikis.

Traditional or face-to-face courses occur when no online technology is used; content is delivered

in writing or orally.

Web facilitated or enhanced/assisted courses use web-based technology to facilitate essentially a face-to-face course. May use a course management system (CMS) or web pages to post syllabus and assignments.

Blended/Hybrid - Course that blends online and face-to-face delivery. Substantial proportion of content is delivered online, as well as a small number of face-to-face meetings.

Online - A course where most or all content is delivered online. Typically no face-to-face meetings are included.

Chapter Three

Theoretical Framework

Community colleges and online education serve a democratizing role in the American post-secondary education system by expanding enrollment opportunities. The fact that more online education is provided at institutions that enroll the greatest number of academically disadvantaged students forms the basis of my inquiry regarding equity in online learning.

The term *equity* is often synonymous with ideas of justice, fairness, and equality, with each having numerous scholarly definitions. Educational equity, particularly with regard to community colleges and online education, is typically defined as access to educational experiences for those who would have otherwise be excluded. This dissertation will refer to theories that I contend frame the concept in relation to online education in order to expand the definition beyond access, which may result in a new theoretical framework for examining equity for online learners.

Pierre Bourdieu - Field, Cultural Capital, Habitus

I use Pierre Bourdieu's concepts of field, and associated concepts of habitus and capital, to help understand the overall challenges for higher education when it comes to community colleges and online education. This discussion is followed by John Rawls's theory of justice and fairness regarding the provision of online learning at community colleges. In addition, Thea Abu El-haj's framework on equity will be reviewed. This section will end with Deborah Stone's concept of policy paradox and the decision of community college administrators to offer online courses in spite of their direct knowledge of students' academic difficulties and the institutions' inability to provide adequate resources and student support to aid student success.

Bourdieu defines a field as a network or configuration of objective relations between positions. These positions are objectively defined in their existence, and the determinations they impose on their occupants, agents, or institutions, by their present and potential situation (situ) in the structure of the distribution of power (or capital) whose possession commands access to the specific profits at stake in the field, as well as their objective relations to other positions (domination, subordination, homology, etc.). (Bourdieu & Wacquant, 1992, p. 97).

Bourdieu scholar David Swartz (1997) further explicates the concept of field as an arena of struggle for the control of valued resources, pitting people in dominant positions against those in subordinate positions, as well as structured spaces of dominant and subordinate positions based on types and amounts of capital. Swartz states that “Bourdieu stresses time and again that positions in fields are determined by the unequal distribution of relevant capital rather than the personal attributes of their occupants” (p. 123). This statement shows the particular relevance of field to the hierarchical system of higher education that sorts individuals according to capital, specifically cultural capital. The concept of cultural capital is commonly used in research into the sociology of education, culture, and stratification. It represents the knowledge that individuals possess either through formal or informal education; its impact can be traced to the unequal performance of students and their subsequent career choices or options (Swartz, p. 75). According to Swartz, field defines the structure in which habitus operates. He argues that habitus is a “structured structure” that originates in the class-based experiences of socialization through family and peer groups, and influences the actions of individuals so that existing opportunity structures are maintained.

In this analysis, online education in general and community colleges in particular are the “structured structure” in the field of higher education which has educated large numbers of first-

generation, low-income and academically disadvantaged students. Community college students enroll in online courses that may not aid their academic success, thereby furthering the reproduction of the lowest graduation rates among post-secondary institutions, and keeping community colleges at the bottom of the higher education system ladder.

John Rawls - Justice and Fairness

Noted community college scholar John Levin aptly applies several of John Rawls's theories of justice to community college. In his work *Non-traditional Students and Community Colleges* (2007), the conflict between community colleges and online education is made clear as he examines their relationship according to Rawls's two main principles of justice as fairness and equality of opportunity. Rawls states: "In order to treat all persons equally, to provide genuine equality of opportunity, society must give more attention to those with few native assets and those born into less favorable social positions" (p. 46). Levin uses this definition to determine the extent to which community college students, many of whom come from disenfranchised or low-income communities, are (or are not, according to online education) afforded justice.

Levin utilizes Rawls's second principle of fairness, which argues that each person should have an equal right to the most extensive basic liberty, compatible with similar liberty for others, and social and economic inequalities are reasonably expected to be to everyone's advantage and attached to positions and offices open to all. This idea is in line with the democratic mission of the community college: to provide open access to students from diverse ethnic backgrounds, educational experience, and socioeconomic status.

Levin also embraces Rawls's social contract argument, which posits that members of society are to guarantee a future from one generation to the next. Through this lens, he examines society's treatment not only of individuals, but also groups and classes. When this approach is

applied to my research, I am able to examine whether online learners at community colleges are treated fairly in the complex higher education system. More specifically, the social contract argument provides the framework to question the extent to which online learning at community colleges guarantees the chance for upward mobility, which is its intended goal.

Thea Renda Abu El-Haj - Equity

In addition to justice, the issue of equity is important in the relationship between online learning and community colleges. Thea Renda Abu El-haj in *Elusive Justice* (2006) uses the term “justice claims” as a way to frame ideas about equity in everyday educational practice and discourse. One of the justice claims she discusses involves equal standards. She states that “the just claim for equal standards aims to interrupt the inequality of educational outcomes by insuring that all students receive the same excellent program. Moreover, equal standards focus on student’s educational outcomes. This justice claim proposes that looking to student outcomes offers an important measure of equity. It is not enough to say that all students have access to an equal education; schools must be responsible for helping students attain the standards” (p. 9).

Abu El-haj’s reference to school responsibility echoes Levin (2007), who contends that “educational institutions have a responsibility to insure substantive equality of opportunity, regardless of the potential economic benefits of unequal access” (p. 97). This point is also critical to my research as it pertains to an institution’s responsibility, to insure the success of students taking online courses and programs. Abu El-haj argues that educational institutions committed to equity should acknowledge and address issues associated with various learning styles, cultures, and values of students. The perception of community colleges and online education is that they attend to these issues given their origins, yet there are significant questions regarding their adequacy in doing so.

Sociologist Pierre Bourdieu has argued that schools serve to perpetuate class inequality. As a result, pedagogical practices such as online learning, which is dominant in the least selective institutions, support the claim that it disproportionately affects those who lack access and/or familiarity with educational norms. Equity is diminished when disadvantaged students have been sorted into less selective post-secondary institutions and have fewer options regarding course and program selection or instructional delivery such as online learning.

The presumed inequity in online learning manifests itself in student populations, i.e., overrepresentation of low-income and under prepared students who are already ill equipped for post-secondary education. The fact that these students are encouraged to participate in a learning environment that requires students to possess specific skills such as reading and technology proficiency in order to be successful, as well as bring experience with self-directed learning, undoubtedly challenges the notion of equity. The unintended consequence is that online learning has the potential to actually widen the educational gap in student outcomes such as retention and college completion, and further stratify our higher education system and class structures.

Deborah Stone - Policy Paradox

Deborah Stone states that “distributions, whether of goods and services, wealth and income, health and illness or opportunity and disadvantage, are at the heart of public policy controversies” (2002, p. 39). She further argues that all policy conflicts involve the protection of some advantage or the prevention of some loss. The policy controversy or paradox at the heart of online learning at community colleges involves the distribution of educational opportunity or educational disadvantage. Stone defines a paradox as a situation which presents contradictory interpretations, both of which cannot be true. The paradox concept as applied to this research asks whether online education supports educational equity or reinforces the existing inequitable

social structure in higher education. This analysis is affirmed by David Levin (2007), who argues that “theoretically, the community college is the educational site where the conflict between neoliberalism and justice is played out, and either resolved or not [and that] the conflict, in short and in general, is between social democratic principles and a consumer-based approach to education” (p. 57).

Community colleges lie at the lowest institutional level in the higher education hierarchy. Its students are typically the most underserved, underrepresented, and under-resourced. Possessing little to no cultural capital, they enter the field of higher education in subordinate positions, struggling for upward mobility. Understandably, the flexibility offered by online education is attractive to community college students, given their often complicated schedules and personal and work commitments. Their habitus therefore leads them to enroll in online courses with a limited understanding of the program expectations or the skills and habits needed for student success. As a result, community college students, who in subordinate positions dominate online learning, unknowingly support higher education’s role in reproducing inequitable social structures. Online learning is a permanent component of educational practices in this country, especially at the post-secondary level. Policymakers play a key role in determining whether it serves the group who need flexible option the most.

Chapter Four

Methodology

The origin of the City University of New York (CUNY) and its mission began with the founding of the Free Academy in 1847. In 1849, Horace Webster, the first president of the Free Academy, that would become the City College of New York (CCNY) in 1866, stated as its mission: “The experiment is to be tried, whether the children of the people, the children of the whole people, can be educated; and whether an institution of the highest grade can be successfully controlled by the popular will, not by the privileged few” (nycbar.org).

At that time CCNY educated primarily white middle-class and working class men. In 1870, the Normal College of the City of New York (renamed Hunter College in 1914) was established to educate women to become teachers. New York City’s population growth and demographic changes led to the establishment of four-year colleges of Brooklyn College in 1930 and Queens College in 1937. All four of the senior colleges were coed and tuition-free for full-time students.

New York City began establishing community colleges in 1955. The first opened on Staten Island in 1955, followed by Bronx Community College in 1957 and Queensborough Community College in 1959. It is important to note that, unlike senior colleges, community colleges were not tuition-free, a distinction that would not be corrected until 1965 when Mayor Robert Wagner reversed the policy. In 1961, the New York State Legislature created the City University of New York, which combined existing senior and community colleges into one entity. The intended mission of the unified CUNY system was codified in Section 6201 of the New York State Education Law, which deemed it “an independent system of higher education . . .

. responsive to the needs of its urban setting,” and which operated as an integrated system. The Legislature described CUNY’s “vital importance as a vehicle for the upward mobility of the disadvantaged in the City of New York,” and stated that the university “will continue to maintain and expand its commitment to academic excellence and to the provision of equal access and opportunity.”

In 1966 CUNY’s Board of Higher Education approved a plan that within nine years would guarantee a seat in one of its colleges to every New York City high school graduate. The 1970 student protests led to the implementation of CUNY’s open admissions policy, which had an immediate impact on the demographic makeup of the system. Today CUNY is the nation’s largest public urban university system, educating almost a quarter of a million students in two- and four-year institutions, as well as its graduate and professional schools. The most current CUNY student profile (Fall 2016) reflects an broadly diverse student population. Of the approximately 245,000 students enrolled, 20.8% were Asian; 26% Black; 31.9% Hispanic; and 21% White. There are 211 identified ancestries, with 35.6% of students born outside the U.S. mainland. The profile lists 174 different languages spoken other than English, with 78% of CUNY freshmen graduates of New York City public high schools. Of these, 44.8% are the first in their families to attend college and 58.2% received federal Pell grants for low-income students. CUNY also educates a significant number of non-traditional students, with 26.5% of its undergraduates over the age of 25, and 26.5% employed at least 20 hours a week (CUNY Office of Institutional Research and Assessment).

In 1999, the CUNY’s Board of Trustees voted to eliminate remedial courses at CUNY senior colleges, thus requiring those freshmen in need of remediation to embark on post-secondary education at a community college. Similar to implementation of open admissions

three decades years earlier, this policy would not only alter the racial and ethnic composition of the CUNY system but would have an impact on New York's most academically vulnerable students.

CUNY's seven community colleges educate nearly 40% of its total undergraduate population. Similar to national community college data, a majority of CUNY community college students are students of color, the first in their families to attend college, and are among the university's poorest students (CUNY Office of Institutional Research and Assessment).

Online Learning at CUNY

Online learning is growing. In fact, increasing online course offerings has been a target for colleges and their leaders participating in the annual CUNY Performance Management Process. From 2006 to 2010, there was steady growth in online courses, except at the senior colleges (see Tables 4.1 through 4.4). Consistent with national data, at 10%, the community colleges had the largest percentage of students enrolled in partially or fully online courses in 2010.

Figure 4.1 Percentage of Instructional FTEs Offered Partially or Totally Online

Figure 4.2 Percentage of Instructional FTEs Offered Partially or Totally Online

Figure 4.3 Percentage of Instructional FTEs Offered Partially or Totally Online

Source: CUNY Master Plan 2012-2016

Figure 4.4 Percentage of Instructional FTEs Offered Partially or Totally Online

City University's priorities regarding online learning are captured in the two master plans covering 2012-2020. The 2012-2016 Master Plan states that offering online and hybrid courses are seminal to the University's core principles of access and excellence. The plan highlights several online learning endeavors:

- The CUNY Online Baccalaureate in Communication and Culture, CUNY's first fully online program, followed by other degree programs;
- The Hybrid-Initiative, a CUNY-wide initiative to increase the number of hybrid courses taught, utilizing best practices. An analysis of CUNY's 2016-2020 Master Plan includes online education as a priority;
- CUNY's participation in the Ithaka Experiment in Statistics, a national experiment to compare hybrid and traditional face-to-face versions of a statistical course;
- Updates on additional academic technology initiatives, including Blackboard, CUNY Academic Commons, and E-portfolio.

The 2012-2016 plan acknowledged that future work in online learning should include a focus on learning outcomes, continued investment in academic technology, and faculty training. Chancellor James B. Milliken stresses online instruction as a key point of access for current and potential students, and states that expanding online education will be a major priority for his administration. "Indeed, if access and excellence are core principles of the university's mission, then online and hybrid learning are integral to that mission. Reducing barriers of time and distance, online and hybrid courses and programs can potentially increase access and improve degree completion rates, contribute much needed revenue to CUNY's colleges, and help mitigate constraints of physical space."

As the plan asserts, for the past 15 years online education grew slowly, but began to pick

up speed. Specific online learning highlights include creation of CUNY's Online Course Catalog, intended to remove barriers to enrollment at individual colleges; expanding online instruction to increase access and grow enrollment as well as improve graduation rates through faster credit accumulation; enhancements to CUNY's technology infrastructure and software; professional development of faculty through the Hybrid Initiative; plan for hiring instruction designers and a university-wide program to engage faculty across disciplines.

The plan specifies that online instruction expansion will be a major focus over the next four years and have a threefold approach that will do the following:

- Offer more fully online instruction, with more options for students;
- Increase digital literacy for students across CUNY;
- Build enrollment and capacity, especially in new programs and those oriented toward tech fields. (CUNY Master Plan 2016-2020, pg. 47)

Population

This background information provides context for the CUNY campus selected as the site for this study: Kingsborough Community College (KCC). Located in the southernmost section of Brooklyn, Kingsborough is Brooklyn's only community college. It tied for second best community college in the country in 2014, identified by Aspen Prize Community College Excellence. In Fall 2012, Kingsborough had the distinction of having the highest graduation rate among all CUNY community colleges, at 30.9%, surpassing the national four-year average for two-year community colleges. The CUNY four-year average for the Fall 2012 is 26.9%. Like CUNY's population, Kingsborough's student body is diverse. According to Spring 2015 data, 36.1 % were white, 30.7% Black, 18.2% Hispanic, and 14.7% Asian (Office of Institutional Research and Assessment).

Figure 4.5 Spring 2015 Enrollment Percentages all CUNY colleges

Figure 4.6 Spring Enrollment Percentages KCC and All CUNY

Data Collection and Analysis

As a woman of color and first-generation college graduate who grew up poor in Chicago and became a community college administrator, I am attuned to educational practices that act as

barriers to student success. My family background, personal experience at UC Berkeley, and subsequent graduate work in educational policy at the New School for Social Research provide the basis for my preoccupation with issues of equity and justice in education.

Not long after joining Kingsborough Community College, I realized that public education more broadly, and community colleges more specifically, are areas where contradictions are the norm and issues of race, class, gender, and meritocracy are contested. In my search for equity related topics in higher education, I came upon the issue of online education equity in 2012. At Kingsborough, online education was rarely discussed. Then president Regina Peruggi was not a proponent of its use, given our student population. CUNY campuses, however, were rewarded for embracing online classes in their annual performance evaluations, the Performance Management Plan (PMP). Subsequently, as part of a group effort to review our school's progress, the president's cabinet, of which I was a member, agreed to incrementally increase online course offerings. This decision was not the result of a comprehensive discussion about student performance in the current online courses, professional development in online course design or pedagogy, or existing information technology resources and technical support. The decision appeared to be made with the tacit acknowledgment that Kingsborough's culture had not fully embraced technological advancements and that the format might not work for many of our students. As a result, we had minimized the school's, and our students', exposure to online courses.

I familiarized myself with the topic, given my lack of experience as a learner. The first clear evidence of online inequity came about when we learned that online enrollment occurred most frequently at community colleges. The data were in stark contrast to the commercials from for-profit higher education sectors that would lead one to believe they were leaders in online

enrollment. Equity issues became even more obvious as I made the connection between community colleges, race, class, academic underpreparedness, neoliberalism, and higher education stratification, based in part on my experience working in a community college.

Though I read the scholarly articles that touted the democratization of education through access to online courses, including MOOCs, I found few reports that compared online education course outcomes with face-to-face courses. Even fewer focused specifically on community colleges and online learning. I decided I would broadly examine whether online learning supports or hinders the democratic mission of the community college, and concluded that the questions I needed answered were quantitative and qualitative in nature, i.e., do community college students perform differently in online courses compared with face-to-face courses? Does ethnicity, gender, or student status impact performance in online courses compared with face-to-face courses? How do community college students view the experience of taking online courses? What resources are provided to support student success in online courses?

I chose these questions, based on a review of the literature that privileged online access over online success, and appeared to overlook the challenges faced by community colleges when it comes to providing quality educational offering to a diverse student population. I determined that using a mixed methods approach would allow me to combine a statistical analysis of online course data with interviews of students regarding their experiences with the college and with online courses in general.

One introductory college-level or credit-bearing course at Kingsborough Community College was selected to assess the effects of online learning on student performance. I chose an English course since most of the existing research studies had examined quantitative courses such as math and economics, and because math is considered a controversial subject at many

community colleges, given the number of students who enter college in need of remedial math.

I also decided to focus on an introductory English composition course because it mitigates the impact of academic preparedness by eliminating students with developmental needs. The course controlled for other external factors that might influence student performance such as prior knowledge. Spring 2015 enrollments for all English 12 courses are either fully online, hybrid, or face-to-face courses, according to Kingsborough's Office of Institutional Research. The data included race, gender, course grade, reading, writing and math placement test scores, and re-enrollment for Fall 2015. For research purposes, I was able to access the email addresses of all students enrolled in the fully online or hybrid course format.

For this study, grades and persistence were chosen as factors key to answering the overarching question of online learning's impact on the democratic mission of community colleges, and became the dependent variables used to compare student outcomes. Race and gender are typical subgroups to be examined when disaggregating education data, and were selected as independent variables for this study. I also used student status as an important characteristic, given that many non-traditional students attend community colleges. In this analysis, course type (fully online or hybrid) was used as an independent variable in order to identify its correlation to student performance. I provide a brief definition of each variable below.

Course grade: A through F grades were converted to a numerical format using a standard 4-point scale.

Persistence rate: The rate at which students reenrolled for the following quarter (Fall 2015 semester).

Race as reported by student.

Enrollment Status: Full-time or part-time status.

Course type: Instruction in face-to-face, fully-online, or hybrid classes. Fully online and hybrid courses were combined due to the small number students who took each type of online course.

Delimitations

There were a number of anticipated constraints inherent in this study. The most important was the lack of a more comprehensive examination of student performance in a selected course, due to a change in methodological approach. While a mixed-methods approach was originally proposed for this study, I was unable to secure sufficient numbers of student interviews to make a qualitative methods component of this research possible. The mixed-methods approach was intended to provide insight into the personal experiences of students involved with online classes as well as shed light on the institutional supports, practices, and policies available for student success. Consequently, the questions formulated to gather this information remain unanswered. I discuss the implications of this constraint in Chapter 5.

Another anticipated constraint is the manner in which the City University of New York collects race/ethnicity data. Identifying racial or ethnic categories on a CUNY application is voluntary. When race is not identified, CUNY uses a formula to predict a person's race based on factors such as last name and zip code. This structural peculiarity complicated my ability to accurately determine statistics regarding race, which ultimately affected the statistical tests in my analysis. Finally, a small sample size of students, particularly enrolled in separate online formats (fully online or hybrid) led to a less robust analysis, which may decrease the generalizability of the findings.

Instead of using the mixed-methods approach, I was forced to rely primarily on statistical analysis. The Statistical Package for Social Science (SPSS) was used to obtain descriptive and

inferential statistics. An independent-samples t-test analysis was conducted to determine if there was a relationship between the dependent variables and independent variables that would allow me to answer the research questions.

Chapter Five

Findings and Discussion

This chapter begins with a summary of the statistics in the data set followed by results from the interpretive tests, and an analysis of the implications for research, practice, education/training, students, and public policy. The principal question of this research is whether online learning supports or hinders the democratic mission of public community colleges. Utilizing statistical tests, this dissertation seeks to answer the overarching question with key sub-questions: Do community college students perform differently in online courses compared with face-to-face courses? How does ethnicity, gender, or student status impact student performance in online courses compared with face-to-face courses?

Student Characteristics

In Spring 2015, 2,088 students took English 12 as a fully online course, a hybrid course, or in a face-to-face (classroom) course. There were 122 face-to-face sections, 10 hybrid sections, and two fully online sections. The vast majority of students were enrolled in the face-to-face format (89.4%), as well as full-time (87.4%). Black students represented over 25% of students in all formats. Male and female students were about evenly split among the three groups, with females represented slightly more in online courses (see Table 5.1 below).

Table 5.1. Spring 2015 English 12 Demographics

Face to Face Format	89.4%
Online (Fully & Hybrid)	10.6%

All Formats Combined

Female	49.6%
Male	50.4%

Black	25.8%
White	18.7%
Hispanic	17.5%

Full-time	86.8%
Part-time	13.2%

Online Format

Female	52.9%
Male	46.6%

Black	28.5%
White	16.7%
Hispanic	17.2%

Full-time	87.4%
Part-time	12.4%

Face-to-Face Format

Female	49.1%
Male	50.7%

Black	25.5%
White	18.9%
Hispanic	17.6%

Full-time	87.4%
Part-time	12.4%

N=2,088**Sub-question 1**

Statistical analysis confirmed the supposition that there is a difference in student

performance between online and face-to-face courses with regard to persistence and grades. For the purpose of the study, student success is based on persistence (measured by re-enrollment the next semester) and course grades. Face-to-face students achieved statistically significant higher course grades (2.210 out of 4.0, compared with 1.875). The percentage of online students was statistically less likely to persist (63%) compared with 69% of face-to-face students (see Table 5.2). This finding is in line with studies that report online performance gaps at community colleges (Beatty-Guenter, 2003; Carr, 2000; Cox, 2006; Kaupp, 2012; Xu & Jaggars, 2011, 2013).

Table 5.2 Student Performance in English 12 Combined Online & Hybrid Formats

<u>Gender</u>	<u>Persistence</u>	<u>Course Grade</u>
Female	.67	2.019
Male	.60	1.694
<u>Race</u>		
Black	.60	1.420 (.025)*
Not Black	.65	2.058
Hispanic	.63	1.609
Not Hispanic	.63	1.944
White	.62	2.741 (.002)**
Not White	.64	1.689
<u>Enrollment Status</u>		
Full-time (N=180)	.63	1.806
Part-time (N=40)	.53	2.208

***Significant at the .001 level **Significant at the .01 *Significant at the .05 level

Sub-question 2

Among combined online formats (Table 5.2), the majority of data were not statistically significant but nevertheless provided critical descriptive information. Female students persisted at a higher rate and earned higher course grades. Black students were least likely to persist and earned the lowest grades compared with all other students, although results were not considered statistically significant. The average course grade for Black students was 1.420, and statistically significant at the .05 level, compared with 2.058 for non-Black students. White students earned the highest course grades at 2.741, which was statistically significant at the .01 level. One descriptive data point worth noting involved combined online formats where full-time students earned much lower course grades than part-time students (1.806 compared with 2.208). In the face-to-face format, race and gender proved to have an impact on student performance with regard to course grade. Female students earned nearly a C+ (2.412) compared to a C for male students (2.010). Black students earned the lowest course grades at 1.906, while White students persisted at the highest rate, .73 compared with .68 for non-White students (Table 5.3).

As shown in Table 5.4, with all formats combined, women had statistically significant higher rates of persistence (.73 versus .64) and a higher average course grade (2.374 versus 1.986) compared with male students, both at the .001 significance level. White students (in all formats combined) earned higher course grades than non-White students, a 2.495 versus 2.106 at the .001 significance level. Sixty-five percent of Black students persisted, compared to 70% of non-Black students, which was significant at the .05 level. They also had lower grades (1.858 compared with 2.288) at the .001 level.

Table 5.3. Student Performance in English 12 - Face to Face Format

	<u>Persistence</u>	<u>Course Grade</u>
<u>Gender</u>		
Female	.74 (.000)***	2.412 (.000)***
Male	.65	2.010
<u>Race</u>		
Black	.65	1.906 (.000)***
Not Black	.70	2.309
Hispanic	.63	2.165
Not Hispanic	.63	2.258
White	.73 (.041)*	2.474
Not White	.68	2.147
<u>Enrollment Status</u>		
Full-time	.71 (.000)***	2.209
Part-time	.56	2.213

***Significant at the .001 level **Significant at the .01 *Significant at the .05 level

Table 5.4. Student Performance in English 12 - All Formats

	<u>Persistence</u>	<u>Course Grade</u>
<u>Gender</u>		
Female	.73 (.000)***	2.374 (.000)***
Male	.64	1.986
<u>Race</u>		
Black	.65 (.038)*	1.858 (.000)***
Not Black	.70	2.288
Hispanic	.66	2.123
Not Hispanic	.67	2.228
White	.72	2.495 (.000)***
Not White	.67	2.106
<u>Course Type</u>		
Online (N=1,867)	.63	1.875 (.014)*
Face to Face (N=221)	.69	2.210
<u>Enrollment Status</u>		
Full-time	.71 (.000)***	2.176
Part-time	.55	2.213

***Significant at the .001 level **Significant at the .01 *Significant at the .05 level

Full-time students were significantly more likely to persist at 71% versus 55% of part-time students, at the .000 significance level. One notable data point was that full-time students earned slightly lower course grades (2.176) compared with part-time students (2.213), although this was not found to be statistically significant.

Examining the central question through the theoretical lens of Deborah Stone's Policy Paradox, online learning cannot both support and hinder the democratic mission of community colleges. I would argue that given a demonstrable performance gap, online learning therefore hinders the democratic mission of community colleges. The difference in student outcomes in course formats, further exacerbated by disparities among subgroups that are well documented at both the K-12 and college levels, indicate that by and large, online learning cannot effectively support a comprehensive community college equity agenda of access and success. In other words, it cannot simultaneously present both educational opportunity and educational disadvantages.

The next section discusses online learning challenges, and outlines implications for future research as well as administrators, faculty, students and broader public policy.

Limitations

The prevalence of online courses, while predominant at community colleges, was less so for the research site. The smaller sample of students in the selected course contributed to a less robust analysis, which might decrease the generalizability of the findings. As a result, some of the data presented are presented more for the sake of descriptive purposes than statistical analysis.

Discussion

To make the provision of online education for community college students more

equitable, effort needs to be made to address success as well as access. As open admissions institutions, community colleges have the overwhelming responsibility of educating the majority of our country's first-generation, limited English speaking, low-income, and under-prepared students. Like their higher income and better prepared peers, these students have hopes and dreams of careers and material progress. However, unlike their peers, community college students often carry the responsibility of supporting their families and improving their life chances for generations to follow.

Online education has the potential to further democratize higher education for millions of students who would benefit from the flexibility it provides for wherever/whenever study. Unfortunately, it also has the potential to become one more educational policy and practice that suppresses student progress and success. Online education may hinder the democratic mission of community colleges if institutions do not take responsibility for implementing policies and procedures that support students rather than disadvantaging them further.

This dissertation focuses specifically on online learning at community colleges because these colleges lead in online enrollment. Yet not many community colleges collect and assess data demonstrating that online education perpetuates performance gaps and exacerbates student inequity. Researchers and advocates of higher education equity must push community colleges to show evidence of their commitment to both access and success for students. To speak of online learning at community colleges in terms of access, while not considering its impact on academic success, is problematic when promoting this approach as an equitable educational practice.

The existence of the online performance gap has numerous implications that will be discussed in the remainder of this chapter.

Implications for Research

The students researched for this study were less successful in the online English course than other formats. Overall, White and female students outperformed males and students of color in the various formats according to course grade; they also persisted at higher rates. Black students consistently earned lower course grades and persisted at lower rates.

This study highlights the potential impact of online learning on community colleges, which educate nearly 50% of the total undergraduate population nationally. The findings of this study were significant, despite the relatively small sample size.

As we engage in national conversations about the value of a college education, graduation rates, and continued relevance of the American dream, the potential impact of online learning on educational equity for over 12.2 million community college students is troubling. Performance gaps expose a mismatch between the target populations and the eventual beneficiaries of an online education, which may have significant implications for educational research. Researchers play a needed role in bringing attention to the challenges of an online education, and future studies are needed to understand specific contributing factors. For instance, qualitative research examining performance gaps must be analyzed to help understand why community college students are not performing as well in an online format, especially when it is marketed as a feasible educational option. Future qualitative research should include not only students but college leadership (particularly online administrators) to determine the effectiveness of resources, policies, and practices (including data collection and student orientation) used in the delivery of online education. Additionally, more research regarding disaggregated data is needed to explore the impact of such student characteristics as race, gender, or grade point average. Online performance for students with documented disabilities is another

important area to study.

One noteworthy finding was the lack of student response to the invitation to be interviewed for this research, which has implications for research, specifically at Kingsborough. A series of emails were sent to 221 students enrolled in hybrid or fully online courses. They were told their responses would be kept confidential and used to improve the delivery of online learning at Kingsborough. Based upon my experience as a community college teacher and administrator, and the literature on online student experiences, I would contend this disinterest can be attributed primarily to three factors: apathy, due to poor course performance; social distance, due to low student engagement or interaction with faculty or the institution; and complicated schedules that did not facilitate participation in the study.

Kingsborough leadership would be advised to consider investigating student experiences with online learning, and the assertion in its accreditation self-study that there is no difference in online and face-to-face performance should be re-examined (Kingsborough Self-study, 2015). Given the demographics of community college students generally, and CUNY specifically, accepting such a claim belies the emerging data on achievement gaps in online learning.

Implications for Administration

The existence of the online performance gap shown in this study raises numerous questions about its efficacy in contributing to the upward mobility of those students most desirous of this option. Another set of implications is in the practice or actual delivery of online higher education. Community college administrators must grapple with the complex issues created by the growth of online education. The basic question generated from the research on online learning and educational equity is this: Should all students have equal access to online courses? If not, how should access be determined? What would be the impact of such a drastic

policy change on college access for so many?

College leadership should also consider the economics of reducing the number of online courses. At a basic level, reducing online enrollment could have an impact on the institution's budget, which for many schools across the country has been negatively affected by government disinvestment. In some cases, online courses and programs may be the only ways in which an institution can grow as it reduces the need for physical space and the cost of maintenance of facilities.

A 2016 report by the Instructional Technology Council indicated that the top three challenges for administrators are addressing accessibility and universal design; support staff needed for training and technical assistance; and adequate administrative authority (Appendix B). Such challenges clearly highlight the need for colleges like Kingsborough to provide adequate pedagogical and operational resources for online education. Kingsborough acknowledged in its 2015 accreditation self-study that up to that point, online education had not been adequately managed. In the accreditation standard that assesses educational effectiveness across location and delivery mode, the school stated:

Course evaluation has focused on those delivered in a face-to-face format. The work of the Committee led to a document of guidelines and protocols for teaching hybrid/online courses as well as a process to certify faculty wanting to teach hybrid/online courses. However, because no one was tasked with overseeing the implementation of the certification process, some faculty who have not been certified have been assigned to teach hybrid/online courses . . . an individual was appointed in Fall 2015 to implement policies and procedures being developed by the Committee on Academic Technology and Hybrid/Online Instruction. (Kingsborough Self-study, 2014)

Kingsborough initiated a process to begin addressing these administrative issues. Through the new committee and dedicated online education staff, additional policies and procedures or the shifting of institutional resources are hopefully evidence of a commitment to educational equity.

One policy that should be revisited by the committee and college leadership is the process for registering for an online course. Online course registration at Kingsborough requires students to call a Registration Help Center. The online course registration policy is stated on Registration Help Center webpage. In order to register for an online course, the following are required: knowledge of how to use Blackboard; regular access to a computer and reliable standard internet access; a word processing application such as Microsoft Word; knowledge of how to download and upload a document. If students attempt to register on their own, they receive an error message prompting them to call the help line, presumably to insure that no one registers for an online section by accident. While it is critically important to make sure that students are fully aware of their enrollment in an online course, Kingsborough should consider a more robust and less rudimentary process that relies less on a student's self-reporting. A more equitable process would involve substantial self-assessment and/or student orientation. Chapter 6 will highlight an example of an online learning initiative that includes an equity-focused orientation process.

Implications for Faculty

This research also has implications for faculty professional development and evaluation in online education. As community colleges plan for online offerings, attention must be paid to course quality and design. The survey revealed that the top three faculty challenges were engaging in faculty development of online pedagogy, evaluation of faculty, and training (Appendix B). These issues are particularly vexing because they have a direct impact on student success. ITC survey respondents stated that online faculty did not want their courses reviewed,

claiming that to do so violated their academic freedom. Requiring education and training for faculty was further complicated by factors such as faculty schedules, particularly at multi-campus sites; large numbers of adjunct online faculty; and resistance or trepidation regarding courses redesigned to meet new standards and expectations (2016 ITC Survey Respondents).

The complex nature of the education and training of faculty was corroborated by the survey's description of a typical online faculty member as someone who has a "limited understanding of how to use technology, but is willing to learn, perceives the value of learning to teach online as a professional development opportunity, and is more committed to improving course quality" (ITC 2016 Survey Respondents). From this description, one can assume that faculty understand that teaching online requires a different skill set, and that although they teach in an online format, they may not be entirely technologically competent.

This faculty perspective stands in contrast to a qualitative study in which faculty placed more responsibility on student factors than those within their control. Bork and Rucks-Ahidiana (2013) reported that faculty expected their online students to possess self-directed learning skills necessary to succeed. Nor did they believe it was their responsibility to help students develop those skills. From these reports, it is clear that educating faculty on specific online pedagogy and training in course design, especially in order to meet federal accessibility requirements as well as mandating online faculty evaluation, is necessary to insure quality across different modalities.

At this research site, the course catalog states that "courses should be consistent in terms of quality" (Kingsborough 2014-15 Course Catalog). Consistent quality can only be achieved given adequate faculty preparation and regular evaluation of pedagogical practices. The college negates this concept by stating that "because no one was tasked with overseeing the implementation of the certification process, some faculty who have not been certified have been

assigned to teach hybrid/online courses” (Kingsborough Self-Study, 2014).

This lack of oversight compromises the institution’s responsibility insureto provide consistent quality and may compromise student success. Abu El-Haj’s concept of equity cited in Chapter 3 is applicable as it relates to quality programming. Again, she argues for the disruption of inequality of educational outcomes by insuring that all students receive quality programs. How can an institution be certain that online course quality is consistent with classroom teaching when the courses are not evaluated?

Unfortunately, Kingsborough is not an anomaly, as shown by the ITC survey. Faculty issues regarding course design, evaluation, and training directly impact insure equal access to quality programs. Seen through this lens, it is clear that community colleges that offer online courses may be subjecting academically vulnerable students to lower quality programs.

Implications for Students

Research that indicates poor performance may have significant implications for community college students. Online education offers students who must balance school and family/work responsibilities hope for a better future. Yet a significant number of these students do not have the skills to succeed in an online learning environment.

The 2016 ITC Annual National E-Learning Survey reports that the top student challenges are student performance, student orientation, and completion rates. Satisfactory grades, readiness, and persistence in online courses are categorized as student challenges, but the responsibility for surmounting them does not belong solely to the student, but equally (if not more) to the administration. The belief that the onus for student success rests primarily on the institution is the foundation for this study.

Bourdieu’s theoretical concepts on field, capital, and habitus are highly applicable to

student implications. College students compete for educational opportunities that will result in successful outcomes, e.g., degree attainment, high-paying jobs, and social mobility. The field of online education thus becomes an arena in which the life experiences of community college students influence their decision to enroll.

Given the option, students take online courses believing they are equal to face-to-face courses because that's what they have been told. Research from ITC indicates that many student success strategies for online education are beyond their control, including course design, faculty training, analytics, and student orientation. The implications for students include ending up enrolled in an online course that requires specific skills they don't have, the odds of being taught by faculty with little to no training for online pedagogy, in courses that are not designed for diverse learning styles or have even been evaluated. These circumstances, considered in the context of an already strained higher education sector, raise justice and equity issues for all community college students. Such a scenario reveals how online instruction may reproduce social inequity and support social injustice by its policies and practices.

Implications for Public Policy

With regard to online education, the focus has primarily been about questions of access. Unlike the achievement gaps seen in K-12 that resulted in national policies such as President George W. Bush's No Child Left Behind Act and President Barack Obama's Every Student Succeeds Act, the gaps in higher education, which are a continuation of K-12, remain largely unexamined. The broader policy discussions regarding higher education have shifted almost entirely to college completion. With community colleges focusing on improving graduation rates and preparing students to fill available jobs, introducing online learning that further depresses graduation rate should elicit serious concern. Policymakers may begin to question the efficacy of

online education in achieving those goals, and reconsider further investment in an educational practice that appears to be a waste of money.

There are policies and programs at institutions across the country with the explicit goal of addressing the achievement gaps of underrepresented and underserved college students, such as Black and Latino males, first-generation and low-income students. Similar attention has been paid to the problems of developmental education and transfer policies at community colleges and their impact on student progress toward graduation. Issues of inequity in online education deserve the same attention.

Policies regarding universal course design may be an important area to begin a national conversation. A universal approach to designing courses honors the notion that students have specific learning styles, and that regardless of style, all students should be taught in courses been designed to support them (Coombs, 2010). From an equity perspective, the universal approach is even more critical for community colleges, given their diversity of learners.

Stakeholders concerned about equity and social justice and the role that higher education plays, especially public community colleges, in achieving those principles should insist that online equity issues be added to public policy discourse. This study and others cited in this dissertation reveal a disconcerting and sadly familiar pattern. The same achievement gaps or racial disparities that have existed in K-12 education do not disappear in postsecondary education. Many students who take online courses in college are members of the same groups that have struggled through elementary, middle, and/or high school. These students may be further disadvantaged by a teaching format intended to promote educational equity, but which may instead depress their chances of completing school, persisting to graduation, or achieving high-wage careers that could improve their socioeconomic status. These trends and their

subsequent analysis require thoughtful action and follow-up.

In my final chapter, I share and analyze two initiatives, one institutional and one system-wide, in which equitable access and completion are equally privileged. Such approaches may serve as examples for Kingsborough and the CUNY system, as they look to expand online opportunities for all.

Chapter Six

Recommendations

Community colleges are the educational vortex of neoliberal policies that favor individual responsibility, the diminution of the welfare state, and the privileging of elites. These policies work against disadvantaged students.

-- John Levin (2007, p. 188)

This summer I was given the opportunity to participate in a Distance Leadership Academy sponsored by the Instructional Technology Council (ITC), an affiliate of the American Association of Community Colleges. I applied for the academy not as a practitioner or administrator in the field of online education but as a higher education administrator and researcher. I wanted to learn more about the actual practices of online education from the experts. Most important, I wanted to learn how practitioners are addressing educational equity issues in the online format.

Numerous topics were covered, from online student readiness to universal design for courses. Overall I gained an enormous amount of knowledge, particularly about best practices. However, the most significant piece of information was the fact that institutions are fully aware of online performance issues. I also learned of the additional impact that learning disabilities may have on student performance in the online format, specifically, the degree to which institutions are challenged in meeting the federal American with Disabilities Act mandates for accessibility.

After that experience, the connection between educational equity and online education

became clearer. Community colleges that allow students to enroll in online courses or programs, when those students are at risk of failure in this format, is a clear breach of Rawls's social contract theory cited in Chapter 3. It is likely that online equity will become a salient issue, as the use of technology in education continues to be promoted by higher education, business, and government leaders.

According to the ITC Annual National eLearning 2016 survey results, there are seven main challenges facing online education:

- Student readiness;
- Faculty training;
- Quality course design;
- Online course assessment;
- Student completion;
- Federal regulatory compliance; and
- Increasing competition.

All of these challenges directly affect student success, and can be addressed through institutional policy changes. At the Distance Learning Leadership Academy, I learned about two online learning initiatives, pioneering approaches that acknowledge institutional responsibility for improving the outcomes for all online students. These are the California Community College Online Education Initiative (OEI) and Wake Technical Community College E-Learning Preparedness Initiatives. I briefly describe each initiative in the next section.

California Community College Online Education Initiative (OEI)

The Online Education Initiative (OEI) is a pilot program created in 2014 in response to faculty opposition to the State of California's proposal to use MOOCs to address the demand for

online courses. The goal of the initiative is to aid students in achieving their educational goals by increasing not only access to online courses, but also addressing success for students with the ultimate objective of increasing degree attainment in California. By utilizing best practices and technology in the field of online education, OEI takes a three-pronged approach to improving online student success: improving access to online courses and services; providing resources to help all students succeed; and increasing support for online courses and services.

Of the courses offered at California colleges, 12.3 % are offered through distance education and nearly half have some online component. California Community Colleges boast an incredibly diverse student population of more than 2.1 million students on its 113 campuses.

This diversity explains why online student equity is a central component of the initiative and is explicitly addressed. Through the Student Equity Work Group of its steering committee, OEI works to reduce challenges, eliminate barriers, and close what they acknowledge as an online equity gap among their diverse student population. Specific efforts include examining the institutional, systemic and learning barriers that may result in inequitable outcomes and disparate impact in course and degree completion rates in online education, identifying disparities and challenges associated with online student equity, and identifying success strategies to address these inequities as it relates to course and degree completion (cconline .com). To support colleges' equity agendas, an Online Equity Framework was developed (Figure 6.1). This framework is used to examine instruction, delivery of student services and institutional policies and practices. In theory, California Community College's OEI is an exemplary comprehensive program that uses an equity lens to deliver online education to a highly diverse population. Online education researchers should continue to follow the program to determine whether California Community College online equity gaps are indeed closing.

ONLINE EQUITY FRAMEWORK

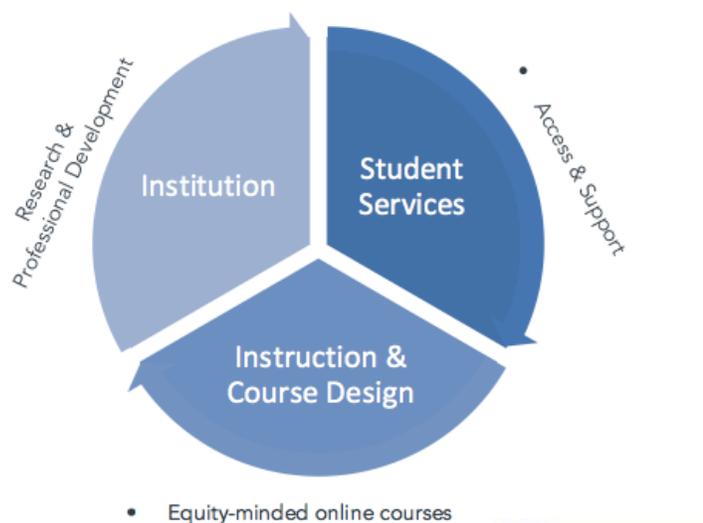


Figure 6.1 Online Equity Framework

Source: CCCOEIonline.com

Wake Technical Community College- E-Learning Preparedness Initiative (EPIC)

Located in Raleigh, North Carolina, Wake Technical Community College is the state's largest community college, serving over 74,000 students across five campuses, three training centers, multiple community site and an online campus. In 2014, Wake Tech began a quality enhancement initiative called EPIC, E-Learning Preparedness Initiative, across the college to improve online student success as well as prepare and certify online faculty. Wake Tech established a goal of increasing online student success by 5% over a five-year period.

EPIC's approach to increasing student success in online courses is to focus on helping both students and faculty become better prepared for the online learning experience.(www.waketech.edu). Specifically, the initiative provides students and faculty with training and tools necessary to improve student performance and success in online courses. For

students, the E-learning Student Orientation Module is an interactive module that assesses and remedies students' skills in three key areas: Basic Computer Literacy, Expectation Management, and Blackboard Boot Camp. New students are required to take the student orientation before they are allowed to enroll in their first online course. If a student did not complete an online course with a grade of A, B, or C at the college in the past five years, they must complete the eLearning Intro before they can register for an online course.

Wake Tech's initiative also established a two-year certification program for the faculty who teach online. The certification program provides instruction in pedagogy, instructional design, and accessibility as well as advanced online teaching training. Upon completion of the program, faculty design online courses utilizing national standards of best practices in the field of online instructional design. The faculty component of the initiative includes a mentoring program to provide ongoing support for quality improvement and peer reviews of all courses.

A final component of Wake's initiative is its commitment to data analysis. Wake Tech administrators, specifically EPIC leaders, will collect and analyze data regarding student retention and success each semester, and compare it with previous data to insure progress toward increasing student success rates in online courses.

These initiatives offer examples of confronting online equity, to support student success while increasing access. Technology resources and training are vital pieces of online education delivery. However, if an institution is committed to offering real opportunities for success in the online environment, then investments in student supports and a focus on online student readiness especially cannot be ignored. The equity-minded initiatives at Wake Technical College and the California Community College system offer guidance for an individual college like Kingsborough and a university system like CUNY in order to include a comprehensive equity

agenda in their online education programs.

Conclusion

This study looks at student performance in an introductory English composition course offered through a range of formats at one college in a large urban university system. It sought to reveal ways that online education sometimes makes the overall mission of community colleges to provide inclusive education more difficult. Findings support the existence of an online performance gap, which raises questions of equity and justice for community college online students. This research does not suggest, as some researchers have proposed (Xu & Jaggars, 2014), that community colleges should construct additional barriers to student progress such as a screening policy that redefines online learning as a student privilege rather than a right. Instead, it recommends that without equitable policies and practices, online learning may become one more barrier toward degree completion for community college students at Kingsborough, CUNY, and the overall two-year college sector.

The democratic mission for public community colleges is to become the place that welcomes students regardless of their academic experience. They are the primary institutions that offer opportunity and upward mobility to students from diverse racial and ethnic backgrounds, learning styles and socioeconomic status, who might otherwise have no chance to improve their situation. Online education at CUNY's Kingsborough campus is one example of how neoliberalism has influenced public higher education and undermined the mission of community colleges. Researchers and advocates of higher education equity must push community colleges to show evidence of their commitment to student access and success. CUNY prides itself on its social justice mission and as an economic engine of mobility. A 2017 report by the Equality of Opportunity Project rated six CUNY colleges among the top ten in the country in moving

students from low income levels to middle class status and higher. The report stated that CUNY colleges launched more students into the middle class than all eight Ivy League institutions, Stanford, MIT, Duke, and the University of Chicago combined. Its marketing campaign states the following: "The City University of New York has educated millions of people. Lifted generations of families. It is one of the most noble, worthy and just creations this city has ever constructed. It is one of the wonders of this city and the envy of the world."

For CUNY, a comprehensive equity approach to online education would make its claim of economic mobility more accurate. With the concentration of the area's most academically underprepared students and online learners attending community colleges, CUNY's leaders should consider an online equity agenda that attends to access and success on an equal basis. Such an approach would disaggregate data by format and subpopulations to assess student performance; provide faculty development in online pedagogy and training in course development that is ADA-compliant; provide 24-hour technology support; and emphasize online student readiness and student supports for success such as online tutorials. Institutional leaders, practitioners and researchers should also publicly acknowledge the difficulties of delivering online education in an equitable and just manner with adequate operational and pedagogical resources to higher education's most diverse population. Such an approach would insure that online education does not become another neoliberal policy that disadvantages at-risk students.

Unless community colleges show evidence of their commitment to student access and success, "CUNY's radical experiment in democratic, public higher education" may be undermined (Brier, 2017). Such a challenge presents a democratic conundrum to higher education more broadly, and community colleges specifically.

References

- Agenda, P. (2013). *Not yet sold: What employers and community college students think about online education. A taking stock report from public agenda*
- Azevedo, R. (2005). Using hypermedia as a metacognitive tool for enhancing student learning? the role of self-regulated learning. *Educational Psychologist, 40*(4), 199-209.
doi:10.1207/s15326985ep4004_2
- Bathmaker, A. (2015). Thinking with bourdieu: Thinking after bourdieu. using 'field' to consider in/equalities in the changing field of english higher education. *Cambridge Journal of Education, 45*(1), 61-80. doi:10.1080/0305764X.2014.988683
- Beatty-Guenter, P. (2003). Studying distance education at community colleges. *Journal of Applied Research in the Community College, 10*(2), 119-126.
- Bork, R. J. H., & Rucks-Ahidiana, Z. (2013). *Role ambiguity in online courses: An analysis of student and instructor expectations* Columbia University. doi:10.7916/D8C24TGV
- Bowen, W. G., Chingos, M. M., Lack, K. A., & Nygren, T. I. (2013). Online learning in higher education: Randomized trial compares hybrid learning to traditional course. *Education Next, 13*, 58.
- Bowen, W. G., Chingos, M. M., Lack, K. A., & Nygren, T. I. (2013). Online learning in higher education: Randomized trial compares hybrid learning to traditional course.(research)(report). *Education Next, 13*(2), 58.
- Bragg, D. D. (2001). Community college access, mission, and outcomes: Considering intriguing intersections and challenges. *Peabody Journal of Education, 76*(1), 93-116.
doi:10.1207/S15327930PJE7601_06
- Brier, S. (2017). Why the history of CUNY matters: Using the CUNY digital history archive to

- teach CUNY's past. *Radical Teacher*, (108), 28. doi:10.5195/rt.2017.357
- Cejda, B. (2010). Online education in community colleges. *New Directions for Community Colleges*, 2010(150), 7-16. doi:10.1002/cc.400
- Cohen, A. M. (2002). In Brawer F. B. (Ed.), *The American community college* (4th ed.). San Francisco: Jossey-Bass.
- Coombs, N. (2010). *Making online teaching accessible: Inclusive course design for students with disabilities*. New York: John Wiley & Sons.
- Dhawal, S. (2016). Monetization over massiveness: A review of MOOC stats and trends in 2016. Retrieved from <https://www.class-central.com/report/moocs-stats-and-trends-2016/>
- Doe, R., Castillo, M. S., & Musyoka, M. M. (2017). Assessing online readiness of students. *Online Journal of Distance Learning Administration*, 20(1).
- Dougherty, K. J., & Townsend, B. K. (2006). Community college missions: A theoretical and historical perspective. *New Directions for Community Colleges*, 136, 5-13. Accessed at doi:10.1002/cc.254
- Fabricant, M. (2016). In S. Brier (Ed.), *Austerity blues: Fighting for the soul of public higher education* (p. 198). Baltimore: Johns Hopkins University Press.
- Howell, S. L., Laws, R. D., & Lindsay, N. K. (2004). Reevaluating course completion in distance education. *Quarterly Review of Distance Education*, 5(4), 243-252.
- Kaupp, R. (2012). Online penalty: The impact of online instruction on the Latino-white achievement gap. *Journal of Applied Research in the Community College*, 19(2), 8-16.
- Khosla, V. (October 2017). Udacity to focus on individual student projects. *The Economic Times*.
- Levin, J. S., & Kater, S. (2013). *Understanding community colleges*. New York: Routledge.
- Morest, V. S., Bailey, T. W., & Muse, P. (2006). *Defending the community college equity agenda*.

Baltimore: Johns Hopkins University Press.

Naidoo, R. (2004). Fields and institutional strategy: Bourdieu on the relationship between higher education, inequality and society. *British Journal of Sociology of Education*, 25(4), 457-471. Accessed at doi:10.1080/0142569042000236952

Picciano, A. G. (2006). Online learning: Implications for higher education pedagogy and policy. *Journal of Thought*, 41(1), 75-94.

Picciano, A. G. (2017). *Online education policy and practice: The past, present, and future of the digital university*. New York: Routledge.

Stone, D. A. (2002). *Policy paradox: The art of political decision making*. New York: Norton.

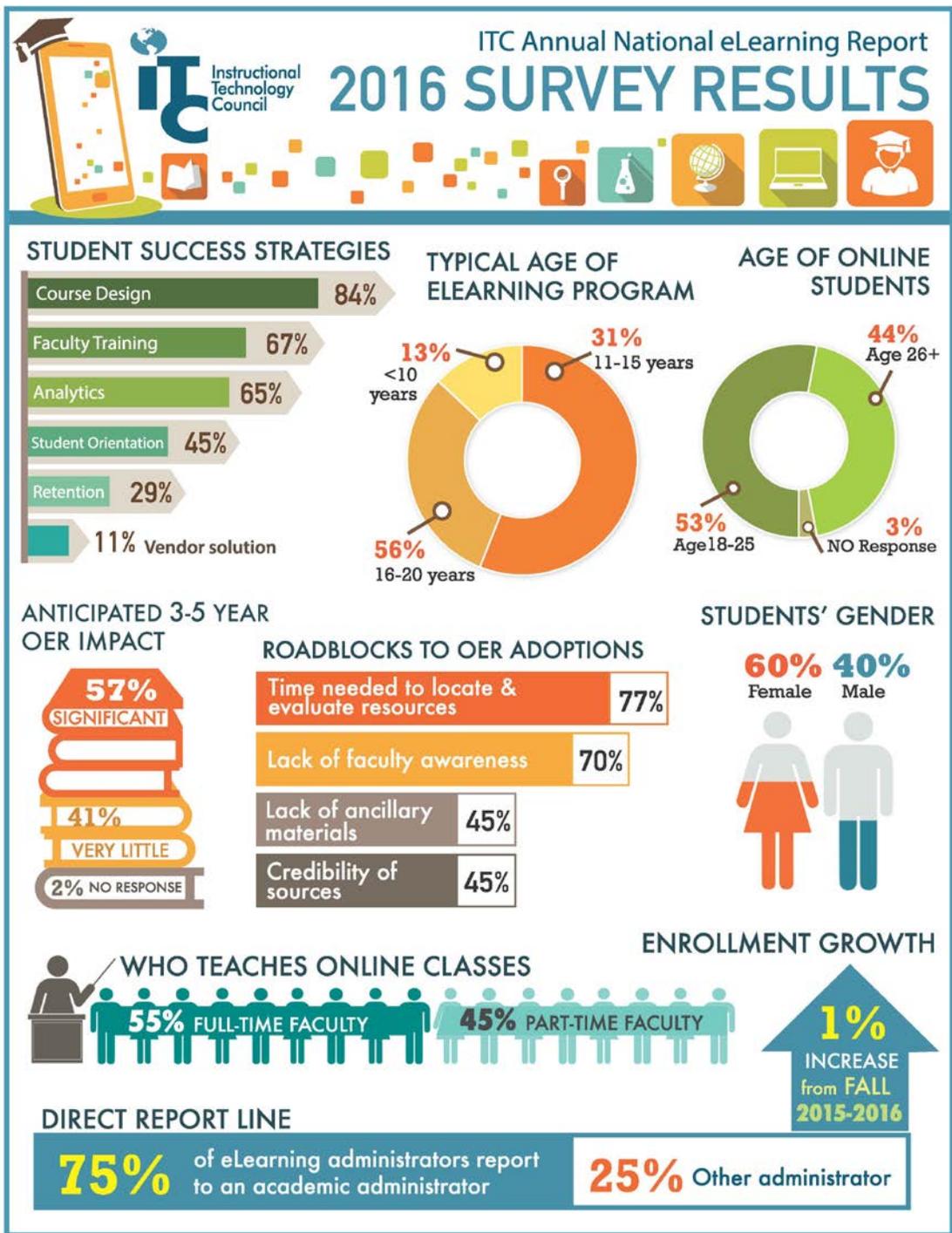
U.S. Department of Education, National Center for Education Statistics. (2014). *Enrollment in distance education courses by state: NCES 2014-023*.

Xu, D., & Jaggars, S. S. (2014). Performance gaps between online and face-to-face courses: Differences across types of students and academic subject areas. *Journal of Higher Education*, 85(5), 633-659. Accessed at doi:10.1080/00221546.2014.11777343

Appendix A. Original Research Questions

Research Question	Research Method	Sources
Do community college students perform differently in online courses compared face-to-face courses?	Quantitative Analysis	Office of Institutional Research
How does ethnicity, gender, or student status impact student performance in online courses as they do in traditional campus-based or face-to-face courses?	Quantitative Analysis	Office of Institutional Research
How do online learners view their experiences?	Qualitative Analysis	Student Interviews
What resources are provided to support student success in online learning?	Quantitative and Qualitative	Documents and student interviews

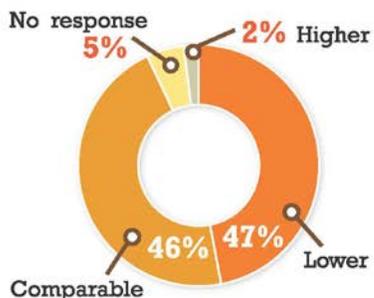
Appendix B



ITC ANNUAL NATIONAL ELEARNING REPORT - 2016 SURVEY RESULTS

COMPLETION RATES

Comparing to on-campus rates



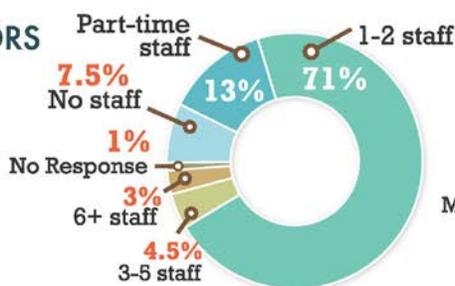
TOP 3 FACULTY CHALLENGES



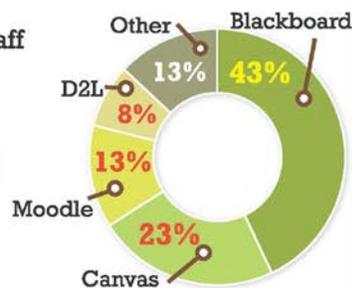
TOP 3 ADMINISTRATORS CHALLENGES



ELEARNING SUPPORT STAFF



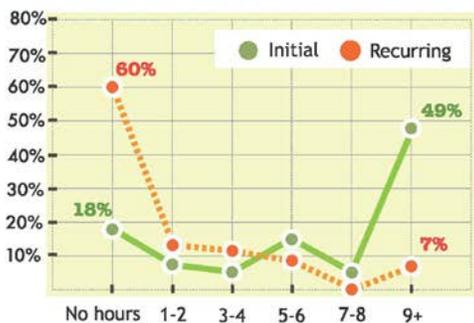
LMS



TOP 3 STUDENT CHALLENGES



REQUIRED FACULTY TRAINING HOURS



62%

of institutions taking additional steps to authenticate student identity

93%

require some type of student/faculty engagement

An affiliated council of



<http://bit.ly/2obr8Mp>