

Is It Really Up To Me?
Academic and Life Tensions for
“Double First-Generation” College Students

by

Jennifer Dawn Shea

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Approved April 2013 by the
Graduate Supervisory Committee:

Gustavo E. Fischman, Chair
Alfredo G. de los Santos Jr
Kris Ewing
Leanna Archambault

ARIZONA STATE UNIVERSITY

May 2013

ABSTRACT

This study examined the experiences of first-generation college students who were enrolled in online degree programs at a traditional brick-and-mortar university located in the western United States. These students were viewed as “double first-generation” because they were not only the first in their family to pursue a bachelor’s degree, but were also among the first generation in the history of American higher education to pursue public, postsecondary education in an entirely online format.

The research was designed as a multiple methods case study that emphasized qualitative methods. Being exploratory in nature, the study focused on participant characteristics and the ways that they responded to and persisted in online degree programs. Data was collected through research that was conducted entirely online; it included an e-survey, two asynchronous focus groups, and individual interviews that were conducted via Skype. Grounded theory served as the primary method for data analysis, while quantitative descriptive statistics contextualized the case.

The results of this study provide a window into the micro- and macro-level tensions at play in public, online postsecondary education. The findings indicate that these pioneering and traditionally underserved students drew from their diverse backgrounds to persist toward degree completion, overcoming challenges associated with time and finances, in hopes that their efforts would bring career and social mobility. As one of the first studies to critically examine the case of double first-generation college students, this study extends the literature in meaningful ways to provide valuable insights for policymakers, administrators, faculty, and staff who are involved with this population.

This dissertation is affectionately dedicated to...

My husband, Sam Shea, for his infinite support,
patience, and strength. You are the love of my life.

The memory of “Grandpa” Tom Kirk, who always
believed in me, and proudly shared my scholarly
accomplishments to anyone who would listen.

ACKNOWLEDGMENTS

If I have seen further it is only by standing on the shoulders of giants.

- Sir Isaac Newton

I owe a debt of gratitude to many people for their contribution to my dissertation research. First and foremost, my gratitude extends to all who graciously shared their experiences as first-generation college students in online degree programs. Your investment of time and self made this dissertation possible; I strive to honor your voices.

I feel blessed to have been guided by particularly wise and accomplished faculty committee members, whose generosity I doubt I will ever repay. I warmly acknowledge my advisor, Dr. Gustavo Fischman, for unwavering support that encouraged me to “recognize the data” and see that my research interests could be more than a private hobby. I am forever changed by your mentorship, your friendship, and the myriad of ways that you have expanded my intellectual boundaries. Thank you, Dr. Alfredo G. de los Santos Jr, for the practical advice that launched this research project and kept it moving forward. Dr. Kris Ewing, I am ever grateful for your guidance in the area of research methods, as well as for your validation. And, finally, thank you Dr. Leanna Archambault for introducing me to the world of online education.

I gratefully acknowledge Casey Self and Therese Aguayo, my supervisors in the School of Letters and Sciences, for their generous support and flexibility throughout my doctoral program. Also, a special thanks to the faculty of the Mary Lou Fulton Teachers College Division of Educational Leadership and Innovation, who awarded the University Graduate Fellowship and the R. Merwin Deever Fellowship, which funded this research.

Several individuals who took this journey before me played an integral role in shaping my experience. My work was influenced by faculty I met while studying at the University of Alaska Fairbanks: Dr. Maria Elena Reyes, who sparked my interest in this topic and who remains a steadfast mentor, and Dr. Craig Wisen, who provided direction along the way. I am grateful for the encouragement I received from friends and mentors in the field of student affairs: Dr. Richard Stimpson, Dr. Sue Weitz, and Dr. J. Lee Peters. Also, thanks to Dr. Gary Watts, who was among the first to field my academic questions while I studied at Jamestown College.

I benefitted from tremendous peer support during the past four years. For helping to normalize this process and calm my fears, thank you Dr. Clarin Collins, Dr. Lenay Dunn, Dr. Amy Markos, and Dr. Melissa Rivers. I could not have asked for a better writing group partner than Rebecca Lish, who was a constant support and a willing collaborator throughout this process. Thank you, Amber Johnston, for going the extra mile to help fuel my mind, body, and spirit, and Erin Nolan, for encouraging words that kept me grounded. To the rest of my colleagues in the Educational Leadership and Policy Studies program, it was a privilege to learn alongside each of you.

I extend heartfelt gratitude to my family, especially to my parents, Donald and JoAnn Axt, for instilling a strong work ethic, to my sister, Valerie Axt, for cheering from afar, and to my sister, Dixie Axt, for listening and making things “magical.” My appreciation extends to the rest of the Axt family, to the Shea family, and to friends who are family in my heart. Last, but definitely not least, I am beholden to my husband, Sam Shea, for helping me to find joy in this journey. Sam, this accomplishment is ours.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	x
LIST OF FIGURES	xi
LIST OF IMAGES.....	xii
CHAPTER	
1 INTRODUCTION.....	1
Purpose of the Study.....	5
Research Perspectives.....	6
Research Questions.....	8
Significance of the Study.....	9
Overview of the Dissertation.....	10
2 LITERATURE REVIEW.....	11
First-Generation College Students	12
Demographics, Academic Preparation, and College Choice.....	13
Transitions to Postsecondary Education.....	14
Persistence and Degree Attainment.....	17
Directly Related to Online Education	20
Online Education	21
Online Enrollment Trends	23
Effectiveness of Online Education	24
Persistence in Online Education	25
Perceptions of Online Educaiton	26

CHAPTER	Page
Examining Student Persistence	28
Parting from Legacy Persistence Theories.....	30
Summary	31
3 METHODOLOGY	32
Case Study.....	32
Rationale for Multiple Methods	33
Rationale for E-Research.....	34
Data Sources	35
Institutional Setting	36
Participant Selection	37
Data Collection	38
Rationale for Participant Incentives	38
E-Survey.....	40
E-Survey Participation	42
Focus Groups	43
Strategies to Improve Focus Group Participation	46
Focus Group Participation	47
Interviews	49
Image Exercise	51
Interview Participation.....	52
Institutional Data and Document Review	53

CHAPTER	Page
Data Management	54
Data Analysis	56
Methods for Qualitative Analysis.....	57
Methods for Quantitative Descriptive Analysis.....	61
Validity.....	61
Presenting the Data	63
Researcher’s Perspective	64
Summary	68
4 DATA AND FINDINGS	69
Participant Characteristics	69
Gender, Age, and Race/Ethnicity	70
Academic Profile.....	72
Non-Academic Profile	74
Balancing Daily Roles	76
Demographics of Focus Group and Interview Participants	78
Online Degree Programs Afford Flexibility	79
Going the Distance with Online Degree Programs.....	85
Factors Supporting Persistence.....	85
Ease in Navigating the University	86
Personal Traits and Goals	89
Postsecondary Promises.....	97

CHAPTER	Page
Factors Challenging Persistence	100
Time Concerns	102
Structure of Online Education.....	102
Structure of Personal Life	109
Quality Concerns.....	113
Financial Concerns.....	118
Perception Concerns	125
Balancing Key Factors in Persistence Decisions	131
Looking Ahead with Hopeful Expectations.....	133
Summary	137
5 DISCUSSION.....	138
Challenging Preconceived Notions	138
Exploring Persistence: A Micro-Level Discussion.....	142
Conceptual Contribution.....	144
Exploring Postsecondary Promises: A Macro-Level Discussion.....	150
REFERENCES	156
APPENDIX	
A IRB APPROVAL LETTER.....	171
B SENDERO UNIVERSITY INSTITUTIONAL DATA	173
C E-SURVEY CORRESPONDENCE	176
D E-SURVEY INSTRUMENT	181
E FOCUS GROUP CORRESPONDENCE.....	189

CHAPTER	Page
F FOCUS GROUP PROTOCOL.....	194
G INTERVIEW CORRESPONDENCE.....	196
H TWO-PART INTERVIEW PROTOCOL.....	200
I IMAGES SUBMITTED BY PARTICIPANTS.....	203
J PRIMARY FACTORS SUPPORTING PERSISTENCE DECISIONS	206
K IMPLICATIONS FOR POLICY AND PRACTICE	210
L RECOMMENDATIONS FOR FUTURE RESEARCH	215
BIOGRAPHICAL SKETCH.....	219

LIST OF TABLES

Table	Page
1. Sendero University Retention, 2009 to 2010.....	8
2. Data Collection and Analysis Timeline	39
3. Number of E-Surveys Completed Following Each Contact in Multi-Contact Approach.....	43
4. Page Views and Posts Made During Online Focus Groups	49
5. Excerpt from Codebook Developed During Inductive Qualitative Analysis	60
6. Participants' Parental Education Levels	70
7. Key Demographic Variables for Research Participants, by Phase of Data Collection.....	79
8. Benefits and Challenges of Online Education	84
9. Factors Supporting Persistence	86
10. Examples of Participants' Intrinsic Motivation to Earn Their Bachelor's Degrees	91
11. Factors Challenging Persistence.....	101
12. Imagery Representing the Challenge of Balancing Responsibilities	111
13. Examples of Participants' Science and Math Concerns	116
14. Sendero University's Undergraduate Tuition and Fees, Fall 2012	121
15. Imagery Representing the Challenge of Financial Concerns	124
16. Exploring Perception Concerns Related to Online Degrees	128

LIST OF FIGURES

Figure	Page
1. Participants' Ages.....	71
2. Participants' Racial and Ethnic Diversity.....	71
3. Participants' Academic Levels.....	72
4. Number of Credits Participants Transferred in to Sendero University.....	73
5. Participants' Majors.....	74
6. Distance of Participants' Residences from Sendero University.....	75
7. Participants' Employment Status, By Average Number of Hours Worked per Week.....	76
8. Participants with Dependents Under the Age of 18.....	77
9. Daily Roles Ranked by Importance to Participants.....	78
10. Online Degree Programs Afford Flexibility.....	80
11. Maintaining Enrollment, Hoping for Postsecondary Promises.....	98
12. Financial Concerns Related to Persistence.....	119
13. Primary Factors Affecting Persistence Decisions.....	131
14. Educational Aspirations of Double First-Generation College Students.....	134
15. Proposed Model to Illustrate Double First-Generation College Student Persistence.....	146
16. Example of the Proposed Persistence Model in Use.....	148

LIST OF IMAGES

Image	Page
1. Joy's Image to Illustrate What Encourages Her Persistence	92
2. Images Submitted by Steve	94
3. Joy's Image to Illustrate What Discourages Her Persistence	136

CHAPTER 1

Introduction

Following World War II, a “college-for-all” ideology emerged once the United States (U.S.) established a system of universal access to postsecondary education (Altbach, 2011), and in so doing, linked education to upward social mobility (Glass & Nygreen, 2011; Goldrick-Rab & Cook, 2011; Tierney, 2013). Propelled by the Reagan administration’s *A Nation at Risk*, “college-for-all” is a paradigmatic ideal that encourages ambition by means of a compelling narrative promising individual and collective progress (Glass & Nygreen, 2011).

Today, over 70% of Americans enroll in postsecondary education within a year of graduating from high school (National Center for Education Statistics [NCES], 2011). In spite of this record level of postsecondary enrollment, other nations are outperforming the U.S. in terms of degree completion, as demonstrated by research showing that the U.S. ranks 14th among 34 developed countries in postsecondary attainment of citizens aged 25 to 34 years old (Organisation for Economic Co-operation and Development¹ [OECD], 2012). This is a significant drop from its number one rank a generation prior (Kanter, 2011). Although 42% of U.S. citizens aged 25 to 64 years old have postsecondary credentials, making the U.S. one of the most well-educated countries in the world (OECD, 2012), this accomplishment does little to ease concerns when the educational level of younger age groups (i.e., 25-34 years) is significantly lower than the educational level of older age groups (i.e., 55-64 years) who are positioned to leave the labor market.

¹ The OECD is an international economic forum comprised of 34 developed countries that focus on economic development and world trade.

The decline in educational attainment spurs lively debate about the United States' ability to remain competitive in the global economy. Two prominent sources are at the forefront of this national debate, both of which emphasize college access and college completion as the best strategies to assure individual economic gains as well as boost the nation's global economic standing. First, in 2008, the Lumina Foundation² launched "Goal 2025" calling for 60% of Americans to earn college credentials by 2025 in order to adequately power the U.S. economy (Lumina Foundation, 2013). Similarly, President Obama announced the "American Graduation Initiative" in 2009, setting a goal for the U.S. to have the highest proportion of college graduates in the world by 2020 (The White House, Office of the Press Secretary). To meet these ambitious initiatives, the proportion of college graduates must increase by a minimum of 50% from U.S. postsecondary institutions (U.S. Department of Education [ED], 2011).

State governments, carrying primary responsibility for the U.S. educational system, are grappling with the process of improving college completion rates. A seemingly auspicious strategy to increase access to public, postsecondary education has subsequently emerged in the development of online degree programs, or online distance education³ programs, which are completed without face-to-face coursework via the internet. Limitations in postsecondary infrastructure (e.g., buildings and land) render

² The Lumina Foundation was formed in 2000 following the nearly one billion dollar sale of the USA Group to Sallie Mae. At the time, the USA Group was the nation's largest private guarantor and administrator of education loans (Lumina Foundation, 2007). The Lumina Foundation was founded, funded, and managed by influential members of the student loan industry; of the original 14-member Board of Directors, 10 were from USA Group and four were from Sallie Mae (Lumina Foundation, 2007).

³ Online education is a form of distance learning that is marked by the physical separation of teacher and student (Harting & Erthal, 2005), and in so doing, alleviates the need for students to travel "to a fixed place, at a fixed time, to meet a fixed person" (Keegan, 1996, p. 7).

online education an attractive solution to effectively increase the proportion of U.S. citizens acquiring college degrees, considering the fact that expansion of college access through the internet will happen more quickly and at a fraction of the cost in comparison to expansion of brick-and-mortar campuses. In addition, the promise of educating greater numbers of students via an efficient, online system bodes well from a long-term perspective; once online campuses are established, higher profits can be realized through larger student-to-teacher ratios and lack of overhead for physical classrooms (Harden, 2013; Twigg, 2002).

The development of online degree programs is significant for the Western institution of postsecondary education, which has been marked by a conventional approach emphasizing face-to-face instruction utilizing traditional teaching methods largely unchanged since the Middle Ages (Altbach, 2011; Keegan, 1996; Kerr, 2001). It was not until after the Industrial Revolution that distance education was introduced to the U.S. system – first through correspondence courses and then independent studies, satellite offices, radio, and television (Nasseh, 1997). Online degree programs, the modern form of distance education, were introduced to the U.S. system in 1989 by the University of Phoenix, a private for-profit institution, using the newly available Internet (Cronin & Bachorz, 2006). Until recently, public universities in the U.S. balked at placing entire degree programs online, upholding neither the desire to expand beyond brick-and-mortar campuses nor the push to recruit the type of nontraditional students who might enroll in such programs (Cronin & Bachorz, 2006; Twigg, 2002).

College completion agendas are merging with the growing acceptance of online learning to change that trend. The online delivery of courses has become the fastest

growing segment of postsecondary education (Tennant, McMullen, & Kaczynsky, 2010) as public universities swiftly create a greater online presence in response to institutional competition (Clark, 2008) and market pressures (Bok, 2003; Willinsky, Fischman, & Metcalfe, 2011). Following a 91% increase in the number of online degrees offered by public universities between 2009 and 2010 (Garrett, 2011), by 2012 over 70% of the 4,500 traditional, brick-and-mortar institutions in the U.S. offered online degree programs (Allen & Seaman, 2013); Pennsylvania State University, the University of Maryland, Northern Arizona University, Colorado State University, Western Michigan University, and the University of Minnesota were among the first to lead the charge.

Though some influential American executives believe online education will cure the "wild inefficiencies of American higher education" (Bok, 2003, p. 87) and may eventually eliminate college campuses, researchers have argued that online education will not replace traditional, brick-and-mortar universities (Bok, 2003; Trow, 2006; Willinsky et al., 2011). Instead, the digital innovations will sustain postsecondary education through upward and outward movement (Trow, 1973), educating a larger proportion of the adult population while removing place-based barriers (Tennant et al., 2010) such as employment, caring for dependents, personal disabilities, or living in a remote location (Rintala, 1998). Online education is more evolutionary than revolutionary (Doyle, 2009). Although it will not replace traditional forms of learning, online education will undeniably affect the structure of U.S. postsecondary education (Trow, 1973, 2006), as online degree programs constitute the most viable means to support the "college-for-all" ideology while addressing the recent college completion agendas.

Purpose of the Study

Online degree programs appeal to many students, but perhaps none more than first-generation college students, or students whose parents have not earned bachelor's degrees (Choy, 2001; Engle & Tinto, 2008; Pike & Kuh, 2005). It is estimated that first-generation college students comprise 24% of the nation's undergraduate population (Engle & Tinto, 2008). First-generation college students are more likely to be bound by conditions limiting their abilities to pursue traditional degree programs such as employment, caring for dependents, rural residences (Rintala, 1998). Online degree programs are an attractive option to effectively remove such place-based barriers (Tennant et al., 2010) by eliminating the need to travel "to a fixed place, at a fixed time, to meet a fixed person" (Keegan, 1996, p. 7).

It has been widely documented that first-generation college students are comparatively disadvantaged in postsecondary settings. For example, first-generation college students have lower degree aspirations (Ishitani, 2006; Somers, Woodhouse, & Cofer, 2004) and are at greater risk of being academically, socially, and economically behind compared with their non-first-generation college student peers (Pascarella, Pierson, Wolniak, & Terenzini, 2004). First-generation college students attempt fewer credits (Inman & Mayes, 1999), work more hours per week, and earn lower grade point averages (Pascarella et al., 2004; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). In addition, first-generation college students are more likely to be from low-income

homes and are less likely to persist⁴ and graduate (Engle & Tinto, 2008; Ishitani, 2006; Lohfink & Paulson, 2005; Pike & Kuh, 2005; Somers et al., 2004; Terenzini et al., 1996).

Existing research, while insightful, focuses almost exclusively on first-generation college students who are pursuing traditional degree programs at brick-and-mortar campuses (e.g., Engle & Tinto, 2008; Harvey & Housel, 2011; Ishitani, 2006; Pascarella et al., 2004; Pike & Kuh, 2005; Stieha, 2010; Stuber, 2011). There is a substantial gap in the field's understanding of how first-generation college students respond to and persist in online degree programs. This gap is vexing given the rapid growth of online degree programs and the fact that online students are 10% to 20% less likely to persist in comparison to students enrolled in face-to-face courses (Tyler-Smith, 2006). It follows that first-generation college students in online degree programs might be doubly disadvantaged; however, there is currently little research to support this hypothesis.

Research Perspectives

For first-generation college students who choose online degrees, the term “first-generation” could not be more accurate. These students are not only the first in their family to attend college, but are also amongst the first generation of students in the history of American higher education to pursue public, postsecondary education in an entirely online format. Hence, this population is best described as “double first-generation” college students, a term that will be used hereafter to capture the nuances distinguishing this group from its more traditional predecessors.

⁴ This term refers to the student action of making academic progress toward degree completion. Students who matriculate in postsecondary education and maintain enrollment through degree completion are said to persist (Hagedorn, 2005). Persistence is sometimes used interchangeably with term “retention.” Persistence, however, is a student measure and retention is an institutional one (Hagedorn, 2005); institutions retain and students persist.

A conceptual framework was developed to “document and reflect a multiplicity of experiences” for students whose personal lives overlap their student experience (Goldrick-Rab & Cook, 2011, p. 271). The micro-level analysis was guided by Geiger’s (2011) view that “origins and destinations” are critical to understanding the role of postsecondary education in students’ lives, since between students’ origins and destinations lies the college experience itself. Additionally, three renowned persistence theories (Bean & Metzner, 1985; Rendón, 1994; Tinto, 1975, 1993) were tried for fit to elicit meaning to the approaches with which double first-generation college students negotiated their educational trajectories; these are discussed in greater length in Chapters 2 and 5.

A macro-level perspective was gained through institutional theory (Meyer & Rowan, 1977, 2006), which provided a useful lens to explore the ways that public universities are responding to the conditions of their environment by rapidly developing online degree programs and expanding access to non-traditional students, such as double first-generation college students. In this case, the college completion agenda and “college for all” ideal, both arising from unsubstantiated beliefs, yet holding the authority of fact-based truth, are exerting external pressures to guide and legitimate the expansion of online education. In essence, online education has taken on the status of “myth” (Meyer & Rowan, 1977), supported by powerful narratives that have been made invisible by their natural and commonsense appearance (Zucker, 1987) and playing a powerful role in legitimating the institution of American higher education, thereby increasing its probability for survival within the larger sociopolitical sphere (Meyer & Rowan, 1977, 2006; Zucker, 1987).

Research Questions

This research was designed as an exploratory case study (Stake, 2008) that was conducted at Sendero University⁵, a large public university located in the western United States. Sendero University launched online degree programs in 2007 in response to its state governing board's mandate requiring enrollment in online degree programs to reach 20,000 students by the year 2020. Extant data provided by Sendero University revealed that 55% of students enrolled in its online campus in fall 2011 identified as first-generation college students, which is significantly higher than the 37% who were enrolled in Sendero University's brick-and-mortar campuses (see Appendix B) and the 24% national average (Engle & Tinto, 2008). Closer examination revealed that double first-generation college students persisted at a lower rate in comparison to other students at Sendero University, including their ground-based, first-generation peers, as illustrated in Table 1.

Table 1

Sendero University Retention, 2009 to 2010

	All Students Attending All Campuses	First-Generation College Students	
		Ground-Based Campuses	Online Campus
Freshmen	75.7%	72.6%	61.0%
Sophomores	85.2%	84.0%	66.7%
Juniors	87.8%	86.7%	77.3%
Seniors	90.8%	90.4%	85.7%

Note. Includes degree-seeking students enrolled or graduated after one year.
Source: Extant institutional data analyzed by the researcher.

⁵ Pseudonym.

To better illuminate the case of double first-generation college students, four research questions were developed to guide this exploratory study:

1. What are the origins, or characteristics, of double first-generation college students?
2. What factors prompted double first-generation college students to enroll in online degree programs?
3. What factors encouraged double first-generation college students to persist?
4. What expectations do double first-generation college students have about their academic or career destinations?

Significance of the Study

As one of the first research projects to specifically examine how first-generation college students respond to and persist in online degree programs at a public university, this study significantly expands the existing body of knowledge. Additionally, this research contributes a qualitative approach that challenges taken-for-granted ideas permeating the field, due in part to the overwhelming dominance of the field's quantitative paradigm (e.g., Ishitani, 2006; Pike & Kuh, 2005; Strayhorn, 2006). This research also adds the voices of double first-generation college students demonstrating their support and appreciation for online degree programs to current debates concerning online education.

The pioneering activities of the double first-generation college students participating in this study, who drew from their diverse backgrounds to persist in postsecondary education, are not only significant for society, but also significant for each of them individually, for their immediate families, and for the traditional brick-and-

mortar university that they have chosen. The findings from this study hold noteworthy implications for policymakers and for those who are directly involved with postsecondary education (i.e., administrators, faculty members, and staff).

Overview of the Dissertation

In this brief introductory chapter, I situated the growth of online education within the context of U.S. postsecondary education and explained the need for research examining the experiences of double first-generation college students. In Chapter 2, I review three distinct strands of literature to bring awareness to the scholarly conversations informing this study, beginning with what is known about first-generation college students, moving to discussion of the innovations and complexities of online postsecondary education, and then exploring the theories typically used to examine student persistence. Chapter 3 contains a discussion of the case study methodology, the research setting, and the multiple methods employed for data collection and analysis. The results are presented in Chapter 4, utilizing various data displays to capture the voices of the double first-generation college students, in response to the research questions guiding the study. The dissertation concludes with Chapter 5, where I present micro- and macro-level discussions relating to the research findings.

CHAPTER 2

Literature Review

I immersed myself in three strands of literature while conceptualizing this study, becoming familiar with the scholarly conversations so as to position my entrée into them. I started with an in-depth exploration of the body of knowledge pertaining to first-generation college students, branching out from the earliest study, which was published in 1982. Next, I reviewed online education literature, coming to know the prominent debates about this form of distance education and how the growth of digital technologies is transforming postsecondary education. Finally, I delved into the college student persistence literature, reviewing two of the most widespread theoretical models and searching for others that could possibly inform this research.

The literature comprising this review consists of empirical studies published in the past ten years, excepting a limited number of seminal studies published in the 1980s and 1990s. I relied upon literature drawn from scholarly books or refereed journals, though some contextual information was drawn from government and foundation reports. I used the Thomson Reuters' Web of Science[®] to identify potential sources for this review, tracking high-impact studies forward and backward within the literature to obtain a holistic view of each contribution. Additionally, I cross-referenced the bibliographies of prominent articles to identify citation patterns, locating citations to complement those I found by searching key terms in Google Scholar and EBSCOhost. The results of these efforts fill the remainder of this chapter, summarizing only the most relevant literature, to establish a shared understanding of the scholarly foundations that preceded this research project.

First-Generation College Students

Consensus for who is and who is not a “first-generation college student” fails to exist. There are two common definitions for this group of students: (a) those whose parents do not have more than a high school education (e.g., Billson & Terry, 1982; Choy, 2001; Pascarella et al., 2004; Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007) and (b) those whose parents do not hold a bachelor’s degree (e.g., Choy, 2001; Engle & Tinto, 2008; Pike & Kuh, 2005). This study employed the second definition, where neither parent has earned a bachelor’s degree even though they might have some college experience or even an associate’s degree. Following this broader definition, researchers have found that first-generation college students comprise 24% of U.S. public, postsecondary enrollment (Engle & Tinto, 2008).

The literature that supports the understanding of first-generation college students leans heavily toward quantitative methods, using data that is drawn from three national, longitudinal datasets: the National Education Longitudinal Study (NELS), the Beginning Postsecondary Students Longitudinal Study (BPS), and the Baccalaureate and Beyond Study (B&B). A limited number of qualitative research studies appear in literature in the 1980s (Rodriguez, 1982; London, 1989) and 1990s (Richardson & Skinner, 1992; Rendón, 1992; Terenzini et al., 1994). There was a significant distancing from qualitative methods until the late 2000s (e.g., Bergerson, 2007; Collier & Morgan, 2007; Stieha, 2010). Since then, qualitative research studies have become more prevalent in this body of knowledge, providing a deeper understanding that supports and challenges earlier quantifiable findings.

The literature related to first-generation college students falls into three broad categories, emulating the college-going process (Pascarella et al., 2004; Terenzini et al., 1996). The first category compares first-generation college students to their non-first-generation peers - focusing on demographics, academic preparation and college choice. A second category examines first-generation college students' transitions to postsecondary education. The third category seeks to understand the effects of first-generation students' college experiences on their persistence and degree attainment. Each of these categories will be expanded upon below.

Demographics, academic preparation, and college choice. Several studies examined the characteristics of first-generation college students. Researchers found first-generation college students are older and are more likely than their non-first-generation peers to be women (Engle & Tinto, 2008; Inman & Mayes, 1999; Terenzini et al., 1996) with children or dependents (Inman & Mayes, 1999; Saenz et al., 2007; Terenzini et al., 1996). They tend to come from low-income families (Inman & Mayes, 1999; Lee, Sax, Kim, & Hagedorn, 2004; Terenzini et al., 1996), minority backgrounds (Bui, 2002; Engle & Tinto, 2008), and are most often Hispanic (Lee et al., 2004; Terenzini et al., 1996; Warburton, Bugarin, & Nuñez, 2001).

First-generation college students face many barriers to college enrollment (Dumais & Ward, 2010) and typically delay matriculation into postsecondary education (Engle & Tinto, 2008; Inman & Mayes, 1999; McCarron & Inkelas, 2006; Priebe, Ross, & Low, 2008). They are less likely to enroll in four-year institutions (Chen, 2005; Choy, 2001) and make choices about where to study based on limited knowledge and experiences (Saenz et al., 2007; Terenzini et al., 1996), which results in “a comparatively

less influential collegiate experience” (Pascarella et al., 2004). After analyzing 38 years of CIRP Freshman Survey data, Astin and Oseguera (2004) concluded that first-generation college students are five times less likely than non-first-generation peers to enroll in a highly selective institution and are “becoming increasingly concentrated in the least selective institutions” (p. 334), such as two-year institutions (Chen, 2005; Nuñez & Cuccaro-Alamin, 1998). This may be partly due to geographic constraints, a significant influence on enrollment decisions, since first-generation college students report needing to study close to home due to employment and family obligations (Inman & Mayes, 1999; Rendón, 1992).

First-generation college students have been described as “significantly handicapped” (Pascarella et al., 2004) and at greater risk for falling behind (Terenzini et al., 1994). Even if a sibling has attended college before them, these students had fewer resources and positive role modeling than non-first-generation peers (Billson & Terry, 1982). They also tend to have weaker high school preparation, which leads to academic challenges (Ishitani, 2006; Pascarella et al., 2004) that are not experienced by their peers (Somers et al., 2004). In addition, first-generation college students tend to enter college with deficiencies in English and math, necessitating remedial coursework (Warburton et al., 2001) that furthers the distance between them and their more advantaged peers.

Transitions to postsecondary education. Researchers have found that first-generation college students tend to lack tacit knowledge to effectively navigate their postsecondary experience (Hahs-Vaughn, 2004; Nuñez & Cuccaro-Alamin, 1998; Pascarella et al., 2004). In addition, they report lower levels of self-confidence (Bui,

2002; Inman & Mayes, 1999; Lee et al., 2004; Rendón, 1992) and a heightened sense of isolation from their campus communities (Rendón, 1992; London, 1989).

In comparison to other students, first-generation college students exhibit lower levels of academic and social engagement that results in a lower likelihood of persisting to degree attainment (Pike & Kuh, 2005). Low levels of engagement, indirectly related to being the first in one's family to go to college (Pike & Kuh, 2005), have been linked to first-generation college students' lower educational aspirations (Ishitani, 2006; Pike & Kuh, 2005; Terenzini et al., 1996) and tendency to live off campus during the first year of enrollment (Billson & Terry, 1982; Pike & Kuh, 2005; Saenz et al., 2007). Weaker integration into the fibers of campus life may also be an outcome of first-generation college students' tendency to work more hours (Inman & Mayes, 1999; Pascarella et al., 2004) off-campus (Billson & Terry, 1982; Terenzini et al., 1996) compared to other students. Warburton et al. (2001) found that a larger proportion of first-generation college students reported working full-time than students whose parents held a college degree (22% and 9%, respectively).

First-generation college students' desire to maintain employment while undertaking postsecondary education can be understood in light of the fact that first-generation college students are not only concerned with finances (Bui, 2002; Martinez, Sher, Krull, & Wood, 2009), but are debt-averse and are more likely to drop out than to take on loans to pay for college (Choy, 2001; Lohfink & Paulsen, 2005; Somers et al., 2004). Martinez et al.'s (2009) research at a Midwest university showed that a lack of finances, in the form of loans and scholarships, was a stronger predictor of attrition than parental education levels. Because some first-generation college students see education

as a luxury, (Priebe et al., 2008) they are more apt to leave postsecondary education if finances become tight.

First-generation college students are more likely to enroll part-time (Chen, 2005) and earn fewer credits (Inman & Mayes, 1999; Pascarella et al., 2004) than others whose parents have a college education. Researchers found that first-generation college students report feeling less academically prepared and struggle to prioritize study time (Bui, 2002; Collier & Morgan, 2007), often resulting in lower grade point averages (Pascarella et al., 2004). Though some contend that pre-college factors (e.g., test scores, high school coursework) significantly impacted first-generation college students' cumulative grade point averages (Billson & Terry, 1982; Strayhorn, 2006), others argued that postsecondary experiences were a stronger influence on first-generation college students' grade point averages (Hahs-Vaughn, 2004; Inman & Mayes, 1999).

A compelling body of research has shown that first-generation college students deal with family tensions when pursuing educational mobility. Qualitative studies have shown that college can be a threatening environment for first-generation college students and their parents (Bergerson, 2007; London, 1989; Stieha, 2010). First-generation college students may feel “academic shock” when attempting to reconcile the new world of academia with their cultural roots (Rendón, 1994), finding themselves on the margins of two cultures (London, 1989), “riddled with ... guilt, pain, and confusion that arise from daring to live simultaneously in two vastly different worlds while being fully accepted in neither” (Rendón, 1994, p. 56). There were three ways that first-generation college students commonly managed these family-related tensions: (a) by persisting to bring honor to the family (Bui, 2002; Richardson & Skinner, 1992), (b) by being

“expelled” from their family for the pursuit of education (London, 1989), or (c) by protecting family relationships to the detriment of their academic aspirations (Bergerson, 2007; Stieha, 2010).

Persistence and degree attainment. Recognizing the academic, social, and economic disadvantages that first-generation college students face, their enrollment patterns are of particular importance to researchers. Enrollment patterns are defined by whether or not one persists, a term that carries two different meanings. The first defines persistence as movement from one academic year to the next, namely from the freshman to the sophomore year (Hurtado, Carter, & Spuler, 1996; Lohfink & Paulsen, 2005; Terenzini et al., 1996). This definition has been influenced by influential research arguing that the first year of college is more critical than any other year in determining whether a first-generation college student will attain a degree (Terenzini et al., 1996). Others have transcended this boundary, arguing that a longitudinal examination is a more comprehensive use of the term, defining persistence as students’ movement toward degree completion (Cabrera, Burkum, & La Nasa, 2005; Hahs-Vaughn, 2004; Ishitani, 2006; Pascarella et al., 2004; Somers et al., 2004).

There are significant differences in degree aspiration and attainment between first-generation college students and their peers. A national, longitudinal study of first-generation students by McCarron and Inkelas (2006) showed that only 30% of first-generation students in their sample ($N = 1,879$) attained a bachelor’s degree eight years after graduating from high school, though 40% aspired to it as high school sophomores. In comparison, 28% of non-first-generation students aspired to a four-year degree while in high school, but 56% had attained it within eight years of their high school graduation.

McCarron and Inkelas's findings supported earlier research showing first-generation students were more likely to delay postsecondary education (Richardson & Skinner, 1992; Warburton, 2001). McCarron and Inkelas's findings can also be linked to research demonstrating first-generation college students prioritize their family and work roles over the role of being a student (Billson & Terry, 1982; Pascarella et al., 2004; Pike & Kuh, 2005; Priebe et al., 2008; Richardson & Skinner, 1992; Somers et al., 2004), which may result in a longer time to degree completion (Ishitani, 2006; Terenzini et al., 1996).

Studies have found that first-generation college students are more likely to leave postsecondary education within a year of enrolling at a four-year institution (Ishitani, 2006; Pascarella et al., 2004). In fact, Engle and Tinto (2008) argued that the likelihood of first-generation college students' departure from a public university is three times higher than for their more advantaged peers – 12% and 4%, respectively. First-generation college students who persist beyond the first year are at a continual disadvantage, with distinct experiences serving as obstacles in their paths to degree attainment and academic success (Pascarella et al., 2004; Astin & Oseguera, 2004; Saenz et al., 2007). Most often, those who were successful at four-year institutions “scaled down” their college experience by connecting with faculty and peers at a departmental level (Richardson & Skinner, 1992; Hurtado et al., 1996).

The literature reviewed for this study provided three primary suggestions to help first-generation college students transition to postsecondary education. The most popular solution was to involve first-generation college students in the academic and social environment of the campus (Hahs-Vaugh, 2004; Terenzini et al., 1996; Pascarella et al., 2004). More recent qualitative studies countered these ideas, finding such involvement

may in fact alienate first-generation college students, whose reality demands a blend of work and academics for survival (Bergerson, 2007; Stieha, 2010). Bergerson (2007) argued that "we must redefine notions of involvement to allow for the legitimacy of those who do not have the resources that allow for engagement in the traditional sense of the word" (p. 117).

Another way to assist with a successful transition is for faculty and staff to "validate" first-generation college students by empowering, confirming, and supporting first-generation college students' academic endeavors (Rendón, 1994). Rendón (1994) conceptualized validation as a way to allow minority students' perspectives to be considered on their own terms, not based on dominant group values and behaviors. Since then, Rendón's concept has been broadly applied as a useful strategy for all first-generation college students, providing reassurance that they belong in college and are capable of academic performance at the same, or even higher, level in comparison to non-first generation peers (Terenzini et al., 1994).

The third suggestion to help first-generation college students persist to degree completion was to offer attractive financial packages, bearing in mind this population tends to be debt-averse. Grant aid for first-generation college students has positive effects on persistence decisions (Lohfink & Paulsen, 2005). In addition, participation in work-study programs improved first-generation college students' four year graduation rates; those who participated in work study during their first year of college were 81% more likely to graduate in four years in comparison to those who did not participate in work-study (Ishitani, 2006).

Directly related to online education. Only one of studies contributing to this literature review carried a suggestion for online education and its applicability to first-generation college students. McCarron and Inkelas (2006) analyzed NELS data, involving 1,879 first-generation college students, concluding that many in this population were not able to complete their degrees within a “traditional” timeframe, which they defined as eight years after high school graduation. McCarron and Inkelas briefly mentioned online learning, via the delivery of accelerated courses, was a possible method to reach first-generation college students.

The literature pertaining to first-generation college students, while compelling, lacked insight as to the academic experiences and strategies of first-generation college students in online settings. There is a substantial gap in the field’s understanding of how first-generation college students respond to and persist in online degree programs, emphasizing the need for this study. It cannot be assumed that findings related “traditional,” ground-based first-generation college students carry forward to illuminate the experiences of double first-generation college students. Not only is the medium for educational delivery entirely different, given there is no face-to-face interaction, but there may be nuances to the demographics of the double first-generation college student population.

The next section, offering entry into the online education discourse, includes information about the development of online education; online, postsecondary enrollment trends; debates about the effectiveness of online education; and online persistence and perception topics, which provide contextual information for the case of double first-generation college students.

Online Education

Online education is a form of distance learning that is marked by the physical separation of teacher and student (Harting & Erthal, 2005), and in so doing, alleviates the need for students to travel “to a fixed place, at a fixed time, to meet a fixed person” (Keegan, 1996, p. 7). Correspondence instruction, the earliest form of distance education, began in the eighteenth century when individual providers offered shorthand lessons to the general public that were couriered via the U.S. Postal Service (Harting & Erthal, 2005). Correspondence instruction grew in popularity in the 1870s, when a Boston-based correspondence school extended instruction in dozens of subjects to thousands of students (Nasseh, 1997). New technologies like film, radio, and television enhanced the delivery of distance education during the twentieth century. Each of these innovations was predicted to dramatically change the face of education, though each claim “turned out to be wildly exaggerated” (Bok, 2003, p. 87) in light of the gradual change that occurs in the structure of American schools (Tyack & Cuban, 1995).

The history of distance education, and the technologies that have supported it, are reminders that the most recent shift to online education has been more evolutionary than revolutionary (Harting & Erthal, 2005; Thelin, 2011). Online education, made possible through the growth of the Internet and the World Wide Web in the early 1990s, brought greater efficiency to distance education, allowing for rapid communication between the teacher and the student in a structure that some have argued mimics the physical classroom (Tennant et al., 2010). Part of the allure of online education is that learners can asynchronously access materials, meaning that they can participate in threaded discussion boards, complete assignments, review lectures, and take tests according to

their own schedules (Burbules & Callister, 2000). Furthermore, students can emulate face-to-face interaction with instructors and peers through synchronous, or real-time, technologies such as chat rooms, webcasting, and Skype (Means, Toyama, Murphy, Bakia, & Jones, 2009).

Despite its utility, there is debate about the growth of online education. Researchers have argued that digital technologies serve humanistic, educational ends, bringing postsecondary education to students who are constrained by time and geographic locations (Harting & Erthal, 2005; Tennant et al., 2010). Digital innovations are sustaining postsecondary education through upward and outward movement – upward to educate a larger proportion of the adult population and outward by removing place-based barriers (Trow, 1973). Burbules and Callister (2000) posited that online education is an important structural feature of U.S. higher education, because:

What is lost in terms of spontaneity and immediate face-to-face interaction may be ... more than compensated for by the convenience (and perhaps lower cost) of [online education]. For ... students [who enroll in online degree programs] the alternative is not the full, rich experience of on-campus, real-time, face-to-face instruction – the alternative is not taking these courses or programs at all (p. 275).

Others agree that online education has increased postsecondary access, but question if the innovations will lead to higher quality teaching and research in support of the public good (Willinsky et al., 2011) or if the expansion will become an institutional strategy for profit-making, ultimately subsidizing research and face-to-face instruction (Bok, 2003; Thelin, 2011). The drive to expand online education is fueled by institutional competition that is inherent in American higher education (Clark, 2008),

which is inevitable since online education “dissolves boundaries,” simultaneously opening doors to broader portions of the student market (Tennant et al., 2010) while providing prospective students choices in where to study (Clark, 2008). Bok (2003) cautioned that this seemingly beneficial relationship should be entered with caution.

Online enrollment trends. Enrollment trends indicate continued growth of online education. According to an annual study conducted by the Babson Survey Research Group, more than 6.7 million postsecondary students, or 32% of students enrolled in U.S. postsecondary institutions, took at least one online college course in fall 2011 (Allen & Seaman, 2013). This was a 9% increase from the previous year, which is significant considering the 2.6% annual growth in postsecondary enrollment (Allen & Seaman, 2013). These statistics, portraying students’ growing interest in online education, are somewhat misleading since they include students minimally enrolled in one online course, giving no indication of the number of students enrolled in wholly online degree programs.

Disaggregating the statistics provides a more accurate portrayal of how online degree programs are impacting the structure of American higher education. Following a 91% increase in the number of online degrees offered by American public universities between 2009 and 2010 (Garrett, 2011), in 2012, more than 70% of public postsecondary institutions offered online degree programs (Allen & Seaman, 2013). In 2010, the most recent date for which data is available, 2.4 million students were pursuing public, postsecondary education via fully online instruction (Garrett, 2011). In terms of demographics, online learners are predominantly female (Doyle, 2009; Kramarae, 2003)

and are generally older than 25 years (Garrett, 2011), averaging 29 years old (Doyle, 2009).

Effectiveness of online education. The effectiveness of online education commands significant attention in the literature, particularly in regard to differences in student learning outcomes between online education and face-to-face instruction (e.g., Burbules & Callister, 2000; Kanuka & Kelland, 2008; Ke & Xie, 2009).

One of the earliest and most pervasive studies demonstrated there is “no significant difference” in student achievement, whether coursework is completed online or face-to-face (Russell, 1999). Three meta-analyses contributed to the debate, with one confirming the “no significant difference” phenomenon (Cavanaugh, Gillan, Kromrey, Hess, & Blomeyer, 2004) and the second revealing that students in courses with an online component outperformed students in face-to-face courses by a small but statistically significant amount, after controlling for other factors (Means et al., 2009). However, Means et al. (2009) argued “despite what appears to be strong support for [online and] blended learning” the studies in their meta-analysis did “not demonstrate that online learning is superior as a medium” (p. xvii). Similarly, discussion in the third meta-analysis cautioned against claiming that online education is better, worse than, or equal to face-to-face instruction (Bernard et al., 2004).

Teaching itself appears to be the “active ingredient” that activates student learning, since instruction, whether face-to-face or online, works well sometimes and poorly other times (Clark, 1994). Researchers have argued the field needs to move beyond the binary framing the student achievement debate; comparing online education to face-to-face instruction has become an impediment to “discover what makes [online

education] effective or ineffective, because the question is cast as a contrast between such starkly different forms for achieving the same end” (Bernard et al., 2009, p. 1245). An alternate approach might be to shift the question to: “Which way of teaching is better *for whom?*” (Burbules & Callister, 2000, p. 276, emphasis in original).

Persistence in online education. Persistence is a pressing issue for online education. A recent study found that students enrolled in online courses were 10% to 20% less likely to persist in comparison to if they were enrolled in face-to-face courses (Tyler-Smith, 2006), echoing findings from earlier studies (Kember, 1995; Morgan & Tam, 1999). Furthermore, persistence trends associated with asynchronous courses are substantially lower than for synchronous courses (Bernard et al., 2004), perhaps due to the likelihood of students experiencing enhanced feelings of isolation in asynchronous courses (Morgan & Tam, 1999). Most often, students in online courses failed to persist due to lack of time, inability to adjust to online education, and underestimating the rigor associated with online courses (Morgan & Tam, 1999).

The responsiveness of faculty members, actively participating in online courses by moderating and focusing online discussions, was found to enhance feelings of connectedness for online students and positively contribute to their persistence (Garrison & Cleveland-Innes, 2005; Shea, Li, & Pickett, 2006). On the other hand, in cases where faculty members did not respond in a timely manner to online students’ inquiries, the students become discouraged, anxious, and frustrated (Hara & Kling, 2000). In such cases, online students were more likely to limit their participation in the course, or drop out altogether, citing decreased satisfaction (Vrasidas & McIsaac, 1999).

A tactic taken by some institutions has been to introduce accelerated courses as a method to boost persistence. Geltner and Logan (2001) found that accelerated courses, providing students the opportunity to earn college credits in a compressed time frame (Wlodkowski, Mauldin, & Gahn, 2001), resulted in fewer student withdrawals in comparison to traditional courses. Accelerated courses are purportedly a benefit for institutions and students alike, with similar learning outcomes in comparison to traditional courses (Johnson, 2009; Wlodkowski & Kasworm, 2003) and allowing students to finish their degrees sooner than if they were taking traditional courses (Wlodkowski et al., 2001).

Perceptions of online education. While research tends to find “no significant difference” in learning outcomes for online education (Cavanaugh et al., 2004; Means et al., 2009; Russell, 1999), there are differing perceptions toward online learning at the institutional level, where online education is coordinated. A recent study by Allen and Seaman (2013) found that three quarters of America’s chief academic officers believe that learning outcomes in online courses are comparable to learning outcomes for face-to-face instruction. Interestingly, the same study discerned that faculty perceptions of online degree programs are even lower today than they were ten years ago (Allen & Seaman, 2013). Among institutions offering fully online degree programs, where chief academic officer support is strongest, Allen and Seaman found that only 38% of faculty members accept the legitimacy of online education; the faculty acceptance rate was only 19% at institutions offering online courses, but not online degree programs. Faculty perceptions, a significant barrier to the widespread adoption of online education, may be partly

explained by the fact that 55% of faculty members believe it takes more time and effort to facilitate online courses (Allen & Seaman, 2013).

In addition to faculty-level concerns, an appreciable body of research has demonstrated that external evaluators, like graduate admissions counselors, human resources staff, recruiters, and managers, do not view online degrees as having the same value as traditional degrees (Adams, 2008; London, 2008; Sinow & Kyie-Blankson, 2012). For example, online degree holders experience significant disadvantage when applying for graduate school (DeFleur & Adams 2004), business-related jobs (Adams & DeFleur, 2006; Kohlmeyer, Seese, & Sincich, 2011) and jobs in health-related fields (Adams, DeFleur, & Heald, 2007). A recent study by Vault, a market-research organization, revealed that a strong majority of nearly 200 hiring managers from various industries favored job candidates with traditional degrees, while only 35% gave equal consideration to candidates with online degrees (London, 2008). Despite these dismal results, 83% of employers believed online degrees were more acceptable in 2008 than they were in 2003 (London, 2008), offering some degree of hope for employers' future perceptions of online degrees.

Online degree programs, a new phenomenon in public postsecondary education, hold advantages and disadvantages not unlike traditional degree programs. Enrollment in online degree programs, a key strategy in the U.S. college completion agenda, is expected to continue growing in the foreseeable future. Given the likelihood that first-generation college students will be drawn to such a form of postsecondary instruction, it is vital to understand their persistence strategies. Potential models to examine student persistence are outlined in the final section of this literature review.

Examining Student Persistence

Researchers, attempting to understand why some students leave postsecondary education while others remain, are driven to quantifiably explain student persistence. Two frameworks dominate the college student persistence literature, simultaneously informing institutional retention strategies to further the college completion agenda: (a) Tinto's (1975, 1993) theory of student departure and (b) Bean and Metzner's (1985) model of student attrition. These ubiquitous theoretical frameworks, when combined, have been cited more than 10,000 times⁶, justifying my reasoning to closely examine them in order to ascertain a possible fit for this research project.

To understand the historical underpinnings of these theoretical frameworks, it is necessary to extend back more than six decades. The first student retention studies appeared after World War II, when the structure of American higher education expanded to become a mass system (Trow, 1973). Shortly after, in the 1960s, researchers began studying "dropouts," or students who left postsecondary institutions prior to degree attainment (Spady, 1970). Spady (1970), having reviewed this growing body of knowledge, created a descriptive model of dropout behavior by applying Durkheim's (1951) theory of suicide, which posited that individuals unable to integrate into the fabric of society were more likely to commit suicide. Similarly, Spady argued, when college students dropped out of postsecondary education, it was likely because they failed to integrate into the structures of their institutions.

⁶ In late March 2013, the Google citation index showed more than 3,400 citations for Tinto's (1975) original theory and more than 5,800 citations for Tinto's (1993) revised theory. Meanwhile, it showed more than 1,100 citations for Bean and Metzner's (1985) model.

Tinto (1975, 1993) extended Spady's model by incorporating the anthropological "rite of passage" (Van Gennep, 1960), or ritual marking individual progress from one social status to another (e.g., youth to adult), to create a predictive theory for student departure. Tinto postulated that students must traverse three stages – separation, transition, and incorporation – in their rite of passage (Van Gennep, 1960) to postsecondary education, eventually shedding the influence of external communities such as family and friends. Tinto argued that students who failed to integrate into the academic and social structure of their institutions were more likely to depart prior to degree attainment, while students who were academically and socially integrated were more likely to persist to degree completion. In essence, Tinto believed that maximizing integration increased learning and persistence (Melguizo, 2011).

Tinto's (1975, 1993) theoretical model, though elevated to paradigmatic status (Braxton & Hirschy, 2005), has been strongly critiqued (e.g., Attinasi, 1989; Rendón, 1994; Tierney, 1992, 1999). Most notably, Tinto's model is based on the homogenous experiences of a white, middle-class population living on campus (Attinasi, 1989), which creates injustice when applied to a more diverse student body (Tierney, 1992). For example, Tinto's model fails to address vital connections between students and their families (Rendón, 1994), stressing that students must disassociate themselves from their past communities in order to fully integrate into their new community. Going further, Tinto's framework has been described as one of "cultural suicide" (Tierney, 1999), since no attention is given to external forces (Melguizo, 2011) and students are expected to assimilate to their institutions in order to succeed; therefore, if students do not persist, then the blame for their departure rests with the students, not the institution.

Bean and Metzner (1985) modified Tinto's (1975, 1993) theory to study the attrition of nontraditional students, or students who were older than 25, attending part-time, and/or commuting to their postsecondary institutions. Bean and Metzner all but dropped the social integration component from Tinto's model, emphasizing the influence of academic integration (i.e., academic performance, intent to depart college, pre-college background) with "non-collegiate, external environment variables" (i.e., finances, employment, outside encouragement, family responsibilities, opportunity to transfer) to predict departure tendencies for nontraditional students. Like the theoretical model that preceded it, Bean and Metzner's approach was marked by a deficit lens, examining reasons for dropout from an institutional perspective, rather than seeking to understand reasons for student persistence.

Parting from legacy persistence theories. The field appears to have a tendency to hold on to these legacy persistence theories (i.e., Bean & Metzger, 1985; Tinto, 1975, 1993) in spite of their limitations. For example, Braxton, Shaw Sullivan, and Johnson (1997), who conducted the most extensive review of Tinto's (1975, 1993) theory, found weak empirical support for it, but urged the field to continue using it anyway (Melguizo, 2011). I considered this advice, but discerning three insurmountable reasons as to why these theories could not adequately capture the persistence decisions of double first-generation college students, I dismissed the pervasive framework prior to data collection. First, both placed an explicit emphasis on students' integration to the institution, which was not suitable for an online learning environment, as in the present study. Second, the dominant values framing the tenants of these theories suggested they would not be applicable for a heterogeneous student population (Attinasi, 1989) such as double first-

generation college students. Third, since these theories prioritized the institutional perspective, citing evidence in students' demographic data to pinpoint reasons for departure, I surmised it would be difficult for either to claim in-depth understanding of students' experiences and reasons for persistence (Attinasi, 1989; Tierney, 1992).

I sought an alternate lens to examine the persistence of double first-generation college students, one that would be more applicable for a diverse population studying in a contemporary, online learning environment. Validation theory (Rendón, 1994; Rendón Linares & Muñoz, 2011), discussed in an earlier section of this literature review, seemed a plausible option. The primary tenant of validation theory suggests that persistence is more likely to occur when those internal to postsecondary institutions affirm minority students as capable of doing academic work. By providing reassurance for students' academic aspirations, culturally diverse students need not disconnect from their past to be successful in postsecondary institutions.

Summary

Three strands of literature were summarized and critiqued in this chapter, creating a solid foundation for the research project and verifying the need for its unique contribution to the bodies of knowledge pertaining to (a) first-generation college students, (b) online education, and (c) student persistence. These topics, though studied at great lengths individually, have yet to be paired with one another, thereby opening the possibility for new findings to confirm, expand, or challenge those previously documented. In Chapter 3, I explain the methodology that was used in this innovative study.

CHAPTER 3

Methodology

This chapter presents the methodology that guided this research study. I designed a multiple methods study to learn how double first-generation college students experience postsecondary education. Qualitative methods provided an optimal foundation to explore the thoughts, feelings, beliefs, values, and assumptions (Marshall & Rossman, 2010) of double first-generation college students, while descriptive quantitative methods provided tools to contextualize key aspects related to the participants' backgrounds. I felt it was imperative to privilege a qualitative approach, since the questions guiding this research were developed to explore the lived experience of an understudied population (Corbin & Strauss, 2008). The research questions guiding this study sought to understand the origins, or characteristics, of double-first generation college students, the factors that led them to enroll in online degree programs, their reasons for persistence, and the expectations they had for their academic or career destinations.

Case Study

A variety of qualitative approaches could have been selected to understand the lived experiences of double first-generation college students (e.g., ethnography, phenomenology, or grounded theory), but none were as suited to the inquiry as case study research. The case study tradition does not call for a prescriptive research design (Stake, 2008), but rather offers a choice of *what* is to be studied, without being constrained by particular methods of inquiry (Stake, 1995). In a case study, the researcher focuses on context and discovery within bounded systems (Stake, 1995, 2008; Merriam, 1998; Miles & Huberman, 1994), which are “cases,” or “units of analysis,” that are specific to time

and place (Merriam, 1998). This leads to an “in-depth understanding of the situation and the meaning for those involved” (Merriam, 1998, p. 19). Essentially, a case describes who or what is being studied, which could be an individual, a policy, or a group of people, such as the double first-generation college students, who comprised the unit of analysis in this particular study.

The case study methodology allowed me to deeply explore a select number of cases to provide insight into the experiences of the larger population (Stake, 2008). The need for deep understanding was critical to this study, since the extant literature revealed a significant gap in understanding double first-generation college students’ experiences. The research design needed to be flexible enough to address the research questions posed in Chapter 1, and detailed enough to potentially disturb existing theory (Merriam, 1998) or lead to the development of new theory (Stake, 2008). These needs were effectively met through a case study built upon multiple methods.

Rationale for multiple methods. Merriam (1998) explained that case studies allow for any and all methods related to data collection and analysis. Accordingly, data collection and analysis in this study occurred through multiple methods, which involved combining qualitative and quantitative methods to create a “whole [that was] greater than the sum of the parts” (Smith, 1986, p. 37). Although some researchers contend that combining methods presents epistemological conflicts (Smith, 1986), I believe that quantitative and qualitative paradigms do not need to be binaries (Lincoln & Guba, 1985), but can be used together to increase understanding and to add methodological rigor (Patton, 2002).

While multiple methods research utilizes both qualitative and quantitative methods, it is nevertheless common to privilege one approach over the other. Due to the nature of the research questions, this study emphasized qualitative methods. Textual data was gathered through data collection methods including open-ended survey questions, focus groups, and interviews. I then used a grounded theory approach for data analysis, inductively condensing data into themes (Saldaña, 2009) through a constant comparison method (Glaser & Strauss, 1967). The use of qualitative methods enabled me to explore, clarify, and discuss the experiences of double first-generation college students through what Geertz (1973) called “thick description,” which moves beyond mere reporting of facts to provide rich details to enhance the case. Quantitative descriptive methods, on the other hand, were utilized to analyze closed-ended survey questions by way of descriptive statistics. Descriptive statistics provided important contextual information such as participants’ age, gender, and major of study, which supported qualitative analysis and the overall findings. The use of multiple methods assisted in triangulating the data (Miles & Huberman, 1994), while also adding complexity to the case (Patton, 2002). A thorough description of the steps involved in data analysis is provided later in this chapter.

Rationale for e-research. All data was collected via e-research, or research that took place on the internet (Anderson & Kanuka, 2003). Dillman, Smyth, and Christian (2009) explained that e-research is well suited for university students, who have access to the internet and possess high skill levels in using it. E-research, therefore, was an appropriate choice for this study, since all potential participants were enrolled in online degree programs at a public, postsecondary institution. E-research made the study more

accessible to the sample by eliminating the constraints of time and place (Anderson & Kanuka, 2003). Correspondingly, this approach to data collection was believed to have a positive effect on participant disclosure, as the anonymous nature of the inquiry could invite more open and honest dialogue (Anderson & Kanuka, 2003; Reid & Reid, 2005).

E-research supported the framework for a case study employing multiple methods. I launched data collection with an e-survey designed to gather descriptive information about the target population and to begin exploring the research questions (Anderson & Kanuka, 2003). The second phase of data collection occurred through two online, asynchronous focus groups conducted via secure, threaded discussion forums at Yuku.com. I concluded data collection with interviews conducted virtually through Skype. Throughout, I conducted document analyses of pages on Sendero University's website and its affiliated social media sites dedicated to providing academic and community support to online students. Data collection procedures are described in greater detail in a later section of this chapter.

Data Sources

When considering potential data sources for this case study, I deliberated between crafting a multi-site study that would involve as many as three postsecondary institutions and focusing attention on one institution. I ultimately decided that a single site would enable me to obtain thick descriptions and a deeper understanding of the double first-generation college student experience by involving many cases at that institution. Another benefit to a single-site approach was that differing institutional variables were diminished, which allowed for a more particular view of the case. Such particularization

allowed me to take a holistic view of a bounded phenomenon, which is an important feature of case study methodology (Merriam, 1998; Stake, 2008).

Institutional setting. The data for this study was collected at Sendero University (pseudonym), a large, public, four-year institution located in the western United States. Sendero was identified as much for the innovation of its online campus as for the unprecedented growth in online enrollment that is expected in the coming years. Sendero University initiated online degree programs in 2007, in response to a call by its state governing board to increase college access and completion. Enrollment in Sendero University's online degree programs exceeded 3,200 degree-seeking students in fall 2011 and topped 5,000 students in fall 2012; administrators plan to increase online enrollment to 20,000 students by the year 2020. In fall 2011, undergraduates in Sendero University's online campus could select from 17 majors, including psychology, nursing (RN to BSN), criminal justice, liberal studies, and history. Students enrolled in online degree programs at Sendero University are only permitted to take online courses, even if studying in close proximity to Sendero University's brick-and-mortar campuses.

Approximately 24% of students enrolled in U.S. public, postsecondary institutions are first-generation college students, or students whose parents have not earned a four-year degree (Tinto & Engle, 2008). Extant data provided by Sendero University revealed that 55% of its undergraduate, degree-seeking, online student population identified as first-generation college students in fall 2011 (see Appendix B). An intercampus comparison, on the other hand, indicated only 37% of those enrolled in Sendero University's brick-and-mortar campuses in fall 2011 identified as first-generation college students. Sendero University requested this demographic variable when students first

applied for undergraduate admission. These statistics, illuminating significantly more first-generation college students opting for online degree programs than for traditional degree programs at this particular institution, supported the need for this research.

Participant selection. For this case study, I sought first-hand information from individuals who identified as first-generation college students, and who were persisting in online degree programs at Sendero University. After receiving IRB approval for my study (see Appendix A), I contacted the Office of Institutional Analysis at Sendero University to request the names and e-mail addresses of all students in its online campus who: (a) self-identified as first-generation college students at the time of admission, (b) were enrolled in an online degree program in fall 2011, and (c) who continued enrollment in an online degree program in either summer 2012 or fall 2012. My request was expediently processed, and I received contact information for 930 students who met the parameters of this study. It was understood that potential participants were freshmen, sophomores, juniors, and seniors who were studying in any of Sendero University's 17 online degree programs (see Appendix B).

Since the participant contact list was created based on a key variable (i.e., first-generation college student) that was self-reported at the time of application to Sendero University, the first two survey questions were designed to verify parental levels of education. This strategy further delimited the participant pool; 11 individuals who responded to the survey request declared at least one parent earned a bachelor's degree or higher. Since these individuals were not first-generation college students, their responses closed the survey, reducing the sample size to 921 students. Additional details about

participant response rates for the e-survey, focus groups, and interviews will be discussed in the following section.

Data Collection

Data for this study was collected from the undergraduate, degree-seeking, online student population that identified as first-generation college students enrolled at Sendero University using e-research methods that included: an e-survey, focus groups conducted through online discussion forums, and interviews that occurred via Skype. These methods of data collection were purposefully designed to address the research questions, and supported the framework for an interpretive study (Erickson, 1986). Data collection commenced when the study received IRB approval (see Appendix A) and continued for a period of five months, as illustrated in Table 2.

Rationale for participant incentives. In an effort to boost response and completion rates for the e-survey, focus groups, and interviews, I offered monetary incentives in the form of Amazon.com gift cards to “hook and induce” (Anderson & Kanuka, 2003) potential participants, and thereby encouraging them to engage in a social exchange (Dillman et al., 2009). The participant incentives ranged from \$10 to \$50 Amazon.com gift cards, totaling an expense of \$910, and were awarded as described in Appendices C, E, and H.

Although Patton (2002) argued incentives such as gift cards do not make a difference in research participation rates, I believe offering incentives had a positive effect on participation rates (Anderson & Kanuka, 2003; Dillman et al., 2009), as such

Table 2

Data Collection and Analysis Timeline, Beginning May 2012

Research Action	2012								2013		
	M	J	J	A	S	O	N	D	J	F	M
Received IRB approval	✓										
Received contact list		✓									
Pilot testing		✓	✓	✓							
Conducted e-survey			✓	✓							
Conducted focus groups				✓							
Conducted interviews					✓	✓					
Document review/analysis		✓		✓	✓	✓				✓	
Analyzed descriptive data					✓		✓		✓	✓	
Analyzed qualitative data				✓	✓	✓	✓	✓	✓	✓	
Member checking				✓	✓	✓					
Wrote up results						✓			✓	✓	✓
Reflexive journaling	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

incentives contributed significantly to high completion rates⁷. Only those individuals who filled in the survey or participated in a focus group or interview were eligible for an Amazon.com gift card. After e-mailing gift card information to recipients, which was willingly accepted 98% of the time, I received some notable commentary. One individual awarded a gift card for filling out the survey e-mailed, “Glad to win, but more glad to help,” a sentiment echoed by several focus group participants. A 48-year old male who was an interview participant made the following remark after learning he would receive a \$20 gift card: “Oh, very thoughtful. I don’t even recall there being any reward for doing this. I simply did it because you asked.” One interview participant (the

⁷ All phases of data collection had a completion rate of 92% or higher. The e-survey had a 95% completion rate, the focus groups had a 100% completion rate, and the interviews had a 92% completion rate. The data collection procedures that influenced these rates will be explained in a later section of this chapter.

2%) refused to accept a gift card, insisting that he was glad to support this kind of research if it would help me or his fellow students.

E-survey. I followed Dillman et al.'s (2009) Tailored Design Method when developing the e-survey. This method not only provided specific guidelines for question development, but also highlighted best practices for survey distribution, survey reminders, and participant incentives (Dillman et al., 2009). Dillman et al. defined surveys as social exchanges between the researcher and survey participants. E-surveys, then, are best facilitated when the researcher is able to garner trust in a social exchange, while also conveying the perception of high rewards and low costs to participants.

Following the Tailored Design Method, my survey:

- included personalized requests for participation;
- offered tangible rewards in the form of participant incentives;
- was interesting, brief, and easy to complete; and
- demonstrated positive regard and appreciation (Dillman et al., 2009).

The survey instrument was comprised of 34 closed-ended questions seeking descriptive information about the target population and five open-ended questions exploring the study's research questions (Anderson & Kanuka, 2003). The survey questions requested information about double first-generation college students' demographics (e.g., age, gender, race), as well as their pre-Sendero educational activities, their motivations to enroll in online degree programs, and their perceived benefits to and challenges in obtaining online education. I limited open-ended questions to those that were most important in exploring the study's research questions (Dillman et al., 2009).

The questions appeared in a conversational order, with demographic questions appearing

early in the survey to yield higher item response rates (Teclaw, Price, & Osatuke, 2012). This placement went against Dillman et al.'s (2009) recommendation, but I maintained a strong interest in the sample's demographic variables to answer my first research question, and desired to ensure that the corresponding survey questions received the highest possible response. See Appendix D for the study's informed consent and survey questions.

The e-survey was designed and distributed through QuestionPro, online survey software available at <http://www.questionpro.com>. In comparison to SurveyMonkey, Qualtrics, and Google Survey, QuestionPro was affordable and offered more intuitive features for survey design and implementation. Additionally, I was provided access to a wide variety of question formats and could set up branching/skip logic to ensure relevant and appropriate questions were displayed to the respondents. I breathed life into an ordinary survey template by changing the fonts, modifying the color palette, and uploading a custom-designed banner that appeared at the top of every page. To prevent skewed results, I designed the e-survey to prevent multiple submissions from the same respondent. In addition, I accessed real-time data as soon as responses were received, viewing responses not by respondents' names, but by anonymous response IDs automatically assigned by QuestionPro for participant confidentiality (Dillman et al., 2009). Finally, to boost survey response rates, QuestionPro's survey tracking feature allowed me to send reminder e-mails to those who had not responded to my earlier requests for participation (Anderson & Kanuka, 2003; Dillman et al., 2009).

After the e-survey was designed in QuestionPro, I pilot tested it, in the following order, with three distinct groups: (a) three fellow doctoral students, (b) three first-

generation college students who were not part of the study, and (c) two faculty members. I sent the e-survey to the eight willing participants by means of the same e-mail invitation that was used to launch the e-survey; this helped me become acquainted with using QuestionPro for an e-mail merge. The pilot test confirmed that the e-survey would take approximately 20 minutes to complete. Each pilot test participant provided written feedback regarding the usefulness of the survey instrument, reviewing it for bias, sequence, and clarity (Marshall & Rossman, 2010), and I modified the survey accordingly during each review cycle. All survey responses received during the pilot testing phase were deleted.

E-survey participation. The e-survey was launched on July 9, 2012, when it was sent via e-mail merge to potential participants through QuestionPro. The e-survey remained open for 40 days, per guidelines in the Tailored Design Method (Dillman et al., 2009). I originally planned to send a survey reminder on days eight and 20 to increase the response rate, as advocated by Dillman et al.'s (2009) three-contact strategy, which suggests utilizing the first e-mail to introduce the e-survey and emphasize its importance, while the second and third e-mails attempt to motivate non-respondents. I needed to adjust the three-contact strategy, however, when I became aware of a distribution problem related to the first e-mail.

The e-survey exhibited a low participation rate following my first contact, as evidenced in Table 3, a trend that continued with the second contact. While I was grateful for the responses I received, I was also disheartened by the 2% response rate in the first ten days of data collection. My spirits lifted tremendously when dozens of survey responses were suddenly received on July 19, two full days after the second

contact was sent. At this time, I became aware of the fact that my first and second e-mails were flagged by Sendero University’s spam filter, and that only the second message made it through. To accommodate for this unexpected difficulty, I adjusted my strategy and sent four messages instead of three, reaching out to Sendero University’s Webmaster prior to sending the third and fourth e-mails to ensure they would successfully pass the spam filter. The initial survey invitation and the three reminders related to the multi-contact strategy are located in Appendix C. When I closed the e-survey on August 18, 2012, it had a 34% response rate and a 95% completion rate, resulting in 300 completed surveys. Responses to the open-ended questions averaged 31 words per response and ranged from one to 438 words.

Table 3

Number of E-Surveys Completed Following Each Contact in Multi-Contact Approach

Day	E-mails Sent	Surveys Completed	Participation Rate
Day 1 – July 9	930	16	2%
Day 8 - July 17	914	141	15%
Day 21 – July 30	769	75	10%
Day 35 – August 13	694	68	10%

Note. This information was retrieved from the “sent items report” in QuestionPro.

Focus groups. The exploratory nature of the research questions prompted me to include focus groups, or group interviews, as a method of data collection (Krueger & Casey, 2000). This socially oriented method expedited synergy amongst the participants by allowing them to reflect on others’ insights and respond with ideas of their own (Anderson & Kanuka, 2003; Marshall & Rossman, 2010). The focus groups were designed to take place entirely online, which reduced participation and cost barriers

(Anderson & Kanuka, 2003). Participants self-disclosed they joined the focus groups from geographically dispersed locations like Canada, California, Arizona, and Montana, which underscored the fact that time and expense would have prevented our dialogue if not for the format of the online focus group (Anderson & Kanuka, 2003).

I set up and conducted two asynchronous focus groups⁸ through secure, threaded discussion boards hosted by Yuku.com (<http://www.yuku.com>). Yuku's discussion boards offered the best solution to emulate the discussion boards participants used in their online courses at Sendero University. Additionally, Yuku was selected for its:

- reasonable cost (\$24 for two ad-free discussion boards);
- secure, members-only discussion boards;
- ease in customizing the discussion boards to create a professional environment that matched the visual design of the e-survey; and
- customizable URLs, which personalized the Web presence (i.e., firstgeneration.yuku.com and firstgen.yuku.com).

The decision to coordinate two focus groups stemmed from my desire to compare the data to identify trends in participants' perceptions and opinions (Krueger & Casey, 2000; Marshall & Rossman, 2010). Finally, by setting up asynchronous discussions, participants were able to log in and comment at their convenience, such as a 23-year old

⁸ Because online focus groups are relatively new to qualitative research, and because I envisioned a particular type of focus group that would emulate a component of the participants' online learning environment (i.e., discussion boards), the literature to guide my process was relatively thin (e.g., Deggs, Grover, & Kacirek, 2010; Hansen & Hansen, 2006). Online focus groups have been critiqued for fragmented discussions, lack of interaction among participants, and the inability to freely pose questions (Anderson & Kanuka, 2003; Reid & Reid, 2005). To offset these concerns, I used experimental approaches in my focus group design. Throughout this phase of data collection, I borrowed heavily from the Tailored Design Method to garner trust and convey the perception of high rewards and low costs (Dillman et al., 2006) to focus group participants.

female who discussed the importance of the asynchronous focus group by providing context for one of her responses, which read: “Since I'm posting this at 3:45am it's obvious I keep unusual hours.”

The focus groups contained six threaded discussion forums, or topics, designed to elicit candid responses regarding the case. Each of the topics was framed by questions centering on participants’ preparedness for online learning, their reasons for persistence, familial responses to their matriculation in online degree programs, and details concerning some of their online learning experiences. Focus group questions are located in Appendix F. As with the e-survey, the focus group questions were pilot-tested through fellow doctoral students, first-generation college students uninvolved in the research study, and faculty members; feedback from this panel regarding bias, clarity, and sequence was incorporated into the focus group questions.

Registration procedures were developed to facilitate easy involvement in the focus group. Potential participants received an e-mail invitation, which included a PDF outlining the necessary registration procedures (see Appendix E). Participants were required to navigate a self-guided registration process that entailed first registering with Yuku.com and selecting an alias, followed by posting an introductory response to the check-in forum to “reserve their space” in the focus group. Registration occurred a few days prior to the start of each focus group to allow time to recruit additional participants, if needed, to reach a minimum of eight participants per focus group (Anderson & Kanuka, 2003; Hansen & Hansen, 2006). All focus group questions were visible, but locked, during the registration period, with the intent of providing participants time to reflect on the topics that would be explored once the discussion forums were unlocked.

Strategies to improve focus group participation. Given scholarly warnings about low response and participation rates in online focus groups (Anderson & Kanuka, 2003; Deggs, Grover, & Kacirek, 2010; Hansen & Hansen, 2006), I decided to use a three-pronged, experimental approach to mitigate the shortcomings related to this method of data collection.

First, I attempted to reduce the costs of participation (Dillman et al., 2006) by limiting the focus group to three days, rather than three months (Anderson & Kanuka, 2003), or six weeks (Deggs et al., 2010). I expected opting in favor of a shorter window for compulsory participation would convey a seemingly easier commitment, thus boosting response rates. In addition, I anticipated participants would log in at the same time, or shortly after one another, which would encourage them to dialogue with each other rather than with me.

Second, I clearly communicated expectations for focus group participation by posting a reminder at the top of the discussion forums; this same reminder was also included in the e-mails launching and closing the focus groups (see Appendix E). The reminder gently advised participants to log in to the focus group each day and to respond to one another's posts.

My third experiment related to moderating the focus groups. I put forth every effort to be genuinely present in the discussion forums, in order to actively guide the dialogue without compromising participants' exchanges by being *too* present. For example, I responded to each of the introductory postings within the check-in forums, modeling the behavior I hoped to see upon unlocking the focus group forums. I anticipated that my cordial responses would aid in establishing the tone for a lively

exchange, thereby creating a comfortable environment that encouraged full participation. These strategies generated a positive impact, as both focus groups produced a 100% participation to completion rate. More information pertaining to participant involvement is detailed in the following section.

Focus group participation. Purposeful sampling, a strategy to identify “information-rich cases whose study will illuminate the questions under study” (Patton, 2002, p. 230), was utilized to identify focus group participants from those survey participants who indicated their willingness to continue participating in the study. While purposeful sampling is viewed as bias in statistical sampling, in qualitative sampling it is a strength in that it leads to insights and in-depth understandings central to the purpose of the inquiry (Patton, 2002). Purposeful sampling was appropriate for this inquiry since I desired to “understand the particular in depth” rather than “find out what is generally true of the many” (Merriam, 1998, p. 208).

Through purposeful sampling I drew a nonrandom sample of 60 total individuals to participate in the focus groups. I attempted to balance the gender, academic level, age, and ethnicity of the cases to construct a demographic representative of the larger sample. Although I initially thought contacting 60 potential participants was unnecessary, the literature indicated response rates for online focus groups would likely be low (Anderson & Kanuka, 2003; Deggs et al., 2010; Hansen & Hansen, 2006), therefore necessitating a broader net.

I sent e-mail invitations requesting participation in the first focus group, which was to be conducted entirely online from August 20 to August 22, 2012, to 30 individuals. Two days later, I made follow-up phone calls to participants who initially

abstained from responding to my e-mail invitation⁹. The invitation round for the first focus group received a 53% response rate ($n = 16$). Given the success of the invitation round for the first focus group, I implemented the same procedures with the second focus group, which was to be conducted entirely online between August 26 and August 28, 2012. The second focus group received a 33% response rate ($n = 10$).

Although it was expected that a sizable percentage of the focus group participants ($n = 26$) would not be retained (Anderson & Kanuka, 2003; Hansen & Hansen, 2006; Deggs et al., 2010), both of the focus groups boasted a 100% participation to completion rate, which undoubtedly stemmed from employing the three-pronged, experimental approach to improve participation rates discussed in an earlier section of this chapter.

Participant dialogue was quite active during each focus group, generating a total of 536 posts¹⁰, with 379 posts in the first focus group and 157 posts in the second focus group. Participant involvement ranged from as few as five posts to as many as 55 posts and averaged 15 posts per participant. Participants' focus group responses averaged 187 words per post, ranging from nine words to 995 words. Table 4 displays the number of page views and posts for each day the focus groups were open. The first focus group demonstrated high activity in the first two days the topics were unlocked. I suspect this related to the timing of the focus group, which occurred four days prior to the start of the

⁹ Phone numbers were collected through an e-survey question related to continued participation in the study. Not everyone provided a phone number for contact purposes.

¹⁰ I actively moderated each focus group, probing participants for greater depth and insight into this inquiry. As a result, I wrote 27% of the 536 posts. A number of my posts were made during the registration phases, when I personally responded to each focus group participant and expressed appreciation for their (future) involvement. My total time commitment for the first focus group was 18 hours, which included time spent reading each post and responding to select posts with probing questions. Since there were fewer participants in second focus group, my time commitment was reduced to 10 hours.

Table 4

Page Views and Posts Made During Online Focus Groups

Day/Activity	First Group		Second Group	
	New Posts	Page Views	New Posts	Page Views
Day 1, registration	5	50	1	9
Day 2, registration	9	100	0	10
Day 3, registration	10	131	6	60
Day 4, registration	8	194	7	127
Day 5, focus group	135	1106	26	183
Day 6, focus group	126	1013	39	353
Day 7, focus group	81	625	78	1011

Note. Information retrieved from my Yuku administrative dashboard, stats section.

participants' fall semester and therefore did not compete with participants' classes. On the other hand, the second focus group occurred two days after the fall semester commenced, which negatively impacted the response rate and often delayed participant involvement to the last day, since participants needed to balance the research request with the demands of their online courses. Even so, I did not feel the delayed exchange in the second focus group diminished the quality of the data gathered.

Interviews. I approached the interviews as conversations with a purpose (Patton, 2002), where I guided the conversation to co-construct meaning with the participants (Kvale & Brinkmann, 2009; Lincoln & Guba, 1985) to capture the perspectives of double first-generation college students. As with the focus groups, I deemed it important to privilege the participants' perspectives. The interviews were semi-structured based on an interview protocol that focused the conversation and facilitated comparisons during analysis (Kvale & Brinkmann, 2009; Patton, 2002). The interview protocol was informed by the overarching research questions, the conceptual framework, and the

preliminary themes drawn from both the survey and the focus group responses. The questions delved into the participants' background and familial support for postsecondary education, particularly in an online format, while also extending understanding of how technology impacted learning, students' reasons for persistence, and their hopes for career or academic destinations after graduation. Similar to the e-survey and the focus group, the interview protocol was rigorously reviewed by fellow doctoral students, first-generation college students uninvolved with the study, and faculty members. For the interview protocol, see Appendix H.

The two-part interviews took place on two separate days and at times that were convenient for the participant. Two-part interviews supported the goal of obtaining more in-depth exploration of the participants' perspectives, and this format allowed the opportunity to provide the necessary reflective space for an image exercise accompanying the second interview (discussed in the following section). During the interviews¹¹, I took minimal notes to maintain a comfortable connection with the participant and to focus on guiding the conversation (Glesne & Peshkin, 1992). The notes that were recorded related to follow-up questions or key points I intended to reference later in the conversation (Lincoln & Guba, 1985). During this phase of data collection, I practiced the art of asking gentle probing questions to prompt elaboration

¹¹ I conducted all interviews using Skype (<http://www.skype.com>), software that allowed me to make audio calls over the internet. I used a Clear One USB speakerphone and a hard-wired internet connection to achieve a greater likelihood of uninterrupted, crystal-clear audio in my connection. Two participants requested a Skype-to-Skype connection; all others were reached on their home or cell phone via my Skype call. After receiving verbal consent from each participant, I recorded each interview using Pamela Professional (<http://www.pamela.biz>), a Skype-certified recording tool, and a standalone Edirol digital recorder. This redundancy in recordings ensured the capture of at least one audio file (.mp3), which helped when technology glitches related to one medium or the other either prevented clear recordings or prevented recordings altogether.

through longer narratives (Marshall & Rossman, 2010). I also practiced active, empathetic listening and allowed extended pauses, to provide participants time to gather their thoughts (Kvale & Brinkman, 2009). Immediately after each interview I composed analytic memos to capture key ideas and interpretive thoughts about the conversation (Stake, 2008; Lincoln & Guba, 1985).

Image exercise. The method of requesting images as a source of data was in response to Fischman's (2001) call to "use visual sources of data ... to advance our knowledge about old and new topics in educational research" (p. 31). Following Fischman's (2012) model, I asked participants for their willingness to collaborate in this educational research by submitting two personally meaningful images that would prompt and facilitate discussion in the second interview. Participants were instructed to attain one image depicting that which encouraged their persistence in obtaining an online degree, and acquire another image to represent anything that might discourage achieving this academic goal (see complete instructions in Appendix G). All of the interview participants agreed to contribute, and e-mailed their images to me with the following labels: "encourage.jpg" and "discourage.jpg." The participants' images are located in Appendix I.

This exercise was intended to encourage participants to reach "beneath the surface" and discuss topics that might otherwise have been left unsaid (Charmaz & Belgrave, 2012). During each interview, I attempted to make it easier for participants to share their perspectives by shifting attention away from the participant and instead emphasizing uncovering the details found within the images. Fischman (2012) explained that "requesting images that have personal significance can effectively aid in the

development of a research narrative or inquiry line by providing clues, fragments of memories, meanings and connections which could be recovered through processes of subjective exploration” (p. 5). The images selected by the interview participants, therefore, carried meaning, helped to clarify participant perspectives, and offered the opportunity to paint a more complete understanding of the case (Fischman, 2001).

Interview participation. Between September 18 and October 31, after the first two phases of data collection passed, interviews were conducted. This provided time to refine the interview protocol using previously collected data. From survey participants who indicated willingness to continue participating in the study, I drew a purposeful sample of 25 individuals to form the interview participant pool. I once again attempted to balance the gender, academic level, age, and ethnicity of the cases to be representative of the demographics of the larger sample. Potential participants received an e-mail invitation to interview, as documented in Appendix G.

I initially aimed for a minimum of 10 interview participants, but since information redundancy was not realized with 10 interviews, I recruited two more participants and achieved saturation (Merriam, 1998). The two-part interviews held a 52% response rate and a 92% completion rate ($n = 12$). One individual did not respond to my request for the second part of the two-part interview, likely due to technology barriers that significantly diminished the quality of our first exchange. The two-part interviews averaged 49 minutes in length, and ranged from 35 minutes to 94 minutes in length.

The interview audio files were transcribed by a professional transcription service in November 2012 to maintain an expedient timeline for analysis and interpretation. I requested the .mp3 files be transcribed non-strict verbatim, which eliminated false starts

and utterances like “umm,” “you know,” and “uh huhs” in the transcripts. This decision was a cost-saving mechanism, as verbatim transcription would have exceeded my budget. To ensure accuracy and to accommodate for any potential loss that might have occurred as a result of my decision, I carefully reviewed each transcript against both its respective recording and my analytic memos, modifying the transcripts as necessary to add pauses, laughter, or utterances integral to the exchange.

Institutional data and document review. I collected supplementary information in the form of institutional data and webpages to support this study. Marshall and Rossman (2010) explained that “history and context surrounding a specific setting comes, in part, from reviewing documents” (p. 107). To arrive at that context, I requested institutional data from Sendero University’s Office of Institutional Analysis, which helped me to conceptualize this case study. I used the institutional data to understand the context wherein the phenomenon of double first-generation college students exists (e.g., enrollment numbers for the online campus, percentage of first-generation college students enrolled, and comparisons to ground-based majors, retention of students).

Additionally, I conducted a document review of pages on Sendero University’s website (e.g., library, online tutoring, bookstore, career services, disability resources, military/veteran services, and technical support) that were provided with the intent of offering academic and community support for students enrolled in online degree programs. I also examined Sendero University’s affiliated social media sites, such as Facebook and Twitter, to understand how double first-generation students might interact with such community networks.

Institutional data and document review, all of which was collected through unobtrusive research (Marshall & Rossman, 2010; Whitt, 2001) occurring throughout the study as indicated in Table 2, enabled expansion of the case with contextual information by providing a more particular and detailed overview of the student services available to the study's participants.

Data Management

As I prepared my IRB application, I initiated the process of data management by strategizing the most efficient and secure methods to ensure the integrity of the research while protecting participants' personal information. The contact list provided by the Office of Institutional Analysis, which included the names and e-mail addresses of all potential participants, and all other electronic files associated with this research (i.e., .xls, .doc, .mp3, .jpg, and .mx4), were saved to a password-protected folder on a server professionally managed by the university where I am employed. The university server automatically encrypted and backed up files several times per day, providing for the possibility of recovering files, if necessary. I also retained working copies of the files on the university-provided work computer that also doubled for my research activities; these files were only accessible through my university login credentials.

There were brief times when the data was not stored on the university server, such as when the data was collected through online mediums. For example, the survey data was stored on QuestionPro's encrypted server during the 40 days the e-survey remained open; however, this survey data was only accessible with my login credentials, and after the e-survey closed, the survey data was exported to an Excel file (.xls). Similarly, when the focus groups were underway, the data was hosted on Yuku's servers. I adjusted the

settings of each discussion forum when the focus group forums were unlocked by restricting access only to registered, approved members (i.e., focus group participants), and immediately after closing each focus group forum, I copied and pasted the data into a Word document (.doc). Interview audio files (.mp3) were securely uploaded to a professional transcription service's website to be transcribed, resulting in several exportable Word documents (.doc) only available through my unique login credentials.

I utilized MAXQDA, qualitative data analysis software, to assist with data and project management. MAXQDA was recommended by Creswell (2009), and was selected for this research project after I attended a week-long MAXQDA seminar presented by Wutich (2012). Upon uploading my empirical data into MAXQDA, it became part of an internal database (Lewins & Silver, 2007) that automatically saved any actions I performed. In the event I needed to return to an earlier point in my analysis, I created redundancy by backing up the .mx4 file daily (Wutich, 2012). The database retained three document sets (i.e., survey, focus groups, and interviews), populated with data corresponding to individual cases, or double first-generation college students, which were assigned alphanumeric codes¹² to protect participants' privacy and confidentiality.

Despite the fact that some contend software commands no place in qualitative data analysis, I found the technology improved, though did not guarantee, the rigor of coding and analysis (Bazeley, 2010; Lewins & Silver, 2007; Seale & Rivas, 2012). Not

¹² I designed the codes to contain cues for gender, age, and major. For example, in the survey data, 4733717-M42-SOC signified a 42-year old male majoring in sociology. The first segment, 4733717, is the respondent ID randomly assigned by QuestionPro. Since the focus groups and interviews contained multiple speakers, I created code labels for each speaker, which were then applied to their respective data segments. The participants' pseudonyms became the code labels (e.g., Kendra-4778441-F34-BLS signified a female named "Kendra" who was 34 years old and majoring in liberal studies). My document naming and coding conventions allowed me to efficiently retrieve data so that I could follow an individual from the survey to his/her focus group or interview, to create thorough picture of each case.

only did MAXQDA assist me in establishing an audit trail, or transparent record and description of the research path (Miles & Huberman, 2004; Patton, 2002), but it also allowed me to separately identify, on the same passage, a range of codes. Immediately upon manually coding the data in MAXQDA “almost limitless possibilities for review, sorting, sifting, combination, and comparison of text segments [became] available” (Bazeley, 2010, p. 435) without losing the original source context. MAXQDA was the tool, not the method, for data analysis and project management.

Data Analysis

My data analysis toolkit was filled with systematic procedures drawn from the tradition of grounded theory, which is an inductive, comparative, iterative, and interactive method “grounded” in the data (Charmaz, 2006). I approached data analysis with the understanding that grounded theory techniques ideally led to substantive, conceptual understanding (Charmaz & Belgrave, 2012), and not to descriptive findings. Charmaz and Belgrave (2012) argued that “the power of grounded theory lies in its integration of data collection and increasingly more abstract levels of analysis” (p. 348), and this aspect of grounded theory analysis required that I stay as close to the participants’ narratives as possible by deeply immersing myself in the data when the e-survey was launched and continuing this immersion through the final report. As Peshkin and Glesne (1992) argued, data analysis was underway even before data collection began, given that I used a ground theory approach to inform and focus my data collection strategies. Throughout this research project, I journeyed back and forth between data collection and analysis to “extend and refine ... emerging analytic categories” (Charmaz & Belgrave, 2012, p. 348).

Methods for qualitative analysis. Qualitative analysis tools were needed to analyze the responses provided by double first-generation college students to open-ended questions in the e-survey, as well as to formulate an understanding of the social exchanges comprising the focus groups and the interviews. I aimed to accurately and genuinely portray the experiences of double first-generation college students and to amplify and bolster their voices via this research study. To meet these goals, it was crucial to gain intimate knowledge of the case, and as such, it was essential to read and re-read the data as amassed during each phase of data collection. While I read, I composed preliminary notes focusing on patterns in the data, and I also tracked topics for further exploration. These notes were reviewed and incorporated into the focus group and/or interview questions. While interviewing participants, I recorded nearly 12 hours of .mp3 audio; all of which I listened to with the purpose of verifying the accuracy of the transcripts in an attempt to capture the subtle nuances of an otherwise textual case.

Shortly after each phase of data collection was complete, I uploaded the data to MAXQDA and manually coded it, starting with the survey responses in September 2012, moving to the focus group transcripts in October 2012, and finishing with the interview transcripts in January 2013. Although coding was not my primary research activity during this period, I was unprepared for the significant investment of time needed to complete this phase of the research study. By engaging in periodic breaks, I was able to maintain my focus, reflect on the emergent themes, and consider those themes in relation to the conceptual framework guiding the research with the aim of refining my analysis to elicit greater meaning to the case (Merriam, 1998) when I returned to codifying the project (Saldaña, 2009).

While meticulously coding the qualitative data, I followed Saldaña's (2009) approach, as detailed in *The Coding Manual for Qualitative Researchers*. Codes are words or phrases assigning a desired attribute to a portion of data; they can be applied to a single word, a sentence, or a paragraph (Saldaña, 2009). I primarily used the following three types of codes to summarize and condense the data:

- Descriptive codes – short phrases to summarize the data;
- Structural codes – codes signifying speakers or responses to specific questions in the survey, focus groups, and interviews; and
- In vivo codes – descriptive expressions provided by participants themselves (Saldaña, 2009).

I coded only what I saw as “complete thoughts,” yet which could encompass a sentence, a few sentences, or an entire paragraph. Some portions of data were characterized by overlapping codes, which Saldaña described as “simultaneous coding.”

Coding was viewed as a transitional step to move from merely describing the case to conceptualizing that description (Charmaz & Belgrave, 2012). Coding occurred in cycles; the first cycle was marked by open coding, where I looked for emergent patterns in the data, as well as for key quotes and metaphors. During the first cycle of coding, I tentatively mapped out categories and subcategories (Saldaña, 2009), to allow the data to speak for itself in response to the study's research questions and conceptual framework (Miles & Huberman, 1994). I also annotated the data and wrote analytic memos to document my reflections and recommendations for future consideration. The preliminary codes and categories were refined in subsequent cycles of analysis (Saldaña, 2009), and

with each successive cycle, I compared data with data, data with category, and category with category until themes emerged (Glaser, 1992).

A codebook was created by drafting memos containing each code, its content description, and exemplars guiding its usage (Saldaña, 2009; Wutich, 2012). The codebook assisted me in the process of maintaining consistency while coding, in light of the fact that my analysis was “cumulative rather than a one-stage process,” and because “the meaning and application of codes [changed] over time” (Lewins & Silver, 2007, p. 145). Building the codebook prompted me to assume a reflexive stance and reminded me that my role as a researcher was not neutral (Lather, 1986; Lewins & Silver, 2007; Lincoln & Guba, 1985; Merriam, 1998). The codebook became a vital component of the audit trail for the research (Miles & Huberman, 2004; Patton, 2002). Table 5 contains an excerpt from the codebook.

One of the most significant benefits to using MAXQDA to help manage the coding process was that I could quickly retrieve coded segments to see the data in new ways, which contributed to building, understanding, and refining the case (Bazeley, 2010). At a basic level, MAXQDA’s retrieval functions supplied counts of the code frequencies, while more advanced retrieval functions supported higher levels of analysis by amalgamating similar data so I could distinguish more conceptual and abstract levels (Lewins & Silver, 2007). For example, because I attached variables (e.g., parental education levels, age, and gender) to the codes and documents that represented each case, I was then able to cut across the dataset using different approaches, such as comparison and contrast of responses from particular groups of participants (e.g., females, individuals over 55 years old, juniors) to test for variation.

Table 5

Excerpt from Codebook Developed During Inductive Qualitative Analysis

Code	Content Description and Exemplar
Flexibility	In vivo code describing the convenience of attending classes according to the student's schedule. This code was applied when participants discussed relative freedom from a rigid academic schedule or class times.
Overcome Place-Based Barriers	Represented instances where students discussed how attending school online enabled them to handle employment, personal disability, caring for dependents, or living in a remote location.
Postsecondary Promises	Represented the unfettered belief that education opens doors to better career opportunities and upward mobility. Examples included participants discussing education in relation to making a better life for themselves, furthering their careers, or increasing their earning potential.
Balancing Time	In vivo code representing challenges associated with simultaneously fulfilling multiple daily roles. Code was applied in relation to data that indicated participant tensions associated with academics and family and/or employment.
Missing Face-to-Face Interaction	Described the loss of physical contact with instructors and students, which diminished learning in some instances. Examples included comparisons to traditional instruction (lack of spontaneous debate/learning or immediate feedback) and the inability to develop deep academic or personal relationships.
Limited Interaction With Faculty	Inability to easily access faculty to seek help or receive feedback. Included situations where participants spoke of self-instruction as a drawback or struggled with the inability to interact one-on-one with faculty members.
Financial Concerns	Represented <i>general</i> concerns associated with paying for online education. Did not include specific examples such as pointing to unreasonable costs, resisting student loans, or expressing doubt about repaying student loans.

Methods for quantitative descriptive analysis. Even though this research emphasized qualitative methods, it also included descriptive statistics related to demographic variables, such as ethnicity, age, and gender. These variables were gathered through the e-survey administered through QuestionPro. While I analyzed response rates for each e-survey question as calculated by QuestionPro, I nonetheless exported demographic variables into a working file via Microsoft Excel for further analysis. Excel was used to quantify and provide summary descriptive statistics for the demographic portions of the survey instrument. I calculated percentages, averages, and ranges, as applicable to each question. The descriptive analyses of the e-survey data provided context for the case study by painting a picture of the individuals who are double first-generation college students at Sendero University. These findings will be discussed in Chapter 4.

Validity. To increase validity, and therefore strengthen the interpretations and inferences of my research, I used triangulation, or the “act of bringing more than one source of data to bear on a single point” (Marshall & Rossman, 2010, p. 202), to demonstrate my research findings were based on a disciplined approach and not simply matters of intuition, good intention, or common sense (Stake, 1995). As Merriam (1998) suggested, different data sources were used to corroborate my preliminary findings. This process involved comparing narratives within the same and different modes of data collection to confirm the data sources (e.g., e-survey, focus group, or interview narratives) overlapped with one another. Eventually, I developed themes in response to the research questions, and I quantified the frequency of the coded segments to numerically support these themes (Miles & Huberman, 1994).

I extended my analysis through Wordle (<http://www.wordle.net>), a supplementary web-based tool used to validate emergent themes. Coded segments supporting each theme were imported into Wordle, which then outputted fabricated word clouds to visualize patterns in the data. The Wordles, or word clouds, revealed word frequency information via font size (Viégas, Wattenberg, & Feinberg, 2009) and enabled me to comprehend the data in new ways. In one instance, comparing two Wordles illuminated the corresponding themes as significantly overlapping one another, which prompted me to combine them. I will present a few of the Wordles in Chapter 4.

I also triangulated the data through a visual, web-based display I created using Lucidchart (<https://www.lucidchart.com>), a free, user-friendly application combining features similar to those found in Microsoft Excel, Microsoft Visio, and Prezi. The Lucidchart designed for this study visually presented each of the research questions under four separate tabs. For each question, I created three columns to: (a) list each identified theme, (b) provide key examples (e.g., data, charts, graphs) from the data corpus supporting each theme, and (c) cite literature to substantiate the theme. This method not only refined my conceptual understanding of the case, but also provided a visual collaboration tool I shared with two first-generation college students who studied online but were not a part of the study, two doctoral-student peers, and two faculty members, who served to check and challenge my interpretation of the data (Creswell, 2009).

Member checks, which enhance the validity of the case (Creswell, 2009) by involving the study's participants to verify the accuracy and interpretation of data, were incorporated into the last two phases of data collection to help triangulate the data. For the focus groups, I set up the discussion board to allow participants the ability to edit

their responses, which occurred in several instances, as noted by responses marked “edited by user at [date and time].” During the interviews, participants were regularly invited to clarify or expand upon earlier responses after having been prompted by probing questions or during free-response times at the beginning and end of each interview. Since these were two-part interviews, I reviewed data collected during the first interview before conducting the second one, thereby enabling me to identify areas needing clarification or further exploration.

Because this study examined multiple cases, and since more than one data-gathering method was utilized, the findings may have usefulness in other settings (Marshall & Rossman, 2010; Stake, 2008). This should not be confused with the generalizability of the case. As will be discussed in later chapters, the findings are specific to a particular place, time, and population. I used thick description (Geertz, 1973) to describe the case of double first-generation college students at Sendero University in sufficient detail; consequently, readers can determine the extent to which conclusions might be applied to other cases.

Presenting the data. Miles and Huberman (1994) described an integral component of data analysis as the creation of data displays that compress and condense information to “permit conclusion drawing and action” (p. 11). Although the most common data display is narrative text, such a display can be cumbersome in comparison to alternative displays like graphs, charts, and matrices (Miles & Huberman, 1994). As I considered the best approach to present the data, I recalled that researchers “know what [they] display” (Miles & Huberman, 1994, p. 11). Since creative approaches are not only acceptable, but encouraged in data displays, I built “systematic, powerful displays”

(Miles and Huberman, 1994, p. 22) to help present the case of double first-generation college students.

Conceiving a way to present the data proved to be one of the most difficult tasks in this research study in that it demanded drawing out only the best quotes from several hundred pages of data, distilling months of memoing, and discussing emergent themes in light of the published literature, all by way of an accessible and useful narrative (Charmaz, 2006). I included participant quotations to illustrate themes, but the emphasis focused on a conceptual analysis of the material, rather than a presentation of of participants' narratives as entire cases. Charmaz and Belgrave (2012) clarified that “during data collection, ... participants take precedence. When analyzing data and presenting findings, the researcher’s emerging theoretical categories take precedence” (p. 362). Evidence of my approach to presenting the data is located in Chapter 4.

Researcher’s Perspective

The researcher’s orientation should not be taken for granted in a research study emphasizing qualitative methods (Rust, 2003). Before moving on to the research findings, which are presented in Chapter 4, readers should be aware of my background as a first-generation college graduate and as an academic advisor at Sendero University. I acknowledge any bias I may have unwittingly introduced into this study. I am inherently an insider by origin and life experience, a factor that could have affected this study whether or not I tried to suppress it. This should not diminish the contributions of this study, as all inquiry has some inherent bias when researchers make deliberate decisions regarding their topics, their theoretical positions, where to conduct their research, and who to include as participants (Lincoln & Guba, 1985; Smith, 1986).

I came to this study through my personal, academic, and professional experiences, which will be briefly described in this section. I grew up in a rural community (population 400) located in the farmlands of central North Dakota. In my large, working-class family, schooling fell second to the demands of the farm (i.e., milking dairy cows, tending beef cattle, and planting or harvesting crops). My parents both completed high school, and expected their children to do the same. They were indifferent to the pursuit of a postsecondary education, but were clear that my siblings and I needed to leave their home immediately upon earning our high school diplomas¹³. In the spring of my senior year, I nearly signed papers to join the U.S. Coast Guard when, on a whim after the suggestion of a persistent admissions counselor, I applied to a private, liberal arts college through which I was admitted to study vocal performance. Elated, I discovered pursuing a college education could “work” for me through some combination of financial assistance (i.e., an academic scholarship, grants, loans, and a work-study award) I did not fully comprehend; subsequently, I decided to continue my education, rationalizing that it would be easier to go to college than to learn how to swim.

Moving into my unfamiliar, on-campus residence 100 miles away from my home, I found comfort in a work-study job at the dining center, where I washed dishes 20 hours per week. This blue-collar job in a white-collar environment was my respite, a way to ease into an unknown world while still retaining some of my personal and family values. Midway through the fall semester, it became evident I was not socially or emotionally

¹³ My parents raised 10 children (two boys and eight girls). The eldest is 15 years older than the youngest. I am the middle child, or the fifth born. Our education levels are as follows: two earned high school diplomas, two hold associate’s degrees, four earned bachelor’s degrees, one holds a master’s degree, and I will be the first to earn a doctoral degree.

prepared for postsecondary education when I nearly dropped out after a crisis of confidence that was marked by “confusion, conflict, isolation and . . . anguish” (London, 1989). I reluctantly returned for a second semester after a pivotal conversation with an upper-classman about the merit of completing college as compared to dropping out in pursuit of blue-collar work. That semester I was validated (Rendón, 1994) as a member of the elite college choir, and was selected as a resident advisor for on-campus housing, affirmations which allowed me to launch my sophomore year of college with newfound confidence. I finally believed I was capable of obtaining my bachelor’s degree.

I discovered my academic achievements would distance me from my once-familiar past (London, 1989). On the day of my college graduation, I hopefully scanned the crowd, looking for my family, and I quickly realized I would be standing without family support to deliver the commencement speech, sing the alma mater, and receive my diploma. It was not a joyful day, but one of loss and isolation that stood in stark contrast against my transition to college four years prior. I realized then that I had become a “straddler” (Lubrano, 2005), at home neither in the working-class family where I was raised, nor in the sea of college graduates who marched toward a white-collar world. This tension has yet to be resolved, but is easier to manage today than at my graduation 13 years ago.

In addition to my first-generation college student status, I am also directly involved in facilitating the success of students in online degree programs at the research site. Since December 2011, I have been employed full time as academic advisor in two of Sendero University’s online degree programs. In this role, I regularly communicate with undergraduate students to suggest courses, interpret university policy, and strategize

academic plans. I am not in a position of power, but act as a collaborative partner in each student's academic journey. Though I considered excluding students who were part of my caseload, I decided against it since the established relationship was not perceived to have the ability to negatively affect the research. In full disclosure, the e-survey was completed anonymously, so I possessed no way to gauge who was or was not a student I advise. After I purposefully selected participants for the focus groups and interviews, I recognized e-mail addresses for two of the participants as belonging to my advisees; however, neither participant acknowledged our professional relationship during the study.

While my origin and life experience fueled my interest in studying double first-generation college students, it was important to acknowledge my positionality and how it might have influenced my role as the primary research instrument. I assumed a reflexive stance to address this bias, making “clear not only my own assumptions but how these assumptions frame[d] my undertaking” (Tierney, 1998, p. 54) by disclosing to readers where “the [researcher] and the subject [became] joined” (Peshkin, 1988, p. 17). I continually challenged the biases I carried into the research process through self-awareness and self-monitoring (Glesne & Peshkin, 1992).

Keeping with my commitment to e-research, I recorded my reflections in an online, password-protected reflexivity journal (Lincoln & Guba, 1985) hosted by Tumblr (<https://www.tumblr.com>). My reflexivity journal spanned the entire research project (see Table 2), adding to its audit trail. In addition, I systematically conducted subjectivity audits (Peshkin, 1988) by engaging in critical conversation with doctoral-student peers uninvolved with the study, and throughout the study, “[I attended] to my subjectivity in a

meaningful way” (Peshkin, 1988, p. 17) to honor the voices and perspectives of double first-generation college students.

Summary

This research was designed as a case study drawing upon multiple methods to examine the experiences of double first-generation college students persisting at Sendero University. Data was collected through e-research, and included an e-survey ($N = 300$), online focus groups ($n = 26$) and interviews ($n = 12$). Grounded theory served as the primary method for data analysis, while descriptive statistics portrayed the context in which the phenomenon occurred. In Chapter 4, I will present the findings to build the case of double first-generation college students.

CHAPTER FOUR

Data and Findings

In this chapter, I present the data to address the research questions guiding this study. The findings are presented in four sections, each corresponding to a specific question. First, I discuss the origins, or characteristics, of double first-generation college students by providing a demographic description of the sample (i.e., survey participants) and the subsamples (i.e., focus group and interview participants). Next, I share the factors prompting double first-generation college students to enroll in online degree programs. The third section relates the factors supporting and challenging double first-generation college students' persistence, while the fourth section details the expectations double first-generation college students hold in regard to their academic or career destinations. I conclude the chapter with a summary of findings to frame the discussion that will take place in Chapter 5.

Participant Characteristics

Descriptive analysis of the quantitative survey data provided context for the study, and also answered the first research question: "What are the 'origins,' or characteristics, of double first-generation college students?" Participants' ($N = 300$) first-generation college student status¹⁴ was confirmed through their parents' highest level of degree attainment. Forty-seven percent ($n = 143$) indicated that their parents obtained no postsecondary experience, while 39% ($n = 116$) acquired some postsecondary education

¹⁴ Status, when used in this sense, is a descriptive term describing the first-generation college student role, especially in comparison to non-first-generation college students (i.e., second generation or more).

but no degree, and 14% ($n = 41$) earned an associate's degree. Table 6 illustrates parental education levels.

Table 6

Participants' Parental Education Levels

Level of Education	Father	Mother	Highest Level
Did not complete high school	21%	15%	10%
High school/GED	43%	45%	37%
Some college	26%	30%	39%
2-year college degree (associate's)	5%	9%	14%
Unknown	5%	0%	0%

Note. Source: Survey.

Gender, age, and race/ethnicity. I examined the variables of gender, age, and race and ethnicity to understand the demographic makeup of the sample. Male participants comprised 24% of the sample ($n = 73$), while nearly three-quarters of participants identified as female ($n = 220$; 73%)¹⁵. These statistics corresponded to national trends, in both higher education and in online education, where females tend to outnumber males (Doyle, 2009; Kramarae, 2003). Participants ranged in age from 21 to 82 years old, and the average age was 35. Most participants were between 25 and 34 years old ($n = 139$; 46%), and those aged 25 and older comprised 89% of the sample as illustrated in Figure 1. Comparatively, enrollment in U.S. online degree programs has been dominated by individuals aged 25 years and older (Garrett, 2011); the average age of online students is 29 (Doyle, 2009). Additionally, the NCES (2012) reported that 38%

¹⁵ Six participants (3%) did not respond to this question.

of the nearly 18 million students enrolled in U.S. postsecondary education were more than 25 years of age, while 25% were over 30.

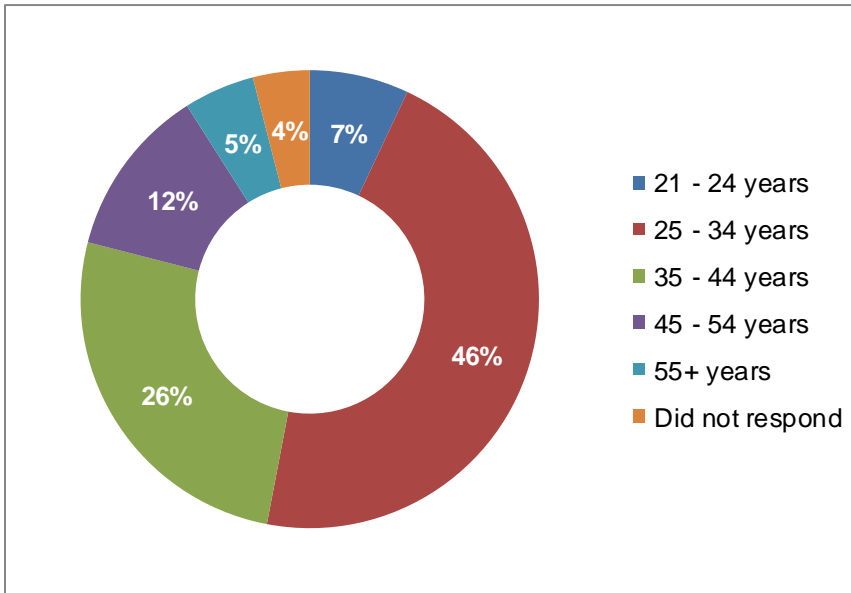


Figure 1. Participants' ages. Source: Survey.

Participants' racial and ethnic diversity was representative of the undergraduate enrollment at Sendero University. A majority identified as Caucasian ($n = 204$; 68%), while minorities comprised 29% of the sample ($n = 87$), as depicted in Figure 2.

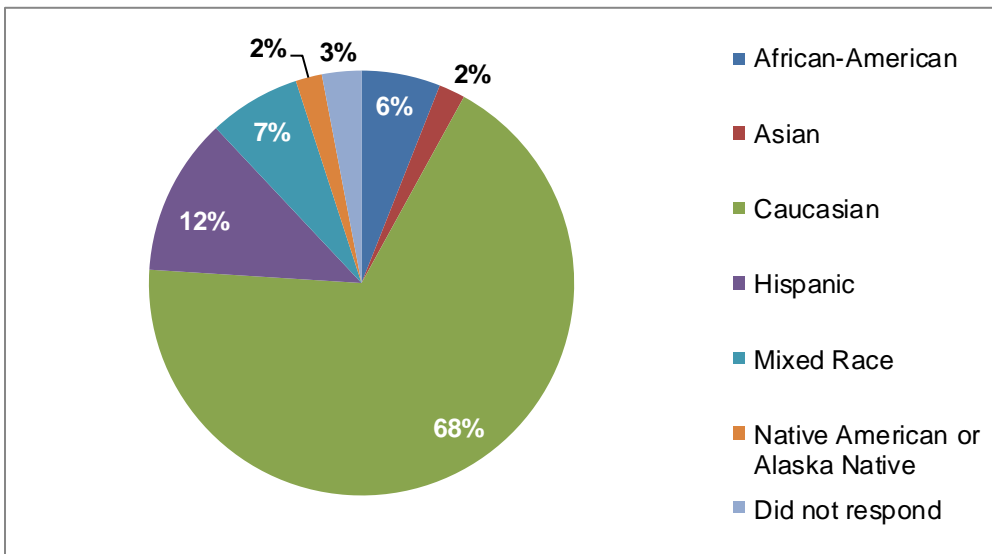


Figure 2. Participants' racial and ethnic diversity. Source: Survey.

Academic profile. Participants were freshmen, sophomores, juniors, and seniors classified as degree-seeking, first-generation college students at Sendero University. As indicated in Figure 3, an overwhelming majority were juniors ($n = 108$; 36%) or seniors ($n = 172$; 57%), and only 6% of participants were freshmen or sophomores ($n = 16$). Few participants reported earning all of their credits at Sendero University ($n = 29$; 10%); commonly, participants transferred in to Sendero University ($n = 269$; 90%), arriving as sophomores ($n = 79$; 26%), juniors ($n = 147$; 49%), or seniors ($n = 28$; 9%). The number of credits participants transferred to Sendero University is depicted in Figure 4. Generally, participants were more likely to be juniors or seniors who transferred from another institution; hence, findings from this study will expand the first-generation college student literature, which tends to focus solely on the freshmen year (e.g., Bergerson, 2007; Pike & Kuh, 2005; Stuber, 2011; Terenzini et al., 1994).

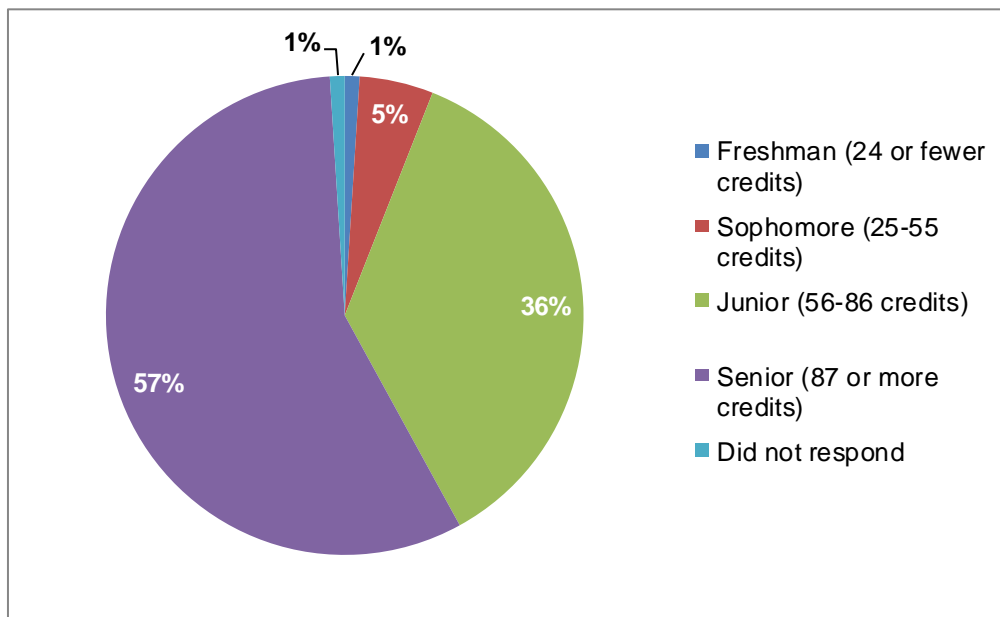


Figure 3. Participants' academic levels. Source: Survey.

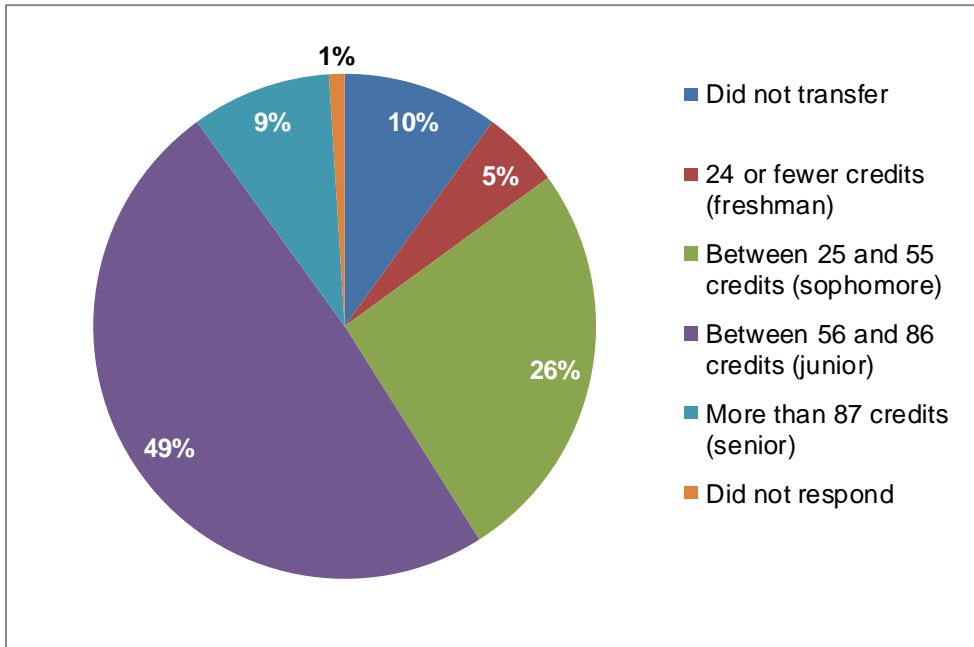


Figure 4. Number of credits participants transferred in to Sendero University. Source: Survey.

In this study, psychology ($n = 45$; 15%), criminal justice ($n = 35$; 12%), liberal studies ($n = 35$; 12%), and sociology ($n = 29$; 10%) were the most popular majors (see Figure 5). Given that online degree programs at Sendero University are rooted in the social sciences (e.g., psychology, criminal justice, and family and human development), this was expected, although there were a few notable exceptions, including majors in both nursing and internet and web development. The prevalence of social sciences majors is not specific to Sendero University, as this is as common a trend for online education (Garrett, 2011), as it is for U.S. postsecondary education (NCES, 2012). All but one of the participants' majors - liberal studies - was also offered as a ground-based major at Sendero University. The university marketed the liberal studies major as “an ideal program ... for students with many transfer credits” (Sendero University “Online Undergraduate Programs” website, n.d.). Additionally, the liberal studies major

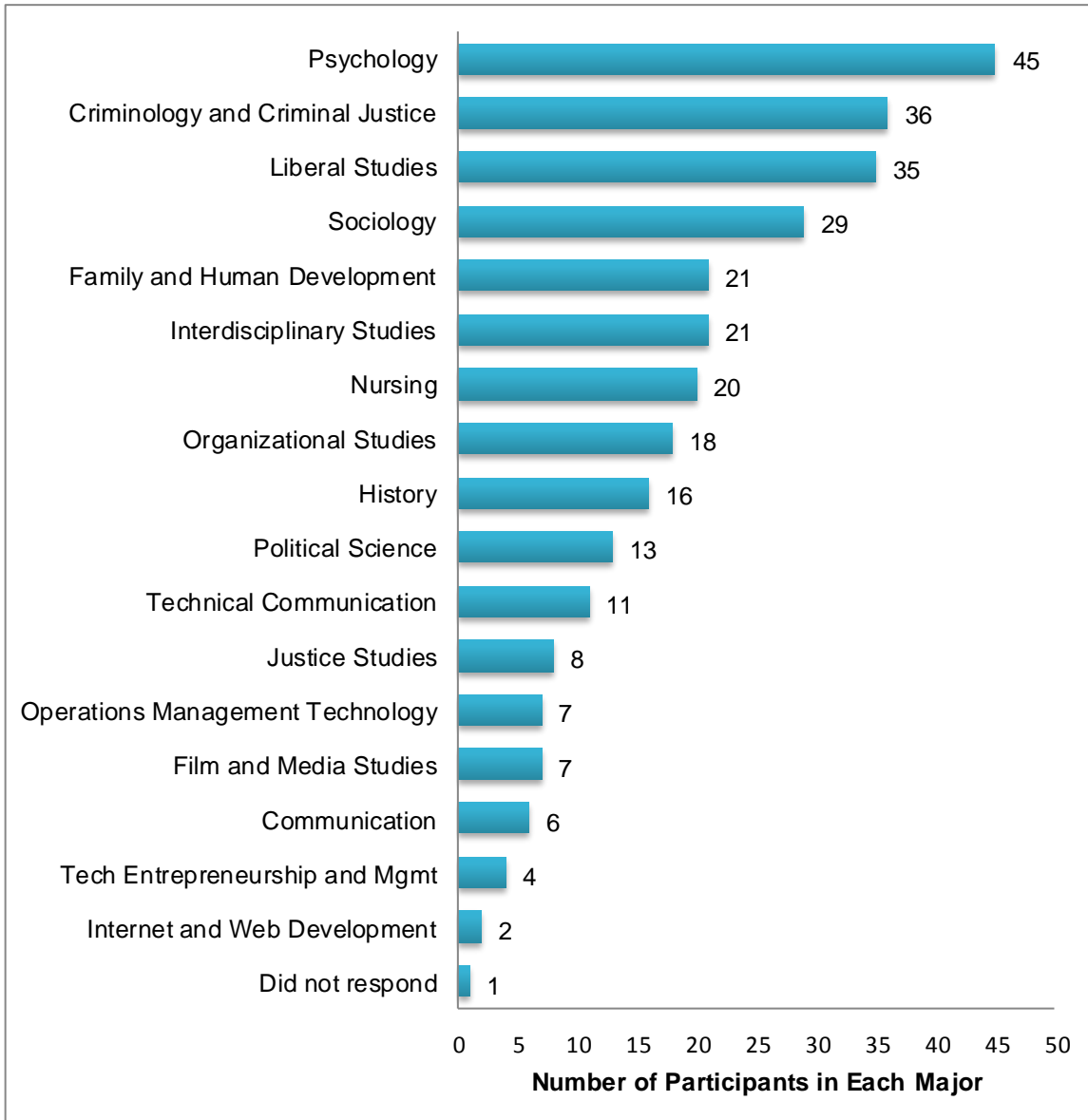


Figure 5. Participants' majors. Source: Survey.

offered the quickest path to degree completion, which was optimal for students who transferred to Sendero University with junior- or senior-level standing.

Non-academic profile. Fifty one percent of the participants resided more than 75 miles away from Sendero University ($n = 153$), while 33% lived within 25-miles of the institution's physical campuses ($n = 99$). This finding nearly replicated Garrett's (2011) research, which indicated 49% of online learners would choose a reputable school or

program regardless of location, while 31% preferred to study at a campus that was within 20 miles of their home. Figure 6 provides a complete overview of the distance of participants' residences from Sendero University.

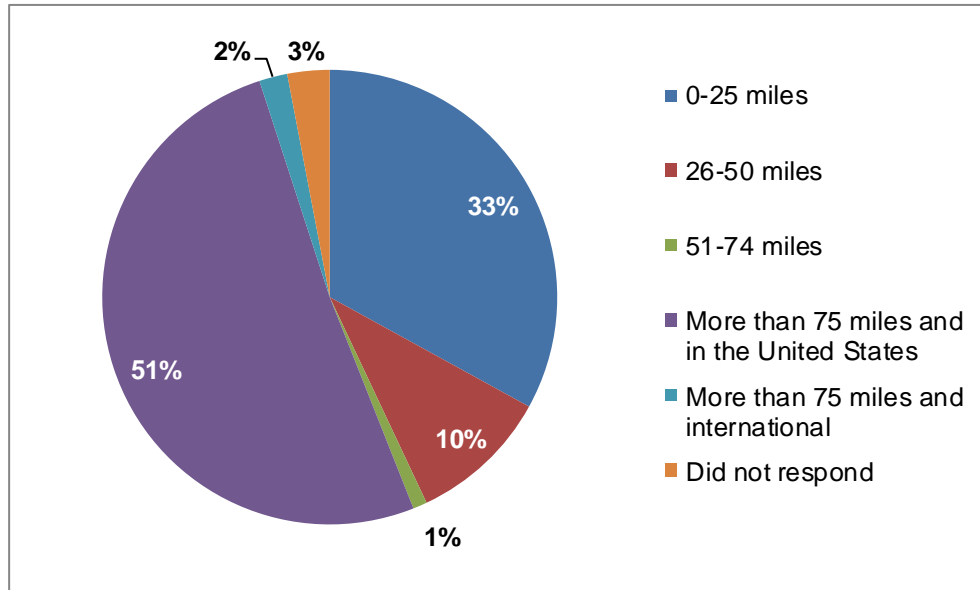


Figure 6. Distance of participants' residences from Sendero University. Source: Survey.

Participants cited the need to balance a variety of roles, in addition to their role as a student, to rationalize enrolling in an online degree program. For example, a vast majority of double first-generation college students were employed while attending Sendero University ($n = 222$; 74%), and of those who were employed, 77% indicated they worked 40 or more hours per week ($n = 172$). Not everyone was employed, however, as Erin¹⁶ pointed out:

Many people assume that if students are in Online college (sic) then they must have a full time job on the side or at least a part time job that doesn't permit them

¹⁶ All participant names are pseudonyms.

to attend traditional college and this isn't always the case (23-year-old white female majoring in organizational studies; focus group).

Twenty four percent of participants were not employed ($n = 73$), as displayed in Figure 7. Forty seven percent of the participants also cared for dependents under the age of 18 ($n = 142$; 47%), as presented in Figure 8, and of those who claimed dependents under the age of 18, most were caring for one ($n = 57$; 40%) or two ($n = 49$; 35%) dependents. Fifty-two percent of participants did not have dependents ($n = 157$).

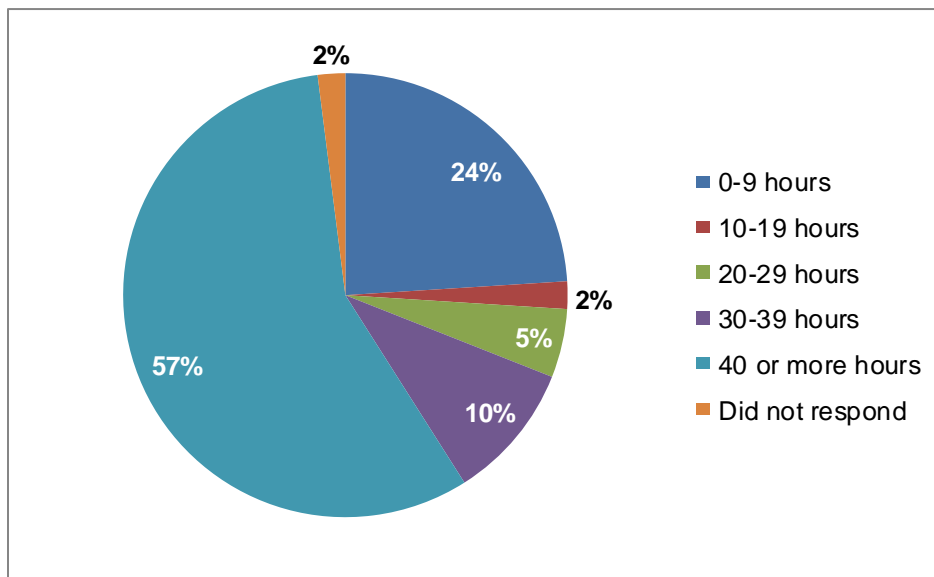


Figure 7. Participants' employment status, by average number of hours worked per week. Source: Survey.

Balancing daily roles. When participants were asked to rank three of their daily roles (e.g., student, parent, employee, spouse) as important, very important, and most important, a majority identified the student role as one of their top three priorities ($n = 186$; 62%), followed by the roles of being a parent ($n = 172$; 57%) and a spouse ($n = 166$; 55%). It follows that the student role would hold significance, since 88% of participants ($n = 264$) were enrolled full-time or were taking a minimum of 12 credits per semester.

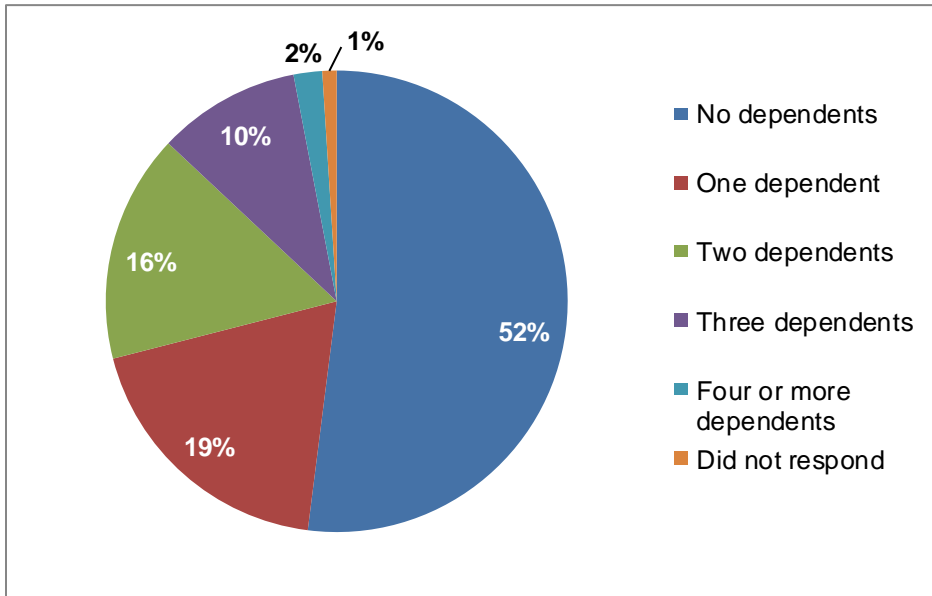


Figure 8. Participants with dependents under the age of 18. Source: Survey.

To meet their academic demands, most participants reported studying either 10-20 hours per week ($n = 141$; 47%) or 21-30 hours per week ($n = 84$; 28%).

Closer examination of the data revealed that although the student role ranked highly for most participants¹⁷, it was surpassed by the daily roles of being a parent or a spouse in terms of importance to participants (see Figure 9). Unexpectedly, the role of employee was not among participants' top three roles, even though 74% of the sample was employed. When these findings were considered together, the data revealed a majority of the participants in this study saw themselves as “parents who study” or “spouses who study.” This finding contradicts other studies describing adult learners as “employees who study” (Berker & Horn, 2003; Kazis et al., 2007). This finding also differed from other research arguing that first-generation college students are likely to prioritize their family roles, where “family roles” were defined as daughter, son, or

¹⁷ Surprisingly, 38% of respondents ($n = 114$) did not consider the role of student as one of the top three roles that occupy their lives.

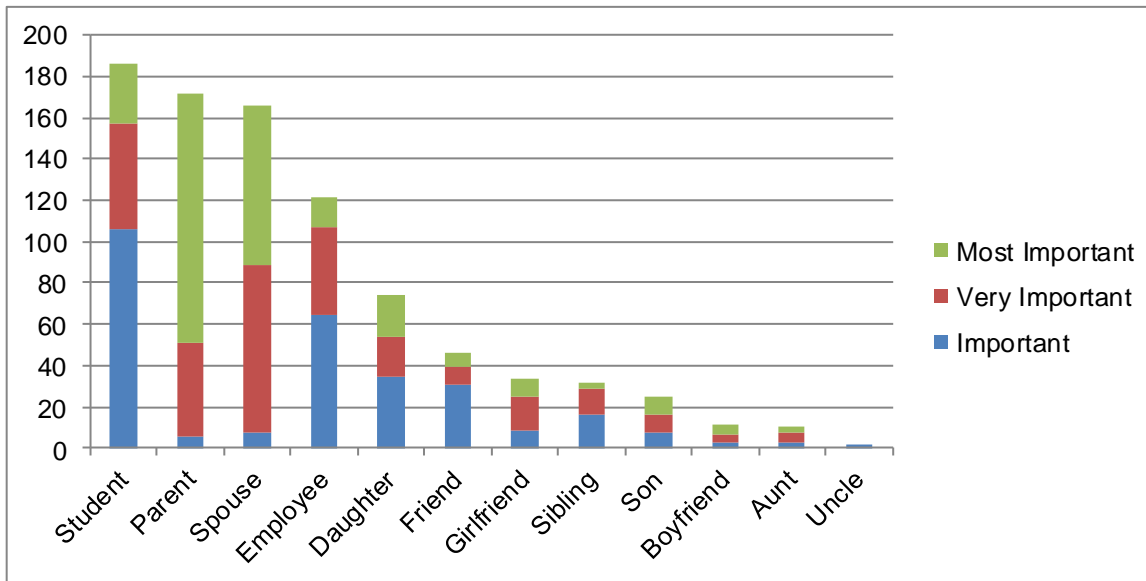


Figure 9. Daily roles ranked by importance to participants. Participants were given the option to mark their top three roles, from those listed on the x-axis. Source: Survey.

sibling, and work roles above being a student (Billson & Terry, 1982; Pascarella et al., 2004; Pike & Kuh, 2005; Priebe et al., 2008; Richardson & Skinner, 1992; Somers et al., 2004). This is dissimilar to the present study, where participants defined family roles as being a parent or a spouse. These findings are worthy of continued discussion, and are revisited in Chapter 5.

Demographics of focus group and interview participants. The demographics of focus group and interview participants varied slightly from those of the survey participants. I used purposeful sampling to identify participants for the second and third phases of data collection; though I attempted to balance the gender, age, race/ethnicity, and academic level to be representative of the demographics of the larger sample, the final outcome depended on the participant response rates, which held at 43% for the focus groups and 52% for the interviews. Table 7 depicts a comparison of the four key demographic variables in each phase of data collection. All variables were relatively

well-balanced, with the exception of slight variance in the 21- to 24-year-old age group and in the freshmen academic level.

Table 7

Key Demographic Variables for Research Participants, by Phase of Data Collection

Demographic Variable	Survey (N = 300)	Focus Groups (n = 26)	Interviews (n = 12)
Gender			
Female	73%	81%	67%
Male	24%	19%	33%
Age			
21-24 years old	7%	15%	–
25-34 years old	46%	38%	58%
35-44 years old	26%	31%	25%
45-54 years old	12%	12%	8%
55 years and over	5%	4%	8%
Race/Ethnicity			
Minority	29%	46%	33%
Non-Minority	68%	54%	67%
Academic Level			
Freshmen	1%	–	–
Sophomore	5%	8%	8%
Junior	36%	23%	34%
Senior	57%	69%	58%

Note. Source: Survey.

Online Degree Programs Afford Flexibility

Data for the second research question, “What factors prompted double first-generation college students to enroll in online degree programs?,” was primarily drawn from the survey responses and was expanded through focus groups and interview responses. Participants cited the need for flexibility as the primary reason for enrolling in online degree programs. The code for flexibility appeared in the data corpus 259 times,

and was transformed into a theme during grounded theory analysis¹⁸. This finding was verified through a Wordle created using all of the encoded data that comprised the theme, as illustrated in Figure 10. This visual representation was limited to the 50 words appearing most frequently in the data, excluding those deemed implicit in participants' responses (e.g., online, degree, college).



Figure 10. Online degree programs afford flexibility. The following words were implicit in respondents' replies, and were excluded from this Wordle: online, degree, college, university, school, program, and university name. Sources: Survey, focus groups, and interviews.

When participants discussed what drew them to enroll in online degree programs, they pointed out that studying online allowed them the flexibility they needed to continue working and/or caring for their families. Mark captured the sentiments of many when he explained, “Studying online allows the flexibility for me to continue working. If not for online classes I would not have the time to further my education” (36-year-old white

¹⁸ Subcategories for the theme of flexibility included: overcoming place-based barriers (253 occurrences), as good as face-to-face instruction (90 occurrences), self-paced learning (74 occurrences), no commute (59 occurrences), could not attend without the online option (47 occurrences), and can “attend” wherever (43 occurrences).

male majoring in psychology; survey). Sylvia, who is a single parent, cited the importance of having access to online education while living in a rural area, thereby removing place-based barriers:

I live in a remote area and the nearest face-to-face BSN program is over 2 hours away by car. With three children and classes held 4 days a week there was no way to join a face-to-face BSN program without completely checking out of my family life. My family is far more important than any degree at this point in my life (30-year-old white female majoring in nursing; survey).

Similarly, Joy discussed the strategies she exercised to balance responsibilities derived from parenting four children, working as a hairdresser, and studying with Sendero University:

I like the flexibility that if I need to watch a lecture at 11 o'clock at night I can do that, or last night I was up writing a paper, and all my kids were asleep. I mean I just need that flexibility because I do need to work (40-year-old white female majoring in technical communication; interview).

For Joy, an online degree program provided the flexibility essential to pursuing her dream of becoming an editor.

These findings resonate with the online education literature. Burbules and Callister (2000) explained that students who choose online degree programs typically do not have the option to attend face-to-face classes, and that if not for the access provided by online education, these same students would not be pursuing their education at all. Others explained the constraints of time and geographic location are dissolved by online education, which provides students choices regarding when and where to study (Harting

& Erthal, 2005; Tennant et al., 2010). Online degree programs broaden access to postsecondary education for a population otherwise excluded due to place of residence, work, and/or family responsibilities.

Participants also indicated online degree programs offered them the freedom to work at their own pace, which was consistent with other research (e.g., Burbules & Callister, 2000; Emami; 2012; Lei & Gupta, 2010). Mary, who sought online education after overcoming a brain tumor, explained:

I can work at my own pace and rest when needed. I can relisten/watch lectures to be sure I understand. I do not need to listen to people talking during class, or socialize with people I am not interested in, or suffer stupid questions (45-year-old white female majoring in history; survey).

Jolene, a 25-year-old majoring in organizational studies, shared that self-paced learning was a key benefit that enhanced her learning: “I can read four chapters at once or one paragraph at a time. I can listen to lectures as many times as I need to. There is no need to feel embarrassed if you didn't understand the material” (white female; survey).

Angelo worked full time and explained the town in which he resided included both a community college and a state university; however, Angelo chose to attend Sendero University as an out-of-state student pursuing an online degree because he could pursue full-time studies within the constraints of his unique, full-time work schedule. Angelo expressed the significance of being able to work at his own pace within an often-changing schedule, adding that

[Sendero University] in particular has made online classes so interactive that literally the only thing missing from my experience is a classroom. I see and hear

my instructors give lectures via pre-recorded and live video chats, I ask questions and interact with students and instructors via email and message boards, and I can do it all at 2 am if I want/need to (24-year-old white male majoring in political science; survey).

Several participants agreed with Angelo that online degree programs are as good as face-to-face instruction (Bernard et al., 2004; Cavanaugh et al., 2004; Means et al., 2009). McKenna, a 29-year-old who has worked full time since graduating from high school, pointed out that Sendero University “was not only easy and convenient but offered everything online.” She explained, “I never worry that I may have cheated myself out of a classroom environment because I'm constantly in contact with my professors and my peers” (white female majoring in sociology; survey). Moreover, Jill, who strongly advocated for online degree programs in her survey responses, proclaimed, “The subject matter is always amazing, and I feel like I am receiving an ivy league education” (33-year-old Native American female majoring in psychology; survey).

While many participants expressed gratitude for the benefits of an online degree program, they also pointed out challenges associated with the pursuit online education, as listed in Table 8. A succinct list of benefits, all supporting the theme of flexibility, tended to outweigh the longer list of challenges for these double first-generation college students. As Stacey explained: “I have attended school the traditional (in person) way. I am not exaggerating when I say that online is actually harder and more time consuming, but I get to do it myself, and on my time, so I'm fine with the trade off” (30-year-old mixed race female majoring in liberal studies; focus group). Michelle, a 29-year-old who started taking college-level coursework over a decade ago, shared: “I chose

Table 8

Benefits and Challenges of Online Education

Benefits of Online Education	Challenges of Online Education
<ul style="list-style-type: none"> • Flexibility 259 = 224 survey, 30 focus group, 5 interview 	<ul style="list-style-type: none"> • Balancing time 152 = 132 survey, 10 focus group, 10 interview
<ul style="list-style-type: none"> • Overcome place-bound barriers 253 = 216 survey, 30 focus group, 7 interview 	<ul style="list-style-type: none"> • Missing face-to-face interaction 134 = 113 survey, 10 focus group, 11 interview
<ul style="list-style-type: none"> • As good as face-to-face instruction 90 = 35 survey, 46 focus group, 9 interview 	<ul style="list-style-type: none"> • Limited interaction with faculty 106 = 70 survey, 26 focus group, 10 interview
<ul style="list-style-type: none"> • Self-paced learning 74 = 60 survey, 13 focus group, 1 interview 	<ul style="list-style-type: none"> • Accelerated courses 93 = 80 survey, 7 focus group, 6 interview
<ul style="list-style-type: none"> • No commute 59 = 55 survey, 4 focus group 	<ul style="list-style-type: none"> • Financial concerns 89 = 82 survey, 6 focus group, 1 interview
<ul style="list-style-type: none"> • Could not attend without online option 47 = 37 survey, 6 focus group, 4 interview 	<ul style="list-style-type: none"> • Unreasonable cost 74 = 68 survey, 4 focus group, 2 interview
<ul style="list-style-type: none"> • Can "attend" wherever 43 = 39 survey, 3 focus group, 1 interview 	<ul style="list-style-type: none"> • Ability to pay back student loans 53 = 45 survey, 2 focus group, 6 interview
	<ul style="list-style-type: none"> • Delayed faculty communication 49 = 42 survey, 6 focus group, 1 interview
	<ul style="list-style-type: none"> • Perception concerns 49 = 27 survey, 10 focus group, 12 interview
	<ul style="list-style-type: none"> • Taking science or math classes 49 = 25 survey, 11 focus group, 13 interview
	<ul style="list-style-type: none"> • Technology concerns 48 = 31 survey, 14 focus group, 3 interview
	<ul style="list-style-type: none"> • Limited social life 47 = 41 survey, 3 focus group, 3 interview
	<ul style="list-style-type: none"> • Prefer face-to-face instruction 36 survey = 25 survey, 5 focus group, 6 interview

Note. This table expresses the codes representing the subcategories for the flexibility theme, which are listed under the benefits column. It also includes codes to be explored in an upcoming portion of this chapter, as they concern the factors challenging student persistence. Numbers appearing in smaller text beneath the code are the frequencies by which the code appeared in the data corpus. Sources: Survey, focus groups, and interviews.

online to 'cut out the fat' as I like to call it. I don't need to sit in on endless lectures I need videos, discussion posts, movies, and quiet time to learn the book knowledge I just need to learn” (white female majoring in liberal studies; survey).

The next section examines factors supporting and challenging double first-generation college students' ability to learn and to persist at Sendero University. It is here, when the trials to student persistence are presented, that the challenges listed in Table 8 are discussed in greater detail.

Going the Distance with Online Degree Programs

Having described the characteristics of double first-generation college students and the ways online degree programs afford these students the flexibility they need to pursue postsecondary education, I move to the third research question: “What factors encouraged double first-generation college students to persist?” To answer this question, I outline three factors supporting students' persistence: (a) ease in navigating the university, (b) personal traits and goals, and (c) the concept of postsecondary promises (i.e., belief that education opens doors to better career opportunities). Following this discussion, I provide a detailed description of four factors challenging students' persistence: (a) time concerns, (b) quality concerns, (c) financial concerns, and (d) perception concerns related to earning an online degree.

Factors supporting persistence. There were three primary factors supporting student persistence, which are displayed in Table 9. The first factor, ease in navigating the university, was related to perceptions of customer service, participants' personal traits and goals were the second factor, and the third factor was postsecondary promises. Each factor supporting persistence is discussed in detail below.

Table 9

Factors Supporting Persistence

Factor	Categories
Ease in Navigating the University	User-friendly website 32 = 28 focus group, 4 interview
	Web-based academic tools 27 = 19 focus group, 8 interview
	Academic advising 25 = 1 survey, 21 focus group, 3 interview
	Ease in getting admitted 21 = 17 focus group, 4 interview
Personal Traits and Goals	Time management 62 = 32 survey, 24 focus group, 6 interview
	Self-motivation 45 = 30 survey, 9 focus group, 6 interview
	Self-discipline 45 = 21 survey, 16 focus group, 8 interview
	Personal goal 43 = 1 survey, 23 focus group, 19 interview
Postsecondary Promises	Postsecondary promises 201 = 134 survey, 47 focus group, 20 interview

Note. Numbers appearing in smaller text beneath the code are the frequencies by which the code appeared in the data corpus. Sources: Survey, focus groups, and interviews.

Ease in navigating the university. Customer service was an important factor that helped to inform participants’ decisions to persist. Although the word “customer” is not well-received in postsecondary education, researchers have argued customer satisfaction is integral to attracting and retaining adult students (Hadfield, 2003; Levine, 2000), such as the double first-generation college students who were involved in this study. Adult learners are “savvy, demanding customers who know how to shop” (Hadfield, 2003, p. 19); if they do not find what they want, they look elsewhere.

Many students discontinued pursuit of other online degree programs after they were admitted to Sendero University, and the institution's web presence played a big role in their decision. Sada researched many institutions prior to submitting her application to Sendero University. She explained, "The way [Sendero] structures their online programs looked a lot cleaner, more straightforward or much easier to use than the ones I saw from other online schools or colleges. For this reason, I chose [Sendero] over other online programs" (38-year-old Asian female majoring in technical communication; focus group). Later, Sada clarified that Sendero University "[has] it together' as far as internet technology" to deliver the courses, further validating Sada's satisfaction with the services provided and the cessation of her pursuit for other online degree programs.

The theme of easily navigating Sendero University's virtual campus was expanded upon by participants who recounted their admissions processes; some indicated it was a matter of mere weeks between applying and beginning classes. Stacey shared,

The entire process, from applying for admissions ... to finding information through the online library has been extremely easy, and timely. It was so easy that I told my admissions counselor that it was as if I had the big red easy button from the Staples commercials, I pushed it, and viola (sic) (30-year-old mixed race female majoring in liberal studies; focus group).

Stacey further indicated the customer service she experienced during her first year at Sendero University tremendously aided her decision to persist: "I have never experienced such service from an academic institution before. [Sendero University] has set the bar high Because of the experience I have had I want to stay here" (30-year-old mixed race female majoring in liberal studies; focus group).

There was a general consensus that enrollment advisors, who assisted prospective students through their admissions process, and academic advisors, who assisted admitted students, provided customer service positively contributing to the student experience. Leigh, a 30-year-old student majoring in family and human studies, “was anxious to start” at Sendero University, but offset her concerns by staying in touch with enrollment advisors, academic advisors, and Veteran’s assistance advisors. Leigh wrote, “I asked all of the questions that I would’ve normally kept to myself because of lack of ease to use assistance at a [brick-and-mortar] university” (white female; focus group). Kayla, who was majoring in psychology, expressed positive disbelief at how many e-mails she and her advisor exchanged when she first enrolled. Kayla indicated her advisor helped “release some tension while [she] was getting comfortable with the [Sendero] online setting.” She emphasized, “Advisers (sic) do make a difference and their patience is greatly appreciated!” (23-year-old Native American female; focus group).

Along with expedient admissions processes and quality advising relationships, participants indicated the university’s user-friendly website and web-based academic tools aided their decisions to persist. Both of the learning platforms used to deliver courses, Blackboard and LearningStudio, and academic services, such as tutoring and the library, received generally positive reviews. Eva, inexperienced with online courses prior to enrolling at Sendero University, captured the sentiments of her peers by recounting that she was nervous to begin her online studies because she was “not up to date with technology,” but that she was “pleasantly surprised with the ease of using the online and [B]lackboard sites” (35-year-old white female majoring in organizational studies; focus group).

In addition, several participants indicated Sendero University's web-based course- and major-mapping tools facilitated their understanding of what classes to take, and in what order to take them. Although there was a steep learning curve in understanding how to read and interpret their "degree audit report" (DARS)¹⁹, once the skill was mastered through the assistance of their academic advisors, participants could follow a well-defined academic path. Some of the juniors and seniors stated the DARS tool helped them to "see the light at the end of the tunnel" (i.e., graduation), which encouraged them to persevere (focus group). Monica, who had elaborated on this point, exclaimed, "I am 42 this year and I can't wait to put on that cap and gown and walk down that aisle!" (white female majoring in liberal studies; focus group).

Personal traits and goals. Discussions about personal traits and goals were found throughout the data corpus, most notably in the survey responses. Participants suggested time management, self-motivation, and self-discipline were imperative for anyone who desired to be successful in an online degree program²⁰. Lei and Gupta (2010) confirmed that these traits were important, and suggested online education is not for everyone, especially those who do better in a group environment.

¹⁹ Per the Sendero University website, "A degree audit is an automated report that matches courses a student has completed with the requirements of a particular academic degree program" (n.d.). DARS demonstrates which degree requirements are satisfied and which degree requirements remain.

²⁰ These valued personal traits were not mentioned in Sendero University's online marketing materials or resources for newly admitted students, which may be part of the reason participants voiced their opinions without being prompted. Personal characteristics such as time management were only briefly discussed in a new blog the university had billed as "realtime resources from real students." The post focusing on time management was made by the director for information technology at Sendero University's online campus, and accompanied 17 other posts written by instructional designers. As of March 25, 2013, only two of the 20 posts were written by a real student, and both student contributions were made by the same student.

In this study, time management was suggested as the most important trait for online learners; occurring 62 times across the survey, focus group, and interview data. Jeffrey, a 31-year-old majoring in organizational studies, explained, “Procrastination is a death wish for an online student, but I have been able to use that to motivate [myself and] to get ahead and stay ahead of the class schedule” (white male; survey). Others mentioned that distractions at home (e.g., children, spouses, household chores) required higher levels of focus and dedication. For example, Vivian shared, “It is difficult to ‘be at school’ when other, more fun things are happening just in the next room. It takes a lot of self-discipline” (29-year-old white female majoring in psychology; survey).

The presence of a personal goal or the desire to earn a bachelor’s degree was also integral to persistence. Rose, the oldest participant, enjoyed a successful career in banking, yet explained she continued “picking up academic credits” for 62 years. Rose further expounded on this fact; she declared, “Since it was a long-time ambition of mine, I came back to school in order to finally obtain my BS at age 82” (white female majoring in liberal studies; survey). The youngest participant, Adriana, majored in family and human studies, asserted, “I knew I was destined to graduate from a university” (21-year-old female; survey). Focus group and interview participants, in particular, drew attention to the importance of persisting to achieve their goals, regardless of others’ opinions (e.g., family, friends, coworkers). Their persistence was fueled by intrinsic motivation to earn a four-year degree, which is illustrated by narratives filling Table 10.

Table 10

Examples of Participants' Intrinsic Motivation to Earn Their Bachelor's Degrees

Participant	Participant Quote
Scott, 48-year-old white male majoring in political science (interview)	“It’s not just a matter of me wanting to have that piece of paper, so that I can advance in my career. At this point, I’ve been working at this for—it’s a four-year degree that has now lasted me 12 years, [and] since I graduated high school. It’s kind of a matter of pride now.”
Allison, 27-year-old white female majoring in sociology (focus group)	“My [family’s] reactions pushed me more to do this for myself and no one else. I benefit from getting a college degree, I will have the better job, I will be able to move onto bigger and better things and that is really why I decided to go back to school.”
Reyna, 23-year-old Latino female majoring in criminal justice (focus group)	“The mere thought of completing my degree is enough to keep me engaged in pursuing my degree. I’ve worked incredibly hard to attend school and pay for school that for me if I were to just stop or take a break I can’t help but feel that it would all have been for nothing; a waste of time and money.”
Lori, 55-year-old white female majoring in liberal studies (interview)	“This is me. This is my time. This is the only time I’m gonna have left to reach some goals that I wanna reach [college] is what works my brain. My school work, it pushes me. It makes me have to push myself.”
Kayla, 23-year-old Native American female majoring in psychology (focus group)	“Even as a young teenager I knew I could only rely on myself. I did get jealous at times when my peers were going to college and their parents paid for their tuition and bought them new cars or still gave them weekly allowances. However, I never had any of that and had to work hard for everything I have. As of today, these challenges shaped me personally and shaped my determination to always follow through with anything I put my mind to, because I know I can do it.”

Note. Sources: Focus groups and interviews.

The interviews included a collaborative component, where participants submitted a personally meaningful image to illustrate what encouraged their persistence. During her interview, Joy was moved to tears when discussing her image (see Image 1). The image was a collage containing motivational phrases such as “Don’t Give Up What You Want Most,” and discussed being strong and “Making Time.” Joy, like so many double first-generation college students, proclaimed that she carried internal motivation to finish a goal started earlier in life, which she renewed when she enrolled at Sendero University. Joy explained,

Ultimately at the end of the day, whether I have my [four] kids’ support or my husband’s support or not, it’s nice yes, but this is something I was determined to do whether I had that or not - whether I had that understanding or not. I just need to make sure I remind myself that I’m the only one that can do it. I’m the only one who can finish my degree...



Image 1. Joy’s image to illustrate what encourages her persistence. Source: Interview.

Joy expanded her thought by adding, “Honestly I think that my online determination is totally internal. It’s just if I start something I finish it. Plain and simple” (40-year-old white female majoring in technical communication; interview).

Personal goals also encouraged continuous enrollment. Most of the participants were planning for continuous enrollment through graduation ($n = 260$; 87%). Sada’s thoughts were representative of many: “I already took a long break from school ... it's time for me now to just keep pushing through my educational goals” (38-year-old Asian female majoring in technical communication; focus group). Steve, who took periodic breaks when he first enrolled at Sendero University, shared a novel perspective:

My wife ... sat me down and said, “It's like paying your credit card with the minimum balance. If you just pay the minimum balance, it's going to take you like 300 years to pay it off. College is the same way. If you take breaks and you don't go full time, it's going to take you 10 years to complete it.”

This imagery moved Steve to “get it done, and get it done quickly” by not taking breaks and by enrolling in more than one class at a time (31-year-old white male majoring in psychology; interview).

These narratives lead to a key finding differing from prior studies in which researchers have argued family influence (i.e., parents and siblings) could be detrimental to the persistence of first-generation college students (Bergerson, 2007; Stieha, 2010). However, this varies for double first-generation college students, in light of the fact that they are typically older and therefore less likely to be influenced by their parents and siblings. In the present study, parents and siblings were acknowledged for the emotional support they provided; however, when emotional support was lacking, a number of focus

group and interview participants, particularly those who were 25 years of age or older, noted parental and/or sibling opinions “had no real impact” on their persistence. Steve illustrated this statement with the images he submitted (see Image 2), and he expanded on the symbolism of these images during his interview:

I do appreciate you asking me to look at the positive and negative influences
I don't think until I really thought about it for a few days, [that] I realized how negative of an influence [my siblings and parents were] and how positive of an influence my [immediate] family was. That was pretty eye-opening for me. You know, like you know it internally, but you don't always realize it? Thank you.
Thank you for that (31-year-old white male majoring in psychology).



Image 2. Images submitted by Steve. Steve’s extended family (i.e., parents and siblings) discouraged his persistence, while his immediate family (i.e., wife and child) encouraged his persistence. Source: Interview

Most participants in this study drew strength from within to move closer to degree completion, and also spoke of being academically and socially distant from Sendero University. This contradicts other prominent studies that found first-generation college students were more likely to persist if they had been validated from someone inside

academe (Rendón, 1994; Rendón Linares & Muñoz, 2011) or were socially and academically engaged on campus (Pike & Kuh, 2005; Tinto, 1975; 1993).

Survey data revealed that three quarters of the students made use of academic advising ($n = 236$, 77%), 61% accessed the Sendero University library ($n = 183$) and a limited few utilized Sendero University's online tutoring services ($n = 29$; 10%). Students, nonetheless, spoke of being academically and socially distant from Sendero University. Although validation theory (Rendón, 1994; Rendón Linares & Muñoz, 2011) guided the development of survey and interview protocols, evidence of students being validated appeared only five times in the data. In addition, regular interaction with instructors was minimal; a strong majority of participants contacted their instructors less than one time per week²¹. Although interaction was more frequent with fellow students²², it centered on discussion board posts that were “intended to incite thoughtful, meaningful, and intelligent conversations” but “do not serve their purpose” (Reese, 35-year-old white female majoring in nursing; survey). Cheri further explained, “I don't feel that I make a connection with any of my classmates through the discussion board. I see it more as another assignment that has to get done” (25-year-old mixed race female majoring in psychology; survey).

²¹ Survey responses revealed 55% of participants ($n = 166$) were in contact with their instructors less than once per week and that 33% communicated one or two times per week ($n = 99$). The primary modes of communication with instructors were via e-mail ($n = 286$; 95%) and discussion board ($n = 241$; 80%).

²² As per survey responses, peer-to-peer interaction was as follows: 25% interacted 3-5 times per week, 35% interacted 1-2 times per week, and 34% interacted less than once per week. Online discussion boards were the primary mode of communication ($n = 262$; 87%), followed by e-mail ($n = 194$; 64%). It was notable that students did not engage with one another on social media like Facebook, Google+, or Twitter.

When participants were asked how they were involved with Sendero University, aside from enrollment in courses, they replied:

- “As a student, I’m not really involved at all at [Sendero University]” (Kendra, 34-year-old white female majoring in liberal studies; interview).
- “As online distance education students, we cannot just ‘go see a counselor’ or get a tutor, or get a student ID, or take advantage of the computer room, campus security, be involved with sports/social/campus activities, or make use of the school library, etc. we do not avail of that stuff I feel like a ‘second class’ student most times” (Sada, 38-year-old Asian female majoring in technical communication; focus group).
- “Not much, because I work 32 hours to 40 hours a week. When I’m not working, I’m pretty much doing school work, so I don’t really get involved with anything else” (Jasmin, 25-year-old Latino female majoring in nursing; interview).

An interview response given by Amy, who lived on the East Coast, further illustrated this point. After I posed this question, Amy paused for some time and then replied, “What do you mean?” I repeated the question, and Amy thought for a while longer. She said, “No, I mean I’ve kind of always – I like the ... area. [chuckle] I’ve kind of always been a fan of [Sendero University] sports. As far as other service, I hadn’t really considered you know, other aspects of the institution itself” (41-year-old white female majoring in technical communication; interview).

These findings, and the corresponding contradictions with the extant literature, are explored in greater detail in Chapter 5.

Postsecondary promises. The theme of postsecondary promises conveyed participants' fundamental belief in the power of postsecondary education. It was the third most popular category in this study, occurring 201 times in the data corpus. The data revealed participants' persistence was strongly related to the implicit societal promise that a bachelor's degree would open the door to career and social mobility. Statements, such as "I know that once I get my degree it will be really rewarding" (Sandra, 40-year-old Latino female majoring in organizational studies; survey) and the reminder Olivia provided to fellow focus group participants to "remember, education ... opens so many paths to you ... [we must] keep those boot straps pulled up and keep on walking" (43-year-old white female majoring in criminal justice), formed the essence of this category. A visual representation of the data encoded as postsecondary promises is displayed in Figure 11. As before, this Wordle was limited to the 50 words appearing most frequently in the data, excluding those deemed implicit in participants' responses (e.g., online, degree, education).

Postsecondary promises were a major contributor to student persistence, and were threaded throughout the data corpus, appearing regardless of participants' age, gender, or race/ethnicity. For instance, Connor was laid off from his job in 2008 and "knew [he] needed to earn a degree to stay relevant in today's job market" (42-year-old white male majoring in operations management technology; survey). Since Connor's new job had him traveling 50% of the time, an online degree was his only option to continue his education. Monica started college in her 30s, and although she acknowledged it was a difficult decision that age, she said, "I know that the sooner I get my education the sooner I will be on track to a career that will help me and my daughter" (42-year-old white

between a four-year degree and a career:

My father worked his way from [one] low paying job to the next, eventually becoming Vice President of three major hair care companies. He always told me how long it took him to complete every day tasks like writing an e-mail, creating an excel spreadsheet etc. My father died in October 2011. Now my mother, a stay at home mom for the past 25 years, has no income to support my six brothers and sisters. I am forced to watch her struggle to find a job rather than a 'career' because she didn't attend college. Now more than ever I am inspired to be a successful educated young woman who will be able to support her family (25-year-old white female majoring in organizational studies; survey).

Similarly, Kimberlyn, a 23-year old majoring in psychology, asserted, “I want a career that I love and that I have earned. I do not want to settle for a job because I was afraid to earn a degree” (white female; survey).

There was a positive energy among these double first-generation college students to “get that coveted ‘piece of paper’” that would “open doors of opportunity” (survey; focus groups; interviews). The promise of better opportunity prompted 48-year-old Scott to work on his political science degree. He declared, “As a union bricklayer in a struggling economy, I looked in the mirror and decided that I no longer wanted to struggle this way” (interview). Likewise, Nathan explained he persisted because, “The successful people that I knew all graduated from college. They seemed to enjoy their lifestyles, and did not seem to be scraping by or having as much difficulty finding work as compared to my family members” (38-year-old Black male majoring in political science; survey).

The idea that more education assures better career opportunities is linked to the “college-for-all” discourse dominating U.S. popular thought and political ideology. For example, it has been said that 60% of Americans need to earn a postsecondary degree by 2025 in order for the U.S. to remain competitive in a global economy (Lumina Foundation, 2013). Similarly, President Obama discussed the need to have the highest proportion of college graduates in the world by 2020 (The White House, Office of the Press Secretary, 2009). Another prominent report projected that by 2018, 63% of all U.S. employment opportunities will require some postsecondary education (Carnevale, Smith, & Strohl, 2010); the authors emphasized, “Our grandparents’ economy, which promised well-paying jobs for anyone who graduated from high school, is fading and soon will be altogether gone ... higher education has become a virtual must for American workers” (Carnevale et al., 2010, p. 1).

Postsecondary education has been touted as the “clearest pathway” to the middle class, since college graduates earn, on average, two times as much as those with only a high school diploma (The White House, n.d.). This speaks to rationalize why the judgments, as revealed by participants within the data corpus, were permeated with the essential belief that a college degree would beget the promise of career and social mobility (Pryor et al., 2012). Among these double first-generation college students, it was understood that “if you don't have your educational background, then you need to get it. That's going to secure your financial and work stability for the rest of your life” (Steve, 31-year-old white male majoring in psychology; interview).

Factors challenging persistence. While postsecondary promises, ease in navigating the university, and personal traits and goals encouraged participants to persist,

there were a number of factors that challenged persistence. The four most prominent challenges were: time, quality, financial, and perception concerns, which appear in Table 11 and were previously juxtaposed against the benefits of online education in Table 8.

Table 11

Factors Challenging Persistence

Factor	Categories
Time Concerns	<u>Structure of Online Education</u>
	Limited interaction with faculty 106 = 70 survey, 26 focus group, 10 interview
	Pace of accelerated courses 93 = 80 survey, 7 focus group, 6 interview
	Delayed faculty communication 49 = 42 survey, 6 focus group, 1 interview
	<u>Structure of Personal Life</u>
	Balancing responsibilities 152 = 132 survey, 10 focus group, 10 interview
	Limited social life 47 = 41 survey, 3 focus group, 3 interview
Quality Concerns	Missing face-to-face interaction 134 = 113 survey, 10 focus group, 11 interview
	Taking science or math classes 49 = 25 survey, 11 focus group, 13 interview
Financial Concerns	Financial concerns in general 89 = 82 survey, 6 focus group, 1 interview
	Unreasonable cost 74 = 68 survey, 4 focus group, 2 interview
	Ability to pay back student loans 53 = 45 survey, 2 focus group, 6 interview
	Resisting student loans 45 = 29 survey, 12 focus group, 4 interview
Perception Concerns	Perception concerns about online degrees 49 = 10 survey, 27 focus group, 12 interview

Note. Numbers appearing in smaller text beneath the code are the frequencies by which the code appeared in the data corpus. Sources: Survey, focus groups, and interviews.

Time concerns. This theme was separated into two subcategories: the structure of online education and the structure of personal life. These subcategories helped to delineate the findings related to time concerns in sensible ways, as might be viewed by participants themselves. The structure of online education was comprised of time concerns related to the virtual classroom, such as limited interaction with faculty, the pace of accelerated courses, and delayed faculty communication. Meanwhile, the structure of personal life referred to what could be likened to the out-of-class experience, which included balancing academic responsibilities with non-academic responsibilities such as work, family and personal life. The structure of online education and the structure of personal life were found to challenge persistence, as described below.

Structure of online education. Limited interaction with faculty members was the leading issue for time concerns related to the structure of online education. For context, most participants reported initiating contact with their faculty less than one time per week ($n = 166$; 55%)²³. Gianna, who is majoring in interdisciplinary studies, explained that “online professors have a large number of students²⁴,” which leads to “no real interaction,” apart from rare occurrences where a select few professors were “20x more involved than others” (28-year-old white female; survey). Sada indicated that “at times, the professors ... give you a week's worth of work and then disappear You feel like you are just a number instead of a face. The teachers don't really know you or how hard you are trying” (38-year-old Asian female majoring in technical communication; survey).

²³ Thirty three percent contacted their faculty one or two times per week ($n = 99$). Primary modes of communication were via e-mail ($n = 286$; 95%) and discussion board ($n = 241$; 80%).

²⁴ Class sizes ranged from 10 students to 250 students (Sendero University class search, 2013).

Garrison and Cleveland-Innes (2005) argued that while it is not feasible for faculty to respond to every discussion board comment, it is vital faculty moderate and shape the direction of the online discussions. Another study revealed a “strong and active presence on the part of the instructor – one in which she or he actively guides and orchestrates the discourse – is related both to students' sense of connectedness and learning” (Shea et al., 2006, p. 185). In fact, an active faculty presence was deemed slightly more important than effective instructional design and organization (Shea et al., 2006).

Participants faced difficulty gauging their academic progress when they encountered limited interaction with faculty members. Trista, who typically carried 18 credits per semester, shared it was “hard sometimes to understand material without a teacher there to go through it” (27-year-old mixed race female majoring in justice studies; survey). Furthermore, McKenna did not feel as challenged in courses carrying low interaction, but she maintained her motivation by competing with herself to make sure “[she] finished work first and got the full max credit for each assignment.” McKenna confessed low interaction levels made her “lose sight of the course's actual content” (29-year-old white female majoring in sociology; focus group). Patricia also recently finished a class where “there was no, and [she] really mean[t] no teacher - student interaction.” As Patricia explained, classmates answered the mandatory weekly discussion board questions, and any questions “beyond the knowledge and understanding of the students” remained unanswered. Patricia shared that “classes like this one ... really challenge[d] [her] to stay engaged” (30-year-old female majoring in organizational studies).

As Patricia suggested, limited interaction with faculty members presented issues when course-related questions arose, even with the “hallway conversations” discussion forum²⁵ built into every class. For example, some participants spoke of a “three before me” policy²⁶, whereby students were expected to go to three sources before contacting their professor with a course-related question. Reyna, a criminal justice major, explained she understood the logic of the policy but found it “incredibly stressful and frustrating” because the policy was present “in every single class” she took (focus group, emphasis in original). Reyna went further to say:

If I ask a question the first two ways about an assignment, I'm literally depending on someone else as to when I can complete an assignment. If I were to take it to a professor first their (sic) usually pretty quick to respond but their responses are so condescending and always ask if we followed the policy I've had to drop two of my classes because of the lack of communication between the professors and me. I literally can't afford it (23-year-old Latino female; focus group).

Some focus group participants sympathized with Reyna, and others suggested they would not feel comfortable asking questions if this policy appeared in their courses. During this

²⁵ Focus group participants shared the verbatim language Sendero University used to introduce the hallway conversations discussion board to online students: “In an on-ground course, there are sometimes conversations that take place before and after class. The ‘hallway conversations’ discussion board replicates this environment. This discussion board is for general questions about the course. It is a good place to ask questions about due dates, assignments, technology issues, and other items related to the course in general. Please check to see if your question has already been asked before posting it. You are encouraged to answer the questions of other students.”

²⁶ Researching the three before me policy led to a July 2010 blog post written by an instructional designer who has since retired from Sendero University. The author attributed the policy to the director for instructional design at Sendero University’s online campus. The rationale for this policy was twofold: (a) to teach students self-reliance and personal responsibility, and (b) to help students initiate a dialogue with others who may have the same question. The author explained that the three sources should be: the syllabus, the course discussion board (i.e., other students), and the technical help desk.

exchange, Calli, on the other hand, pointed out that not all professors are distant, and that “courses conducted by individuals whom (sic) are engaged and passionate make all the difference” (26-year-old white female majoring in sociology; focus group).

The inability to develop a personal relationship with faculty members hit home for a small, but vocal group of double first-generation college students ($n = 16$) who sought faculty letters of recommendation for graduate school and professional positions. Monica succinctly explained why limited interaction with faculty “makes it hard” as she decided whether or not to pursue a graduate degree: “I need letters of reference from Professors but I really don't know them and they don't know me” (42-year-old white female majoring in liberal studies; survey). This also concerned Steve, who intended to apply for a graduate program in psychology. Steve asserted, “A huge disadvantage of taking online classes is there's no real network you need recommendation letters or know people who are in your field ... [but] there really isn't any of that for an online student” (31-year-old white male majoring in psychology; interview).

The desire for interaction with faculty was clearly a significant challenge to persistence in this study. It may be helpful recognize that a majority of the participants in this study transferred to Sendero University ($n = 270$; 90%), and of those only 12% held previous experience with entirely online courses ($n = 32$). When participants discussed academic challenges associated with the limited interaction with faculty, they likely drew comparisons to faculty involvement in their previous traditional ($n = 108$; 40%) or blended courses ($n = 127$; 47%), where face-to-face interaction may have provided stronger interaction.

The pace of accelerated courses was also categorized as a time concern related to the structure of online education at Sendero University²⁷. In the data corpus, few participants expressed appreciation for accelerated courses (18 occurrences); many more voiced concern about the challenges accompanying accelerated courses (93 occurrences), as in these cases:

- “Pace of the courses can be difficult when despite being an online 'flexible' class there are many due dates throughout each week” (Diana, 34-year-old white female majoring in nursing; survey).
- “The pace is intense. You better hope you don't have a disaster or family emergency set you back” (Peter, 29-year-old white male majoring in psychology; survey).
- “The 7 1/2 week classes seem to have hurt the quality of my work. I feel like I rush through the lessons, skim reading materials” (Jeffrey, 31-year-old white male majoring in organizational studies; survey).

Paige, who is majoring in justice studies, also disclosed, “the pace of the online program classes is really grueling.” She was previously enrolled in “regular classes” and declared, “The accelerated pace of the online program has made me feel like quitting the program at times I’m very close to graduating and being able to see the finish line which has helped me to not give up” (25-year-old female; focus group).

In terms of content, participants indicated accelerated courses seemed to cover the same amount of material as a traditional, 15-week class (survey; focus group; interview).

²⁷ Sendero University’s online courses primarily followed an accelerated, 7.5-week format. A majority of participants reported taking two classes at a time ($n = 264$; 88%).

While Noelle explained, “It wouldn't be as challenging if I didn't work full time and/or had family. I would be able to devote my time to school” (47-year-old Black female majoring in liberal studies; survey), Tamara agreed, “The course pace was quite fast, but it was much easier when I quit working to study” (28-year-old white female majoring in nursing; focus group). Ceasing employment, however, was not feasible for everyone. Scott, for example, discussed how he tried to manage both his employment demands and his academic workload by changing his class schedule:

I registered for three classes for this session B of this [fall] semester. When I went online to order my books I had 17 books. To think that I'm gonna read 17 books in seven weeks, plus all the lecture material, and the videos is just not gonna happen. [chuckle] I dropped one of the classes that was really book laden I went from a course where there were seven books required to a course where there are four. [laughter] ... I dropped it to as manageable as I could get it, I guess (48-year-old white male majoring in political science; interview).

Allison, furthermore, explained the pace “packs a lot of information and work into a small amount of time” and that “by the end of the classes [she] felt exhausted” (27-year-old white female majoring in sociology; focus group).

From an institutional perspective, research has indicated accelerated courses have similar learning outcomes compared to traditional courses (Johnson, 2009; Wlodkowski & Kasworm, 2003), as well as fewer student withdrawals than traditional courses (Geltner & Logan, 2001). Accelerated courses also allow students to finish their degrees sooner than if they were taking traditional courses, even if there is no significant

difference in six-year graduation rates between accelerated programs and traditional programs (Wlodkowski et al., 2001).

It has been argued that student attitudes toward accelerated courses are positive (Wlodkowski, 2003), but these findings were based on face-to-face courses. The findings from this study suggest double first-generation college student attitudes toward accelerated, online courses are not positive. It is beyond the scope of this dissertation to explore this finding in detail; therefore, it will be presented as a direction for future research.

The third theme comprising time concerns related to the structure of online education was delayed faculty communication, which challenged participants' persistence, especially given the rapid nature of accelerated courses. Angelo, who worked hard to maintain his above 3.0 GPA while also working full time, explained:

It's difficult to get feedback on how we're doing This morning I emailed an instructor asking whether we would get feedback on our last writing assignment before our next assignment is due. Her reply, while polite, bemoaned the fact that she is teaching 3 classes and has a lot of grading to do (sic) I have a lot to do too, and I can't gauge how well I'm doing unless I see grades! (24-year-old white male majoring in political science; survey).

This complexity was also discussed by Mary, who believed her biggest academic challenge involved "professor feedback [which] has been slower than [she] would prefer." Mary elaborated, "I spend a huge amount of time studying and have to trust that I am on the right track" (45-year-old female majoring in history; survey).

Another participant pointed to the likelihood of miscommunication in online education, acknowledging that “the time lag between messages can be problematic. Standing in front of your computer staring and wishing for a reply is not the same as standing in front of your professor until you get an answer” (Therese; 45-year-old female majoring in technical communication; survey). For some participants, like Tamara, delayed faculty communication changed how they felt toward a class. Tamara said, “I respond to the class how the teacher does. If they are cold and refuse to reply, I do what I must and try hard, but do not feel as confident” (28-year-old white female majoring in nursing; focus group).

Research has demonstrated that when online students perceive faculty members are not responding in a timely manner, they become discouraged and limit their participation in the course (Hara & Kling, 2000; Vrasidas & McIsaac, 1999). Delayed feedback generated a tendency to incite student anxiety about academic performance, and led to student frustration (Hara & Kling, 2000) and decreased students’ sense of satisfaction with the course (Vrasidas & McIsaac, 1999).

Structure of personal life. The primary time concern related to the structure of participants’ personal lives was the challenge of balancing academic and non-academic responsibilities. This concern was fourth most popular category in this study, and it was most prevalent for double first-generation college students who were employed (107 of 152 occurrences). For these participants, work had a tendency to compete with school, school had a tendency to compete with work, and family was left hanging in the balance.

To help illustrate this, Casey shared that he was employed full time while attending Sendero University part time, and in striving to balance his responsibilities,

Casey said, “There have been times in which I have been forced to chose (sic) school over my daughter” (26-year-old white male majoring in criminal justice; survey).

Choices like these can be difficult, just as Nicole explained, “After long stressful days at work, you do your best to keep up ... but life happens and sometimes you have to make a choice and some studying or homework may be put off” (23-year-old white female majoring in criminal justice; survey).



And life was happening for participants in this research study. Scott explained he needed to request extensions for his assignments when life demanded he step in to help “rescue” a family business (48-year-old white male majoring in political science; survey). In Michelle’s case, our interview was briefly delayed as she received a phone call related to selling her home and planning a cross-country move to Chicago. As if that were not enough, Michelle went on to explain:

We have another baby on the way. I need to get this [bachelor’s degree] done before that one shows up. I just have lots of things I need to get done [it’s] gonna be a new challenge, trying to balance a move – and doing school from Chicago (29-year-old white female majoring in liberal studies; interview).

Several participants expressed that they considered either taking a break or quitting altogether when it became too difficult to balance multiple responsibilities. In fact, two interview participants cited this as a top potential reason that could discourage them from maintaining enrollment at Sendero University, as depicted by their images and narrative in Table 12. Both participants discussed feeling overwhelmed and being spread too thin while balancing multiple responsibilities. This is similar to Morgan and Tam’s (1999) finding that students who take online courses most often fail to persist due to lack

Table 12

Imagery Representing the Challenge of Balancing Responsibilities

Participant	Image	Explanation
Jasmin, 25-year-old Latino female majoring in nursing (interview)		“The person is overwhelmed with all the work that he has to do, and just frustrated, and ... kind of lost on where to start. [Sigh] I think that's how I felt sometimes, just looking at all the things that I had to turn in in a week. I would just feel like I didn't know how I was going to be able to do all of it in the amount of time that I had.”
Carmen, 38-year-old Native American female majoring in organizational studies (interview)		“[This image] was like chaos. The ship's in distress to me would be me and my life and the chaos around me, not able to balance. Then I saw there are sailors in the sea and I just imagine that I spread myself too thin, and you know, maybe something slipping away or getting out of my control where I can't handle the schoolwork, and work and family, at the same time.”

Note. The images in this table were submitted by the participants noted in column one.

of time. This point was also articulated by Tom, who disclosed:

I consider quitting each and every day. Today for instance started at 0500 and I am still going If I don't succeed, [my little baby] is not going to have a chance at having the life I want her to have...so I push through I consider quitting every day but if I were to quit it would be because I was a baby myself (45-year-old white male majoring in liberal studies; focus group).

Tom, similarly, was encouraged to maintain his enrollment because his “oldest [son] used to say 'after high school' I want to do this and that...Now he says 'after college I want to do this and that'... [ellipses in original] Awesome!!” (survey).

Participants attempted to meet their responsibilities by studying late in the evening or early in the morning while the remaining members of their family slept. Trista, a 27-year-old majoring in justice studies, explained “sometimes the things that we really want require sacrifice,” so she completed her homework after 2:00 a.m. when her husband and infant son were asleep (mixed race female; focus group). Sada agreed, “I spend a lot of time sacrificing adequate sleep [while the rest of my family is asleep] ... in order to stay on top of my education and work. I just want all that to end as soon as possible; the faster I finish school, the faster the sacrificing will end” (38-year-old Asian female majoring in technical communication; focus group).

Linked to balancing responsibilities and the structure of personal life is the likelihood of a limited social life while pursuing an online degree program. This was particularly significant for female participants (36 of 47 occurrences), who expressed, “The pace is punishing. Everything moves quickly and when class is in session my social life must stop” (Josephine, 31-year-old white female majoring in sociology; survey).

Another exclaimed, “I have no social life!! ... Since I started school all I do is work and go to school. I work from 7am-4pm, get home at 5pm, have dinner, and study up until 11pm” (Sandra, 40-year-old Latino female majoring in organizational studies; survey).

In summary, time concerns related to the structure of online education and time concerns related to the structure of personal life were important factors participants regularly negotiated in their quest for postsecondary credentials. These concerns are

discussed in depth in Chapter 5, in connection to the other factors that supported and challenged persistence for double first-generation college students.

Quality concerns. Quality concerns were factors diminishing the learning experiences of double first-generation college students and challenged their persistence. This included lack of face-to-face interaction and taking science or math classes in an online format. The primary quality concern was the lack of face-to-face interaction, with 134 occurrences equitably distributed across age, gender, and race/ethnicity. Participants explained they missed the dynamic classroom conversations they experienced prior to enrolling in their online degree programs at Sendero University. Below are three brief vignettes illustrating these comparisons:

- Reese explained she did not learn as much in her online nursing courses because “the lack of personal, or face to face, interaction between faculty and students [created] a silo for learning” marked by “monotonous reading” and instructor feedback that was “difficult to decipher due to the nature of online communication.” Reese felt “online programs [were] geared toward paying for a degree, rather than investing in the learning process” (35-year-old white female majoring in nursing; survey). Reese, however, divulged that the online, RN-BSN pathway was the only way she could earn a bachelor’s degree in nursing.
- Heather needed to enroll in an online degree program because she took “a once in a lifetime job,” that would not accommodate a face-to-face program. She commented, “Sometimes I feel that I am not as important in online classes as I am in traditional classes because you don't form any kind of

personable/memorable relationships with professors and peers. Also, it's much harder to know what the professor will focus on in exams, whereas it is much easier to listen to what a professor might emphasize in a live lecture” (22-year-old white female majoring in criminal justice; survey).

- Dwayne, who was retired and enrolled at Sendero University for the satisfaction of finishing the degree he started 40 years ago, remarked that his online degree program suffered from a “lack of real-time interaction” and a “loss of clarity in instruction, meaning and purpose.” Dwayne took issue with the pace of accelerated courses, asserting his “the education experience [was] reduced to being a mechanical process of climbing a mountain - alone” (59-year-old white male majoring in organizational studies; survey).

These double first-generation college students felt they must enroll in online degree programs because it was “the only way” for them to earn their degrees (survey; focus group; interview), even though they might prefer face-to-face instruction. For example, near the end of our first conversation, Steve confided, “I’m totally against online” but “it’s the only option I have. I think it’s a great option, and I don’t think they should ever get rid of it. I think it’s great for most people. [sigh] At the same time it’s kind of limited” (31-year-old white male majoring in psychology; interview). Shortly thereafter Steve clarified, “I hope my opinion about online schooling doesn't affect the interpretation that I've given, because I really think [Sendero] sort of is really good. If I didn't, I wouldn't have done it.” As Burbules and Callister (2000) discussed, and as is exemplified by some participants in this study, students enrolled in online degree programs seek flexibility, even if it means they miss out on face-to-face interaction.

Concerns regarding the quality of online courses were raised in one of the focus group forums, where participants discussed their expectations for an online degree program. It was here that Calli mentioned her expectations for Sendero University classes were not always met. Calli wrote, “I have had some courses that made me wonder why anyone would pay such a high price to do what I imagine 8th graders do today. Others have been out of this world and had huge impacts on my personal, academic, and professional lives (sic).” Like other participants who reported experiencing one or two unfavorable courses, Calli did not think this was particular to online learning. She explained this was “an experience any college student, on any campus [could] have” (26-year-old white female majoring in sociology; focus group). Calli’s perspective spoke to previous research demonstrating that teaching activates student learning, not the medium by which it is facilitated (Clark, 1994). Instruction, whether face-to-face or online, works well sometimes and poorly other times.

Regardless, two disciplines were regularly discussed as a challenge in an online format: science²⁸ and math²⁹. Some resisted taking these courses in an online format and made arrangements to take them in-person at another institution. Jill, who completed both math and science online, explained that even though Sendero University “made [the

²⁸ The online science options at Sendero University included: geology, chemistry, astronomy, and habitable worlds. These were comprised of four credits, three credits for the lecture and one credit for the lab. In these courses, labs were conducted through simulations or experiments using household items.

²⁹ Sendero University required at least one college-level math class for general studies. The minimum requirement was college mathematics, or math for everyday life. This is considered a lower-level math course in comparison to college algebra. Psychology was the only major (at the time that data was collected) requiring a higher math – finite mathematics. Some majors also required a statistics course. Sendero University partnered with Knewton to use adaptive learning technology for entry-level math courses, such as those mentioned in this footnote. See <http://www.knewton.com/math-readiness> for additional details.

math and science courses] as user friendly as possible, the complexity of the material was challenging to do online” (38-year-old female majoring in technical communication; survey). Table 13 details examples of participants’ science and math concerns.

Table 13

Examples of Participants’ Science and Math Concerns

Science	Math
<p>“I’m taking a Geology 101 class right now It’s not easy at all. It’s a 1,200 point class ... and then the assignments are given in five and ten point increments. I spend my five hours a day doing science” (Steve, 31-year-old white male majoring in psychology; interview).</p>	<p>“The math caused considerable stress from the amount that had to be done. I was doing math six hours a day for one class and was generally stressed for the duration of each class” (Beth, 48-year-old mixed race female majoring in psychology; survey).</p>
<p>“[My proudest accomplishment] was getting a C in chemistry. [Laughter] I mean ... I would cry over that class. I thought I wasn’t gonna pass it. [Chuckles] I really was proud of that C. I’ve never been as proud of a C in my life” (Joy, 40-year-old white female majoring in technical communication; interview).</p>	<p>“Math has always been a struggle for me so I knew that I needed a classroom setting in order to succeed. Having graduated high school 25 some years ago I knew that I would need some help when it came to math. I never even considered math online I knew that any and all math classes would be in the traditional way” (Monica, 42-year-old white female majoring in liberal studies; focus group).</p>
<p>“My lab science was pretty intense, since I had corn, beans, lettuce, and all sorts of other strange things growing all over my dining room Keeping the little one and the cat from eating my homework were a bit of a challenge” (Marisa, 34-year-old white female majoring in technical communication; survey).</p>	<p>“[Putting off] my math class ... has caused a great deal of anxiety. I am not sure why, but I just have not had the confidence to take the [math placement] test and get it out of the way” (Paige, 25-year-old female majoring in justice studies; focus group).</p>

Note. Sources: Survey, focus groups, and interviews.

Participants suggested that a 15-week format, instead of a 7.5-week format, would be more conducive to their learning in the areas of science and math, which would help to extend the learning time and reduce the hours participants suggested they allocated to these topics (e.g., five or six hours per day).

It was difficult to decipher whether participants' science and math concerns were related to fear or anxiety of the topics (Tobias, 1993), to a lack of science or math ability due to being underprepared as a first-generation college student (Warburton et al., 2001), or if the online medium was actually a barrier to learning science and math. If it were the latter, the finding would be contrary to meta-analyses arguing no significant difference in learning outcomes related to online courses and traditional courses (Bernard et al., 2004; Cavanaugh et al., 2004; Means et al., 2009). Few studies have been conducted on student perceptions toward online math and science courses. The data collected in the present study raised concerns that are recommended for future research.

Along with the expectation that some classes would be less challenging than others was the reality that some faculty provided minimal feedback. As Michelle discussed, "You get feedback on specific assignments, but nothing on discussion posts. Your feedback comes in the form of a grade, which doesn't say much" (29-year-old white female majoring in liberal studies; survey). Trista went further to discuss "classes where the teacher basically just posted a syllabus" and nothing else "until final grades were put up." She said, "I was very disappointed in those classes [because they were] a little too self-guided" (27-year-old mixed race female majoring in justice studies; focus group). Sada agreed, sharing an instance in which a faculty member "just issued the letter grades, not telling students what was wrong about [their] papers etc." Sada expected "the

teacher, who is the ‘expert’ ... to give the instructions, supplement the textbook and give you an honest critique of your work” since “that is what their ‘PhD’s’ are for” (38-year-old Asian female majoring in technical communication; focus group).

Shea et al. (2006) found that when online courses were marked by a teaching presence (e.g., reviewing and commenting upon student responses, or facilitating discussions in a desired direction) students reported higher levels of learning and increased satisfaction. In another study, researchers argued a “subject matter expert” should facilitate conversations to ensure accurate understanding and to ‘scaffold’ learner knowledge through direct instruction (Anderson, Rourke, Garrison, & Archer, 2001). When the attributes for an active teaching presence were lacking, online students experienced frustration, anxiety and confusion (Hara & Kling, 2000).

Financial concerns. The third factor challenging student persistence involved financial concerns related to the cost of an online degree program, including the perception of unreasonable costs associated with tuition, fees, and books; uncertainty about paying back loans; and resisting student loans. These concerns were most prevalent for participants under 55 years old. A Wordle was created to visually represent the data encoded under the financial concerns theme (see Figure 12). Once again, the word cloud was limited to the 50 words appearing most frequently in the data, excluding those deemed implicit in participants’ responses (e.g., financial, college, online).



Figure 12. Financial concerns related to persistence. The following words were implicit in respondents' replies and were excluded from this word cloud: college, online, financial, student, education, degree, school, classes, and program. Sources: Survey, focus groups, and interviews.

The financial challenges associated with earning an online degree were cited as the fourth biggest challenge of online education (see Table 8), however, since there was no overlap between what was coded under financial concerns in general (89 occurrences), and what was coded as unreasonable cost (74 occurrences) or the ability to pay back student loans (53 occurrences), it is fair to argue financial concerns (216 occurrences in total) presented the biggest challenge to persistence. Shauna remarked the cost of college was “extremely overwhelming” and one of the “most expensive endeavors” in her life. For Shauna, like so many other double first-generation college students, “money [was] always what [came] to the table when trying to make the decision to keep going or not” (36-year-old white female majoring in psychology; survey). This held true for Lisa as

well: “[The] cost of college is almost not worth going to school for. When I graduate I will be over \$50,000 in debt from student loans alone” (25-year-old mixed race female majoring in communication; survey).

Participants did not understand why their tuition was so high, especially in consideration of the fact that they were not occupying a physical classroom or using on-campus resources (see Table 14 for tuition and fees). Carol, who was majoring in nursing, posited, “On-line classes are a great deal for the schools, but still very expensive for students” (56-year-old white female; survey). Reyna agreed, “I have a hard time paying over \$5000 a semester when I’m in the comfort of my own home just merely accessing computer programs.” Reyna said she was trying to come to terms with the costs associated with her degree, but ultimately felt she was “merely paying for the name ‘[Sendero] University’ to be on [her] diploma” (23-year-old Latino female majoring in criminal justice; focus group). Paige, who had been “blessed with [financial] assistance,” pointed out that she was “a bit disheartened to see how expensive classes can be,” and was particularly troubled by the tuition breakdown. Paige wrote, “[I] see a ton of fees³⁰ that I have no idea what they are. For example association fee, technology fee and these other things. I think it seems ridiculis (sic) to pay these extra fees when we are already paying a ton for classes...” (Paige, 25-year-old female majoring in justice studies; survey).

³⁰ For the Fall 2012 semester, online students at Sendero University paid the following additional fees, automatically charged with tuition: (a) \$50 Technology Fee, which covered the wireless network on all of Sendero’s brick-and-mortar campuses and provided access to University-licensed software, (b) \$21 Financial Aid Trust Fee, which goes to fund need-based grants under a program set up by the state legislature, and (c) \$2 fee for the Associated Students Association, an organization representing Sendero University students to state and national governing bodies (Sendero University Tuition and Fees Descriptions website, Fall 2012).

Table 14

Sendero University's Undergraduate Tuition and Fees, Fall 2012

	Online Campus	Ground-Based Campuses	
	In-State or Out-of-State ^a	In-State ^b	Out-of-State ^c
3 credits	\$1,399	\$2,128	\$2,962
6 credits	\$2,725	\$4,102	\$5,770
9 credits	\$4,071	\$4,862	\$8,682
12 credits	\$5,397	\$4,862	\$11,489
15 credits	\$6,723	\$4,862	\$11,489
18 credits	\$8,049	\$4,862	\$11,489

Note. Source: Sendero University Tuition and Fees Schedules website (August 2012).

^a Online students paid on a per-credit basis, regardless of in-state or out-of-state residency for tuition purposes. ^b In-state tuition was capped at seven credits. ^c Out-of-state tuition was capped at 12 credits.

Participants who self-identified as out-of-state students for tuition purposes were less likely to cite financial concerns. Heather explained, “I have no complaints about the cost.” She had been paying out-of-state tuition for traditional classes at Sendero University, and when she switched her major to the online campus, her “cost [was] less than half.” As an out-of-state resident, Heather benefited from the same low tuition rate in-state residents were paying (22-year-old white female majoring in criminal justice; survey). This troubled in-state residents like Monica, who said: “I do not get any sort of reduced tuition even though I am an [in-state] resident. I find it strange that people living all over the United States pay the same amount as I do. I also think that there should be a tuition cap like there is for students that are on campus” (42-year-old white female majoring in liberal studies; survey).

Some participants resisted taking out student loans to cover their educational expenses (45 occurrences), as tends to be the case for first-generation college students

(Choy, 2001; Somers et al., 2004). Michelle explained, “[The] cost of college has ALWAYS been a massive challenge and the primary reason why it has taken me over 10 years to finish my bachelor’s degree” (survey). Michelle had been trying to:

pay for [school] out of pocket. Well, to do that [chuckle] as money allows, you end up putting school off When I decided to just go for it, I just said, “You know what, let’s just rack up some debt, because if we insist on paying for this out of pocket, I will be in school working on a bachelors until I’m 40. Let’s just get it done.” [My husband and I] decided to ... take out a few loans, because I knew we couldn’t afford to pay for it out of pocket. We had to borrow (29-year-old white female majoring in liberal studies; interview).

Similarly, Lacey, who is a single parent holding a full-time job, declared, “I was trying to pay as I go but that hasn’t been working.” She explained, “Sometimes I’m not sure which is more stressful, the homework or paying the tuition on time” (Lacey, 22-year old white female majoring in justice studies; survey).

Participants requiring student loans to fund their coursework were concerned about their ability to repay these loans once they graduated. The language they used in this area of the data corpus was more vivid than in any other, perhaps to emphasize heightened concerns. Below are some examples, which were drawn from the survey data:

- “I will clearly be in debt until I die.”
- “I’m racking up loans that I doubt I’ll ever be able to pay off.”
- “I will be in MASSIVE debt when I graduate.”
- “I am buried in student loans.”




- “The cost [of] tuition handicaps my life.”
- “I’m afraid to graduate because my student loans are so high.”
- “I am going to be in debt for the rest of my life.”

Jolene, dependent upon financial aid to fund her education, said, “Just looking at the numbers freaks me out. I feel like I will be paying on school forever.” Jolene expressed regret as she confided, “Sometimes I wonder if school was really worth the enormous expense. In reality I know it is – but financially suffering is going to hurt” (25-year-old white female majoring in organizational studies; survey). Pilar took a more optimistic tone, “I know in the end I’ll have to pay back all the loans I’ve gotten but I try not to stress about that. I tell myself that I’m going to get far in school and be able to pay off these loans once I have my career” (22-year-old Latino female majoring in liberal studies; survey).

Financial challenges were also made visible through the image exercise accompanying the two-part interviews. Four participants independently submitted images depicting or referring to money, but surprisingly, none of the images were intended as something that would encourage persistence (see Table 15). Money, or the lack thereof, represented the greatest challenge to persistence for 33% of the interview participants ($n = 4$). This important finding replicated prior research. First-generation college students are not only concerned with finances (Bui, 2002; Martinez et al., 2009), but are also debt-averse (Lohfink & Paulsen, 2005; Somers et al., 2004) and are more likely to drop out than take on loans to pay for college (Choy, 2001; Somers et al., 2004).

Table 15

Imagery Representing the Challenge of Financial Concerns

Participant	Image	Explanation
Sara, 29-year-old mixed race female majoring in history (interview)		“My student loan is probably the biggest—they’re the biggest debt I’ve ever had—like the biggest loan I’ve ever gotten. I’d always assumed that if I was gonna borrow that much money it would be for a house.”
Andrew, 27-year-old male majoring in psychology (interview)		“I’m pretty heavily invested in [school] at this time. I don’t know if I would really be able to stop even if I really wanted to. Stuff, like I said, debt—student loan debt kind of freaks me out a little bit. It’s also another reason why I can’t really stop at this point Most of the good aspects and bad aspects kind of require that I continue [to study].”
Michelle, 29-year-old white female majoring in liberal studies (interview)		“I didn’t really know how to—how else to sum it up but as in money It’s kind of like, money for daycare, money for books. We got a little bit of loans, but I’ll accept that If money ever got to be a big issue that would be the one thing that would stop me in my tracks.”
Kendra, 34-year-old white female majoring in liberal studies (interview)		“My discouragement [image] was money, because it’s expensive It’s ridiculous, especially at a state school.”

Note. The images in this table were submitted by the participants noted in column one.

This section, which centers on the financial challenges associated with online degree programs, concludes with a vignette highlighting Aubrey, a 24-year-old in the midst of her junior year. Aubrey had been caring for her disabled mother while attending school to earn a degree in psychology, but picked up a job in the past year to help cover expenses. Aubrey dreamed of overcoming the “stress of living in poverty; like [she and her family] still [were],” and she believed she could “break the chain in her family” by obtaining an education. Furthermore, Aubrey thought she would need to take a break from her studies, due to financial constraints:

My family is poor so paying for college is a struggle. I am not even sure I am going to be getting money for the last year towards my BA because of exceeding the amount as an undergrad or so I have been told. I have no one to help with a bank loan because I have tried Other than my parents help I have asked aunts, uncles, etc. for help but no one can. I just keep trying and praying things will work out (24-year-old mixed race female; survey).

Aubrey may have her dream deferred due to lack of resources. Her case speaks to Martinez et al.’s (2009) research, which revealed that a lack of finances, in the form of loans and scholarships, was a stronger predictor of attrition than parental education levels.

Perception concerns. The fourth factor challenging persistence was perception concerns related to the value of an online degree. A survey participant aptly described this concern when he wrote, “There is still a stigma attached to online study. Some people don’t recognize the challenge and the quality of the education that can be achieved through online study” (Robert, 41-year-old white male majoring in film and media

studies; survey). Perception concerns appeared minimally in the survey data (10 occurrences), but more so in the focus group (27 occurrences)³¹ and the interview data (12 occurrences); this was an unexpected finding.

Participants hoped their official academic records would not carry an online designation. Sharon explained, “I wanted to attend a school with a reputation and a solid institution not like a University of Phoenix but an establishment where an employer would not necessarily know if I was on campus or on line (sic)” (48-year-old white female majoring in liberal studies; survey). Several mentioned feeling relief when their advisor or enrollment counselor shared the word “online” would not be “stamped across their transcripts or diploma” (focus group; interview). Kayla posited “little concerns like this should be ... clarified for students, so they do not think that an online degree is devalued” (23-year-old Native American female majoring in psychology; focus group).

Sendero University’s reputation was critical to easing participants’ concerns about the perception of their online degrees. For example, Stacey said:

I do not know how true or important it is, but a lot of people ... seem to think that online education is a little bit of a joke, ... [and that] the programs offered don't really lead to anything in way of better jobs or pay.

Stacey felt more assured attending Sendero University, since it “is a ‘known’ and traditional school that just happens to have an online program” (30-year-old white female majoring in liberal studies; focus group). Bill agreed, insisting, “Saying you're going to

³¹ The focus group questions were not designed to explore this concern (see Appendix F). The anonymous discussions must have helped focus group participants to feel comfortable expressing their opinions, such that once perception concerns were voiced, they became normalized. After analyzing the focus group data, I adjusted an interview question to explore the topic more deeply – setting up a human resources scenario during the first part of the interview to elicit a deeper understanding (see Appendix H).

school ‘online’ sounds cheezy (sic) and cheap But when I graduate that piece of paper will still be from [Sendero University], campus or online” (28-year-old white male majoring in liberal studies; survey).

At times, participants’ parents, friends, and coworkers questioned their choice to pursue an online degree program, as illustrated in Table 16. For the most part, these perceptions were unimportant to the participants, who had done their research about online degree programs and felt comfortable with their educational choices.

Double first-generation college students were less sure about what they might encounter when they entered the job market. Calli mentioned “a huge drawback” to attending school online was that “some big name schools have made online schooling look like a joke.” She confessed, “I will probably keep the fact that I went to school online a secret. I don't want to miss out on jobs because of how I learned” (26-year-old white female majoring in sociology; survey). Along the same lines, Michelle explained, “[My greatest fear is] that future employers will think that I have a lesser degree if they find out I got it online” (29-year-old white female majoring in liberal studies; interview). Conversely, Tamara did not feel her “degree being online [would] be less valuable” after graduation; nevertheless, she feigned confidence by adding, “Every RN to BSN program in the state is online. So I know I will be one of MANY graduates with that degree which will keep me from sticking out!” (28-year-old white female majoring in nursing; focus group).

Table 16

Exploring Perception Concerns Related to Online Degrees

Participant	Others' Perceptions	Participants' Beliefs
Sara, 29-year-old mixed race female majoring in history (interview)	"I've had clients joke and say, 'Oh, are just going to print out your degree?'"	"They don't really understand ... but I don't really think it's an issue, mostly because once you have the degree, it's not like it says it's from online. It just says [Sendero] State. I think it's more trying to convince people when you're taking the classes that it actually is a real class and you have to do a lot of work."
Scott, 48-year-old white male majoring in political science (interview)	"[Some of my family members] were very critical saying that online school wasn't 'real' school Most of them did not attend regular college so the idea of online college almost seemed like a cop out as far as [they were] concerned. They couldn't understand why I would opt for online college instead of continuing my traditional college route."	"I had already done a lot of research on my own about online college. I didn't let their opinions sway my decision, but it does make me want to work harder and show them that an online degree will get me to the same place a traditional degree will."
Doug, 54-year-old white male majoring in sociology (focus group)	"[My parents] felt that it was ... akin to a correspondence course, with no structure to the course and no real instructor. My Dad asked me if my diploma would have the word 'online' printed on it...he felt this would devalue the degree in the eyes of employers."	"I did a LOT of research and asked a lot of questions before deciding to pursue an online degree.... Seeing the large number of major universities that offer fully-online degrees went a long way towards my decision, and more importantly, my work schedule just doesn't allow me to attend in a traditional classroom setting."

Note. Sources: Focus group and interviews.

The double first-generation college students in this study believed perception concerns associated with online degrees would change over time. Tom pointed out:

I work with lots of VERY educated people and I have not found one that thinks that my quest for a degree at [Sendero] online is hard. They believe, the old schoolers, that face to face classes are the only way to learn effectively. That tide is changing every day. The old schoolers are being replaced by a new generation that understands and must work with computers and yes, some of us have degrees from that computer thingy In the end, I will get a degree from [Sendro University] and if I were up against a traditionalist equal on paper, then the interview would be the deciding factor and I am pretty good at those (45-year-old white male majoring in liberal studies; focus group).

Kayla also carried a positive attitude: “Within a few years, I am sure that online degrees will gain the same respect as in-class degrees. If anything, I know that online courses are more challenging than in-class courses” (23-year-old Native American female majoring in psychology; focus group). Though Scott felt employers’ perception concerns would “absolutely [be an] issue” for him, he believed these concerns would be short-lived: “I think that when you’re [studying] online, especially if you’re from my generation, you’re thinking of correspondence schools and those – the back of the comic books where you can become a reverend and things like that, [chuckles] I mean obviously [these are] legitimate degrees” (48-year-old white male majoring in political science; interview).

Online postsecondary education has been likened to a digital diploma mill (Noble, 1998), marked by the presence of untrained faculty with the end result of illegitimate credentials. Sendero University administrators have been working to change this

perception. According to an excerpt from a January 2013 press release: “Students who choose an online program with [Sendero University] learn from the same excellent faculty, engage with the same rigorous content and earn the same degree as students who attend on ground The result is unprecedented access to a leading Research-1 university” (Sendero University Executive Vice Provost).

Even still, research demonstrated that “gatekeepers”³² in different settings do not see online degrees as having the same value as a degree earned through face-to-face instruction (Adams, 2008; London, 2008; Sinow & Kyie-Blankson, 2012). Researchers identified a significant disadvantage to earning an online degree when applying for graduate school (DeFleur & Adams, 2004), applying for a business-related job (Adams & DeFleur, 2006; Kohlmeyer et al., 2011), or seeking employment in a health-related field (Adams et al., 2007). Market research showed consistency with these scholarly findings; a recent study by Vault revealed 63% of hiring managers ($N = 176$) from various industries favored job candidates with traditional degrees, while only 35% gave equal consideration to candidates with online degrees (London, 2008). Despite these dismal results, 83% of employers believed online degrees were more acceptable in 2008 than they were in 2003 (London, 2008).

The findings from present study, when matched to the institutional perspective and considered alongside extant literature, suggest a necessity to address perception concerns associated with online degrees. Not only is there a need for additional research about the perceived value, or acceptability, of online degrees, but resultant reports should

³² Gatekeepers, in this sense, refer to graduate admissions counselors, human resources staff, recruiters, managers, etc. Anyone who would evaluate a candidate’s application for employment or graduate school would be considered a gatekeeper.

spur conversation between policymakers, gatekeepers, and postsecondary administrators. This is discussed in greater detail in Chapter 5.

Balancing key factors in persistence decisions. The overall findings related to the third research question – examining the factors that encouraged persistence – revealed that a majority of double first-generation college students balanced six primary factors when making persistence decisions, as illustrated in Figure 13. For instance, double first-generation college students were more likely to persist if they (a) perceived costs to be equitable with the quality of online instruction, (b) experienced academic flexibility that adequately fit into other demands on their time, and (c) believed postsecondary education would create opportunity for a profitable career, in lieu of a job. On the other hand, double first-generation college students were less likely to persist if (a) cost or time was prohibitive, (b) academic quality or flexibility lagged, or (c) a job became more prized than a career.

cost - quality
time - flexibility
job - career

Figure 13. Primary factors affecting persistence decisions.

Below are three examples, among many that could have been highlighted, demonstrating how participants balanced these competing factors in deciding whether or not to persist. The factors (i.e., cost, quality, time, flexibility, job, career) are color-coded with corresponding data to visually represent the participants' thoughts about persistence; additional examples are included in Appendix J.

- When Nathan discussed the **quality** of his education, he also relayed reference to its **cost**: “Some of my acquaintances do not understand how serious I am about completing this degree or they think that it is easy because it is online. I do not qualify for financial aid, so I have to pay out of pocket. It seems expensive in the overall because I am not occupying a physical facility” (38-year-old African American male majoring in political science; survey).
- Rich mentioned his limited resource of **time** when he discussed **flexibility**: “I’m a full-time working husband and father. My time is a commodity and it was not an option to work my existing responsibility around the times and availabilities of the in-person classes. On-line (sic) classes allow me to schedule when I will learn the material and do the assigned homework” (43-year-old white male majoring in internet and web development; survey).
- Similarly, when Judy considered the prospects of obtaining a **career** following graduation, her response was framed by the reverse factor of having a **job**: “Having stayed at home with [my] daughter for the first 5 years of her life, when she went to school, I was faced with the decision to either go out and get another J-O-B or to go to college for a degree and a career” (39-year-old white female majoring in interdisciplinary studies; survey).

Factors encompassing cost – quality, time – flexibility, and job – career, were integral to double first-generation college students’ persistence decisions. They are revisited in Chapter 5 as part of a micro-level discussion about persistence.

Looking Ahead with Hopeful Expectations

Having detailed the factors that supported and challenged student persistence, I turn to the fourth, and final, research question: “What expectations do double first-generation college students have about their academic or career ‘destinations’?” In spite of the perception concerns presented in the previous section, participants were hopeful in regards to potential opportunities awaiting them once they earned their bachelor’s degrees, be that graduate or professional school (32 occurrences), a promotion (35 occurrences), or a new career (78 occurrences).

A closed-ended survey question offered a comprehensive view of the educational aspirations of the double first-generation college students in this study. While 38% indicated they aspired to earn a bachelor’s degree ($n = 114$), even more participants planned to continue on with their education to attain their master’s degrees ($n = 120$; 40%), and a number intended to strive even further and earn a doctorate or professional degree ($n = 57$; 19%), as displayed in Figure 14. This finding was contrary to other research indicating first-generation college students have lower educational degree aspirations (Ishitani, 2006; Somers, Woodhouse, & Cofer, 2004) and are less likely to persist and graduate (Lohfink & Paulson, 2005; Ishitani, 2006; Pike & Kuh, 2005; Terenzini et al., 1996, Somers et al., 2004). Although the present study cannot address the point in relation to whether or not these 300 double first-generation college students

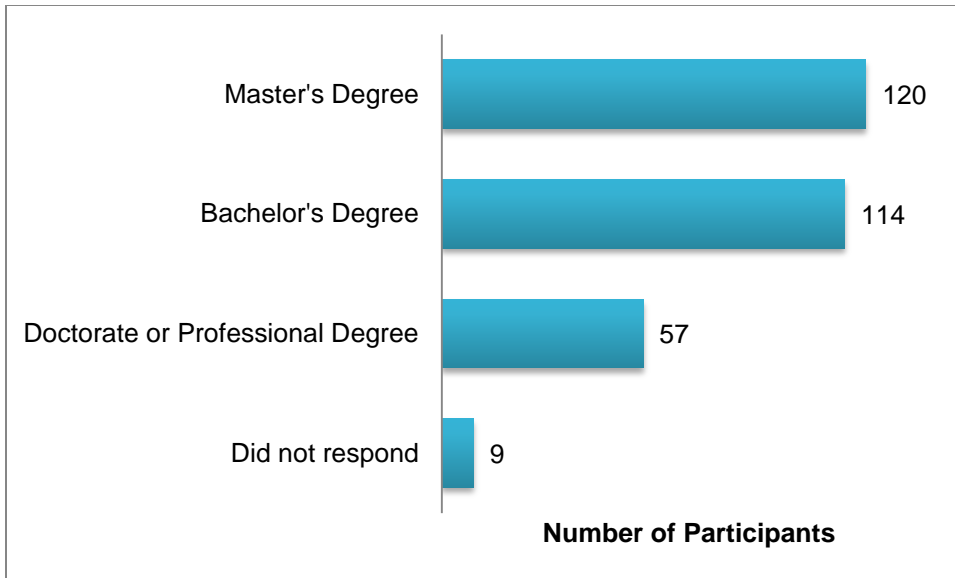


Figure 14. Educational aspirations of double first-generation college students.
Source: Survey.

will graduate, the results suggest findings pertaining to first-year students cannot be applied to an entire population, which is a topic that will be explored in Chapter 5.

Participants discussed pursuing college to “move up the corporate ladder” or advance beyond “a ceiling in the corporate world” (survey), but those who enrolled in an online degree program to bolster their chances for a promotion internal to their current place of employment seemed more confident than others. Carmen felt assured she would become eligible for a promotion after earning her degree:

My boss [told] me, “I want to give you more responsibility and put you in higher positions, but you need to have your education. I know you can do it, I know you have experience, but you need those letters behind your name” (38-year-old Native American female majoring in organizational studies; interview).

This was also true for Lori, who explained, “[My boss] says that she has something in mind for me as soon as I have a degree” (55-year-old white female majoring in liberal studies; interview).

Other participants dreamed of a new career, but they were also unsure whether or not they would find one as a result of their credentials. Brenda, who was majoring in technical communication, said, “In a perfect world the cost of my education should be compensated when I complete my degree and find a job within the scope of my program of study [but] there are no guarantees and we just have to roll with the punches and do the best we can” (50-year old, white female; survey). Joy also raised this concern via the image exercise that was part of her interview (see Image 3). Similar to the perception concerns cited in the previous section, Joy wondered:

Is this degree gonna be enough to get me where I need to go? Do I need to go further? Do I need to get my masters? When I go to ... the job markets, are they gonna look at my degree and think that I’m qualified, or are they gonna look at my degree and think, “Is the online sufficient enough?” I mean there’s a lot of things for me that I worry about, and that I question, or I worry about. I have lots of questions. There. [chuckle] (40-year-old white female majoring in technical communication; interview).

Joy’s point was indicative of many of her peers’ concerns. This aspect of the dissertation research, which attempted to project the future, raised more questions than answers. Since the participants in this study are among the first group of students in the history of American public education to earn their postsecondary credentials in an entirely online format, it is not yet known how they will fare when they enter the labor



Image 3. Joy’s image to illustrate what discourages her persistence. She explained she has many questions about the future, including employer’s perceptions about her online degree. Source: Interview.

market or apply to graduate schools. To add greater complexity, the state of the US economy generates another level of uncertainty. Although concerns abound, the double first-generation college students in this study have hopeful expectations, just like Tamara, who expressed:

Before I began my courses I would have said I think this education would be less important compared to a traditional degree path. Now that I am nearing its completion I feel a bit differently. I feel what I have learned is just as valuable as a traditional in class degree (28-year-old white female majoring in nursing; focus group).

Even Erin, whose parents exhibited a “wait and see” attitude about her choice to attend Sendero University for an online degree program, agreed. Opening her discussion board post with the phrase “No College [Student] Left Behind,” Erin wrote, “[My parents] don’t believe that going to school online will help me in the ‘real world’ so it’s up to me to

show them” (23-year-old Hispanic female majoring in organizational studies; focus group).

So it is for Erin and her peers. These double first-generation college students have displayed strength and determination in not being left behind. It yet it may be largely up to them to demonstrate to their families, their institution, their future employers, and the greater American public that attaining an online degree is as good as attaining its brick-and-mortar counterpart. This will be further discussed in Chapter 5.

Summary

Within this chapter, I addressed the four research questions guiding this study by presenting key findings through systematic, powerful displays of data. To briefly summarize, the participants in this study were more likely to be female, 25 years or older, who worked 40 or more hours per week. The participants tended to think of themselves either as spouses who study or parents who study. Their majors were in the social sciences, and they usually carried 12 credits per semester. To balance their multiple responsibilities, participants transferred into online degree programs, which afforded the flexibility they needed to pursue postsecondary education. The promise of a better career was the most significant factor that supported their persistence, while financial concerns challenged their persistence. Though life beyond graduation seemed uncertain, most participants held hopeful expectations for their career or academic destinations as a result of their enrollment in an online degree program.

In Chapter 5, I draw connections between these findings in relation to the extant literature, in order to provide a more holistic view of the case of double first-generation college students.

CHAPTER 5

Discussion

In undertaking this study, I sought to illustrate the academic experiences and persistence strategies of double first-generation college students who matriculated at a public university. The research questions, designed to explore the origins and destinations of double first-generation college students, ultimately revealed implicit societal promises associated with acquiring postsecondary credentials and illuminated personal tensions double first-generation college students balanced in pursuit of those promises.

In the pages that follow, I extend the study by amalgamating the research findings in order to provide a more nuanced understanding of the double first-generation college student experience. In addition to challenging the paradigmatic ideal championing postsecondary credentials as assurance for upward mobility and discussing implications associated with the expansion of online degree programs, I argue that legacy student departure theories (i.e., Bean & Metzner, 1985; Tinto, 1975, 1993) do not adequately depict the vital dynamics leading double first-generation college students to persist. Accordingly, I propose an alternate framework with which to examine this population's persistence strategies.

Challenging Preconceived Notions

When conceptualizing this case study nearly two years ago, I surmised it would be a research project focusing on traditional, first-generation college students who happened to be studying online. I posited that these students were part of a “faceless” population (Crawley, 2012) easily overlooked because they were not physically present

on campus. The first step I took in my endeavor to anthropomorphize, or put a “face” to, double first-generation college students was to consult the scholarly literature on their traditional predecessors. Based on the particulars revealed in the studies involving first-generation college students, I presumed this research would be informed by “older,” predominantly female students (Engle & Tinto, 2008; Inman & Mayes, 1999; Terenzini et al., 1996). In addition, I expected participants:

- Would feel less academically prepared and would struggle with time management (Bui, 2002; Collier & Morgan, 2007).
- Would cite financial concerns (Bui, 2002; Lohfink & Paulsen, 2005; Martinez et al., 2009; Somers et al., 2004).
- Would prioritize their family roles (i.e., daughter/son, sibling) and their work roles, especially in comparison to their student roles (Billson & Terry, 1982; Pascarella et al., 2004; Pike & Kuh, 2005; Richardson & Skinner, 1992; Somers et al., 2004).
- May protect family relationships to the detriment of their social and academic aspirations (Bergerson, 2007; Stieha, 2010).

I also supposed that participants’ persistence could be negatively impacted by limited involvement with the academic and social environment of their virtual campus (Hahs-Vaugh, 2004; Pascarella et al., 2004; Terenzini et al., 1996). After receiving IRB approval to commence this study, I was certain that I understood this population to some degree; however, the data collected pointed to dimensions significantly disparate from what I envisioned.

As participants' voices amplified with each phase of data collection and each round of data analysis completed, my eyes progressively opened. My understanding of double first-generation college students grew in conjunction with the research project; participants in this study were not merely "older" but, ranging from 21 to 82 years old, averaged 35 years old, and while these double first-generation college students did prioritize family roles over their student roles, they defined the former differently than is typified in the existing literature. Double first-generation college students in this study identified as *parents* or *spouses* who studied and, contrary to other research (e.g., Pascarella et al., 2004; Pike & Kuh, 2005), did not view their daily role as an employee as one superseding their role as student. Double first-generation college students balanced their competing daily roles by taking advantage of the academic flexibility afforded through online degree programs, and knowingly sacrificed face-to-face interaction with faculty members and peers (Burbules & Callister; 2000) because, for many of them, online degree programs were the only way to pursue or continue their postsecondary education.

As my research progressed, I noted distinctions pertaining to familial influences on double first-generation college students' academic aspirations. Unlike other studies (Bergerson, 2007; Stieha, 2010), parental and sibling support was less important to double first-generation college students' persistence. Participants appreciated parental and sibling support for their pursuit of postsecondary education, but when family members' opinions differed from their own, the dissenting voices produced a negligible impact on students' persistence decisions. The principal factor contributing to this finding was the fact that double first-generation college students in this study were adult

learners who were more apt to place their children and/or spouses in their familial support circle, subsequently diminishing the importance of extended family members' views.

Remarkably, research participants were driven to persist in their pursuit of an online degree, even without a tangible connection to their brick-and-mortar institution – many never stepped foot on a physical campus and most experienced only loose, temporary connections with peers and faculty, as these persons changed with every class undertaken. In sharp contrast to existing research (Pike & Kuh, 2005; Terenzini et al., 1996; Tinto, 1975, 1993), double first-generation college students in this study persisted with limited academic engagement and virtually no social engagement to Sendero University. They were more likely to experience a heightened sense of isolation from their campus community (Rendón, 1992; London, 1989), given that they completed their coursework online at the place and time of their choosing. Lacking social and institutional engagement, participants were motivated by internal factors, primarily the pursuit of postsecondary promises, or the belief that a bachelor's degree would bring career and social mobility. Toward that end, fervently desiring postsecondary credentials, these double first-generation college students demonstrated resilience when external factors such as difference in family opinion, personal finances, limited time, and societal perceptions of online degree programs challenged their academic goals.

Reflecting upon these discrepancies near the end of the study, I wondered how I initially missed the mark in anthropomorphizing the true “faces” of double first-generation college students. As a seasoned professional, early-career researcher, and first-generation college graduate, I reasoned I should have known better, that is, until it dawned on me that I had been groomed by the extant literature and the privileged voices

within that body of knowledge. The disconnect was inevitable, since the double first-generation college students in this study were doing something new, something never before done in the history of American higher education – which was therefore accurately reflected as “missing” in the scholarly literature. I argue that double first-generation college students are pioneers whose educational experiences will challenge the field’s preconceived notions about first-generation college students, especially with regard to persistence, which will be discussed in the next section.

Exploring Persistence: A Micro-Level Discussion

Given the distinctive academic experiences of double first-generation college students, I encountered difficulty identifying a suitable framework to examine their persistence strategies. Two prominent theoretical models – the “Theory of Student Departure” (Tinto, 1975, 1993) and its derivative “Model of Student Attrition” (Bean & Metzner, 1985), discussed in Chapter 2 – were dismissed for three primary reasons before data collection commenced.

First and foremost, both theoretical models privileged the institutional perspective, as evidenced by the descriptive titles, which include the phrases “student departure” and “student attrition.” I contend that models privileging institutional retention indicators are inappropriate tools to examine student persistence (Hagedorn, 2005); therefore, I sought a framework to highlight the student perspective, focusing on reasons for persistence, not departure.

Second, both predictive models assumed a deficit lens attributable to examining reasons for dropout³³ of students unable to integrate into the structure of their postsecondary institutions (Tierney, 1999). Similar to Tierney (1999) and Rendón (1994), I found this type of theoretical approach diminished double first-generation college students' strength and determination by "placing a magnifying glass round the interactions within the institution," thereby assuming "a small and static world" that failed to capture the economic, social, and political realities influencing students' lives (Melguizo, 2011, p. 400), and in contrast, I deduced that a more suitable perspective would examine how postsecondary education fits within the structure of double first-generation college students' lives. This point is particularly salient for the reason that first-generation college student status should not be viewed as detrimental to success (Rendón, 1994).

Third, these theoretical models were derived for entirely different populations, and therefore posed insurmountable barriers for the current study. Tinto's (1975, 1993) theory addressed the academic and social involvement of white, middle-class students at residential universities in the 1970s. Tinto's narrow parameters, possibly effective for homogenous, residential student populations (Attinasi, 1989), created injustice when applied to an especially diverse student body (Tierney, 1992) attending a "virtual" campus. Although Bean and Metzner (1985) differentiated their model to be inclusive of nontraditional students, their framework was developed for commuter students who enjoyed face-to-face instruction, a dissimilar population to the present study. In either

³³ Tinto's (1975) original theory, Theory of Dropout, was renamed in 1993 to Theory of Student Departure, and although the name was changed, the intent to predict reasons for dropout was unchanged.

case, the dropout variables associated with such divergent populations were far too inadequate to decorously capture the varied academic experiences and persistence strategies of double first-generation college students.

Finding little use for widespread student departure theories (i.e., Bean & Metzner, 1985; Tinto, 1975, 1993), I attempted to utilize Rendón's (1994) validation theory, which privileged the student perspective and presented a reasonable match for students pursuing online degrees. I designed the study with Rendón's framework in mind, crafting survey and interview protocols that might elicit responses demonstrating validation, or affirmation and support of college-going activities. Ultimately, I procured limited evidence regarding validation of double first-generation college students by personnel internal to the institution; this occurred only five times in the data corpus. Taking an alternate approach, I broadened the theoretical framework to include any source of validation, whether internal or external to the institution, excepting family members, yet the impact was still fairly low, with just 27 occurrences across the data corpus. Taking into account the dearth of substantial evidence to support validation theory, it too was dropped from the conceptual framework.

Conceptual contribution. Considering the limited applicability of decades-old theories to a new postsecondary phenomenon involving a contemporary, online learning environment and a markedly different student population, I propose an innovative model to examine the persistence of double first-generation college students. The suggested model did not evolve from the above-mentioned legacy theories, but originated from the rigorous analysis of empirical data collected in this qualitative case study, an approach researchers argue is fundamental to theory building (Attinasi, 1989; Tierney, 1992).

Before presenting the model, it is necessary to revisit two foundational ideas. The first is that most double first-generation college students matriculated in online degree programs for pragmatic reasons – to increase their earning potential and/or to improve their career prospects (Levine, 2000; Pryor et al., 2012). The second is that double first-generation college students are customers (Hadfield, 2003) interested in developing a relationship with a postsecondary institution similar to what they experience with their financial institutions, auto repair shops, and supermarkets (Levine, 2000). This means double first-generation college students are willing to pay a reasonable price for postsecondary education marked by quality instruction, convenience, and excellent customer service; they are unwilling to pay for postsecondary services or activities that are of no avail to them, especially since they can “attend class” wherever they access the internet and are not using the facilities of a physical campus to meet academic obligations. This customer – provider relationship, understood as working toward the customer’s pragmatic educational goal, is vital to understanding the model I put forth.

The proposed model includes six primary factors, or variables, affecting students’ persistence decisions. These variables, first introduced in Chapter 4 and illustrated in Figure 15, are characterized by three key tensions that comprise the model: cost – quality, time – flexibility, and job – career. This model draws from Fischman and Haas’s (2012) and Haas and Fischman’s (2010) research, particularly in borrowing the use of “tensions” to demonstrate “constantly evolving” conditions (Fischman & Haas, 2012) that inform students’ persistence decisions. In this model, the term “tensions” signifies the conditional clauses, or contradictions, participants used when (a) explaining their reasons for enrolling in online degree programs or (b) sharing factors that supported or

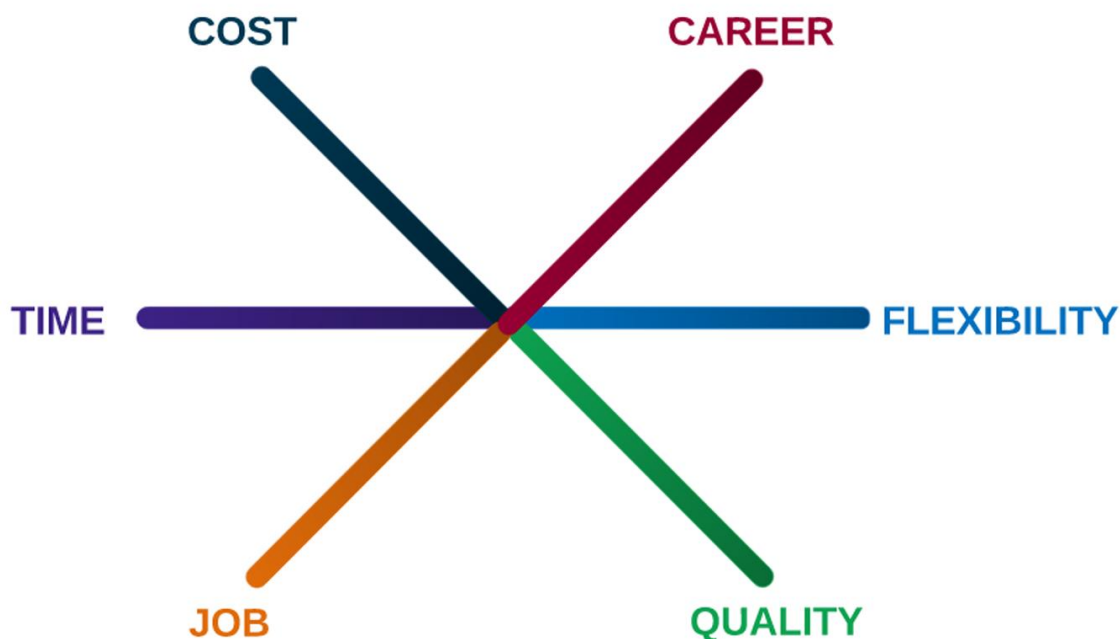


Figure 15. Proposed model to illustrate double first-generation college student persistence.

challenged their persistence, as demonstrated in Appendix J. These tensions, which are not meant to be resolved, are balanced and rebalanced according to double first-generation college students’ professional goals, finite resources (i.e., time and money), and perceived value of their online degree program (i.e., cost and quality).

Persistence is associated with variables appearing on the right side of the model. In other words, double first-generation college students are more likely to persist if they strive for a career, experience academic flexibility as a benefit to enrollment in online degree programs, and/or perceive they are receiving quality education. For example, if a student’s goals or resources change such that:

- a job becomes more attractive than a career;
- time becomes too compressed to negate a flexible academic schedule; and/or

- educational costs outweigh the quality of instruction,

then the variables on the left side of the model will take precedence, jeopardizing the student's desire to persist. In this way, persistence decisions are directly related to the customer – provider relationship described earlier; if the customer's resources become too limited or the provider's services are no longer desired, then the student is less likely to persist. Persistence decisions are ascertained whenever students make any enrollment decisions, whether in the form of adding, dropping, or withdrawing from courses. It is expected that students' views toward each of the tensions will evolve during the length of their postsecondary career – be it four years, 10 years, or 62 years – due to the ever-evolving nature of life circumstances over time, and will, therefore, result in varied persistence decisions.

The proposed model flexibly accommodates students' persistence decisions, as will be illustrated by vignettes for three double first-generation college students who participated in the study. Their stories highlight the tension pairs and correspond with the model bearing participant indicators, as displayed in Figure 16.

Sada, a 38-year-old, Asian female who was studying technical communication, explained: "I returned to school as a married, working adult ... to have a career doing something I really like, technical writing--instead of feeling forced to work as an accountant for the rest of my adult years." Sada's online degree program afforded the "flexibility, efficiency, and convenience" she needed to pursue that goal. Sada attended to her schoolwork "during late nights, weekends and early mornings," and she expressed disappointment toward "the cost and the quality of some of [her] courses," stating that "When you pay that kind of money, you should expect quality. Unfortunately, a handful

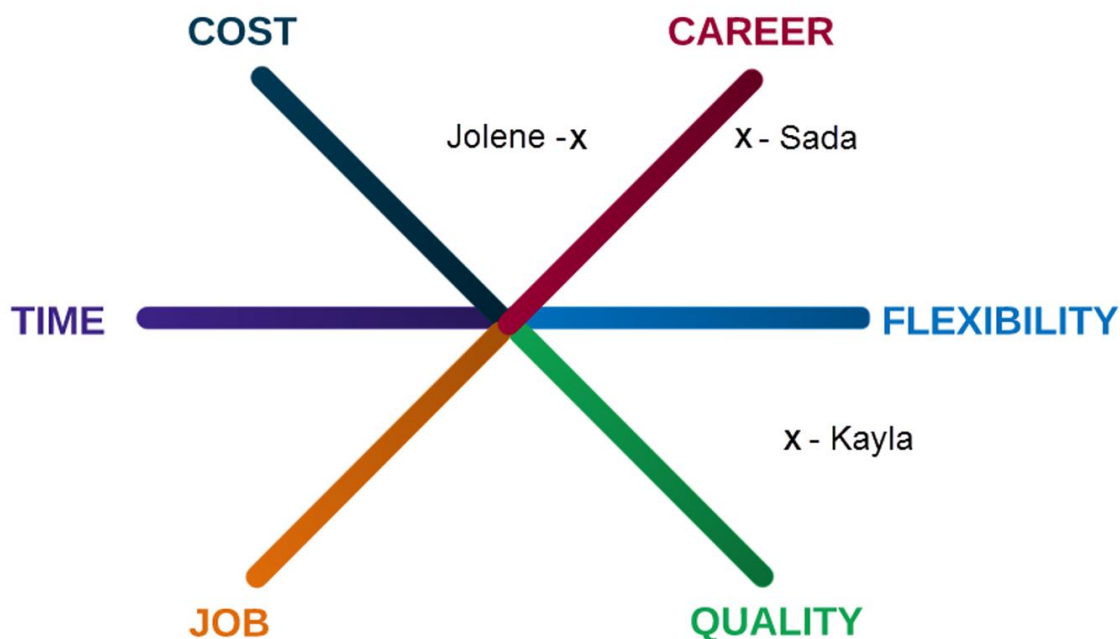


Figure 16. Example of the proposed persistence model in use. Participant indicators were placed after analyzing their related data.

of aloof, or lazy teachers is too many to excuse” (survey and focus group). I deduced that Sada persisted primarily for the promise of a career, but she also appreciated the flexibility of her online degree program; therefore, Sada’s indicator fell in the upper right side of the model.

Jolene, a 25-year-old, white female majoring in organizational studies, observed her father, who had some college experience, work “his way from [one] low paying job to the next,” and after her father’s passing three years ago, Jolene witnessed her mother’s “struggle[s] to find a job rather than a ‘career’ because [her mother] didn’t attend college.” These experiences pushed Jolene to become “a successful educated young woman” – a woman possessing the capacity and the capability to support her future family. Jolene’s circumstances necessitated the flexibility of an online degree program to

(a) accommodate the travel that was required for her job and (b) allow her to continue pursuit of her studies after she moved home to support her family, including six siblings, once her father became ill. Jolene made no comment as to the quality of her education, but declared that finances were her “biggest challenge,” leading her to question “if school was really worth the enormous expense” (survey). To obtain a career, Jolene persisted in taking advantage of a flexible online degree program, but because she was heavily also concerned about costs, Jolene’s indicator was placed in the middle right section of the model.

Kayla, a 23-year-old, Native American female majoring in psychology, was a single mother who opted for an online degree program, given the academic flexibility she required to care for her 16-month-old daughter while also holding employment. Kayla, whose education was fully covered by scholarships, felt she received her “money’s worth” because all of her Sendero University courses “exceeded [her] expectations.” Kayla discovered online students are “capable of taking advantage of everything that an in-class student is capable of having” because Sendero University went “the extra mile to make sure that online students are receiving the same benefits”; additionally, Kayla “enjoyed the convenience” of her ability to virtually complete tasks starting with the admissions process to accessing and fulfilling the requirements for her courses. Kayla hoped her degree would aid in her desire to “make a difference in [her] ... Navajo community” by breaking a “negative cycle” that included domestic violence and substance abuse – while also positively transforming the circumstances in her life, as well as those of her family, given that Kayla saw herself as the “main source of help, reliance, and funds” (survey, focus group). Kayla, who was cognizant of the link between

education and future career goals, stressed the flexibility, quality, and value of her academic program; therefore, I placed her indicator in the middle of the lower right side of the model.

Although further research and examination is required to test and then strengthen the model, it is hoped that the fresh perspective will spur productive conversations in relation to double first-generation college students' persistence decisions. The suggested model accommodates the contemporary experiences of double first-generation college students, and does so without forcing their persistence decisions into the rigid confines of the preceding ubiquitous student departure theories (i.e., Bean & Metzner, 1985; Tinto, 1975, 1993) that have been unquestioningly carried forward within the field. The innovative persistence model, designed by privileging the voices of the students themselves, offers a promising, new direction to understanding the persistence decisions of double first-generation college students³⁴.

Exploring Postsecondary Promises: A Macro-Level Discussion

Related to persistence is the essential hope among participants in this study that acquiring a bachelor's degree will open doors to career or social mobility. Although considerable political and media attention has fueled this belief, the unfettered faith that postsecondary education leads to upward mobility is a contentious topic in scholarly circles. As some participants feared, researchers have argued that there is no guarantee postsecondary education will lead to increased earnings or a better career (Lafer, 2002; Rose, 2012). While U.S. citizens, including politicians and other authority figures,

³⁴ Though the model was designed for double first-generation college students, it may also be applicable to other online student populations and to non-traditional students pursuing face-to-face instruction.

maintain an unwavering faith in education as the panacea for poverty and economic inequality (Marsh, 2011; Pryor et al., 2012), bachelor's degrees might merely act as a pre-selection device to help employers identify quality applicants (Jencks & Riesman, 1969) since "education is a supply-side policy" that "improves the quality of workers, not the quality or the quantity of jobs" (Bernstein, 2007, para. 11).

By focusing on the idea that a minimum of 60% of Americans need college credentials to be competitive in the marketplace (Carnevale et al., 2010; Lumina Foundation, 2013), it is easy to lose sight of the fact that the U.S. economy generates many jobs that not only do not require a degree, but also may not require any college whatsoever, and that these particular jobs pay lower wages regardless of the employee's educational attainment (Cuban, 2012; Marsh, 2011). Grubb and Lazerson (2004) declared that "the notion of an overwhelming surge in education requirements for jobs is absurd, and the promotion of college for all is in some ways dishonest" (p. 19). In actuality, Grubb and Lazerson estimated that only 30-42% of American jobs require a college degree, joining others contending that the "widely assumed need for college graduates is overstated" (Glass & Nygreen, 2011, p. 5). A recent report by Vedder, Denahart, and Robe (2013) furthered this argument, using employment data from the U.S. Bureau of Labor Statistics, to demonstrate that 48% of college graduates were underemployed, or held jobs requiring less than a bachelor's degree. It follows then, that while it is appropriate for all parents to hope their children enroll in college courses, it is not appropriate for policymakers to hope every American does so (Lafer, 2002). By suggesting college-for-all or even college-for-a-majority, policymakers "perpetuate a

myth that personal fulfillment and economic security can be had only by pursuing a college degree" (Rose, 2012, p. 58).

To add further complexity related directly to the case explored in this study, there is a compelling body of research reporting employers and other gatekeepers' perceptions of online degrees as holding less value than traditional degrees (Adams, 2008; Adams & DeFleur, 2006; Adams et al., 2007; DeFleur & Adams 2004; Kohlmeyer et al., 2011; London, 2008; Sinow & Kyie-Blankson, 2012). It is unknown whether online postsecondary credentials will be sufficient when participants enter the labor market or apply for graduate school, even though Sendero University administrators have gone on record (press release, n.d.) to say there is no difference between a degree earned online and one earned through face-to-face instruction (Bernard et al., 2004; Cavanaugh et al., 2004; Means et al., 2009). Even with reassurance that their transcripts and diplomas would not bear an online distinction, some participants planned to conceal the fact that they attended an online degree program for fear of losing out on job opportunities.

The idea that online postsecondary credentials may not be the proper "academic currency" (Labaree, 1997) for career and educational opportunities is a significant concern, not only for the double first-generation college students in this study, but for anyone involved in online postsecondary education (e.g., policymakers, administrators, practitioners, and researchers). To understand the dilemma in light of the present study, it is important to recognize four primary actors involved in this exchange:

- Private, For-Profit Postsecondary Institutions. Online degree programs, introduced to the U.S. by private, for-profit institutions, attracted an "underserved, growing constituency – namely, working adults ... that

traditional colleges had often ignored or neglected” (Thelin, 2011, p. 368). By 2010, the for-profit sector captured more than 10% of U.S. postsecondary enrollment, but public fear and criticism mounted when the leading provider, the University of Phoenix, faced over three months of congressional scrutiny for questionable business practices (Thelin, 2011).

- **Public Postsecondary Institutions.** Today, more than 70% of U.S. public postsecondary institutions offer online degree programs (Allen & Seaman, 2013), following the lead of the for-profit institutions, and administrators at these institutions assert that the education associated with online degrees is no different than face-to-face instruction. As a result, enrollment in online degree programs is growing (Garrett, 2011), and expansion efforts to increase online enrollment are underway.
- **Double First-Generation College Students.** Drawing a connection between postsecondary education and career or social mobility, participants in this study enrolled in online degree programs because it was “the only way” for them to further their education (survey, focus group, interviews).
- **Employers and Other Gatekeepers.** These actors ultimately determine the value of postsecondary credentials, and have repeatedly disclosed that they are likely to view bachelor’s degrees earned through online instruction as less valuable than those earned through face-to-face instruction (e.g., DeFleur & Adams 2004; Kohlmeyer et al., 2011; Sinow & Kye-Blankson, 2012).

It seems obvious to point out the fact that there is a gap, or a tension, between the postsecondary institutions offering online degrees and the gatekeepers who screen

applicants for potential employment or graduate-level education. To a certain extent, this tension is the culpability of institutional abuses by the for-profit sector, and to some extent, a liability of the traditional institutions that followed in the for-profit sector's footsteps, rather than leading in the innovation of online degree programs (Thelin, 2011). Caught in the middle are double first-generation college students, who accept taken-for-granted notions about the "myth" (Meyer & Rowan, 1977, 2006; Rose, 2012) of postsecondary education, which heightens the demand for postsecondary education. Viewed in light of institutional theory (Meyer & Rowan, 1977, 2006), students' enrollment in online degree programs may ameliorate the tension, aiding institutions in their portrayal of online credentials as a legitimate pathway to social mobility – for if the labor market becomes flooded with individuals holding online degrees from traditional brick-and-mortar institutions, gatekeepers will have little choice but to accept the credentials.

A primary concern I have been deliberating in this study is whether or not postsecondary promises are linked to online degree programs. Political influence aside, did the suppliers (i.e., public, postsecondary institutions) investigate the labor market demand for their product (i.e., online bachelor's degrees), or are they hedging their bets that demand will follow supply, similarly to when postsecondary access was broadened decades ago? (Thelin, 2011). Even though colleges proliferated in the mid-19th century, college presidents essentially created public appeal for their product by "convincing American families that an undergraduate education was worthwhile and affordable" as a "passport into ... [the] American middle class" (Thelin, 2011, p. 108). This was a risky proposition in a burgeoning industrial economy, resulting from "numerous hungry,

underfunded colleges trying to define both a mission and market” (Thelin, 2011, p. 109). In the end, the tension of demand and supply was managed; 19th century colleges generated a lasting contribution to the American society by *creating* the educated elite who were marked by socioeconomic mobility (Thelin, 2011).

Although history has a way of repeating itself, there are no guarantees online degree programs will be readily accepted in the 21st century. Will higher education administrators be able to create demand for online degree programs? It seems a risky proposition, especially when viewed from the perspective of the individual, double first-generation college student, who invested significant time, money, and effort into obtaining online credentials promising to increase earning power.

Admittedly, this delves into a debate that cannot be easily resolved. My hope is that this study will serve as an impetus to further conversations among the actors involved in this exchange for the sake of students who have responded, and who will continue to respond, to the compelling narrative that individual and collective progress assuredly follows the attainment of postsecondary education, irrespective of whether credentials are earned through traditional or online degree programs.

REFERENCES

- Adams, J. (2008). Understanding the factors limiting the acceptability of online courses and degrees. *International Journal on E-Learning*, 7(4), 573–587.
- Adams, J., & DeFleur, M. H. (2006). The acceptability of online degrees earned as a credential for obtaining employment. *Communication Education*, 55(1), 32–45.
- Adams, J., Defleur, M. H., & Heald, G. R. (2007). The acceptability of credentials earned online for obtaining employment in the health care professions. *Communication Education*, 56(3), 292–307.
- Allen, I. E., & Seaman, J. (2013). *Changing course: Ten years of tracking online education in the United States*. Wellesley, MA: Babson Survey Research Group. Retrieved January 2013 from http://sloanconsortium.org/publications/survey/changing_course_2012
- Altbach, P. G. (2011). Patterns of higher education development. In P. G. Altbach, P. J. Gumpert, & R. O. Berdahl (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (3rd ed., pp. 15-36). Baltimore, MD: The Johns Hopkins University Press.
- Anderson, T., & Kanuka, H. (2003). *E-research: Methods, strategies, and issues*. Boston: Allyn and Bacon.
- Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, 5(2), 1-17.
- Astin, A. W., & Oseguera, L. (2004). The declining “equity” of American higher education. *The Review of Higher Education*, 27(3), 321–341.
- Attinasi, L. C., Jr. (1989). Getting in: Mexican Americans’ perceptions of university attendance and the implications for freshman year persistence. *Journal of Higher Education*, 60, 247-277.
- Bazeley, P. (2010). Computer-assisted integration of mixed methods data sources and analysis. In A. Tashakkori & C. Teddlie (Eds.), *Sage Handbook of Mixed Methods in Social & Behavioral Research* (2nd ed., pp. 431–468). Thousand Oaks, CA: SAGE Publications.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485–540.
- Bergerson, A. A. (2007). Exploring the impact of social class on adjustment to college: Anna’s story. *International Journal of Qualitative Studies in Education*, 20(1), 99–119.

- Berker, A., & Horn, L. (2003). *Work first, study second: Adult undergraduates who combine employment and postsecondary enrollment* (No. NCES 2003-167). Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved February 2013 from <http://nces.ed.gov/pubs2003/2003167.pdf>
- Bernard, R. M., Abrami, P. C., Borokhovski, E., Wade, C. A., Tamim, R. M., Surkes, M. A., & Bethel, E. C. (2009). A meta-analysis of three types of interaction treatments in distance education. *Review of Educational Research, 79*(3), 1243–1289.
- Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., Walseth, P. A., Fiset, M., Huang, B. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research, 74*(3), 379-439.
- Bernstein, J. (2007, April 22). Is education the cure for poverty? *The American Prospect*. Retrieved March 2013 from <http://prospect.org/article/education-cure-poverty>
- Billson, J. M., & Terry, M. B. (1982). In search of the silken purse: Factors in attrition among first-generation students. *College & University, 58*(1), 57–75.
- Bok, D. (2003). *Universities in the marketplace: The commercialization of higher education* (1st ed.). Princeton, N.J.: Princeton University Press.
- Braxton, J. M., & Hirschy, A. S. (2005). Theoretical developments in the study of college student departure. In A. Seidman (Ed.), *College student retention: A formula for student success*. Westport, CT: Praeger Publishers.
- Braxton, J. M., Shaw Sullivan, A. V., & Johnson, R. M. (1997). Appraising Tinto's theory of college student departure. In J. C. Smart (Ed.), *Higher Education: Handbook of Theory and Research* (Vol. 12, pp. 107–164). Bronx, NY: Agathon Press.
- Bui, K. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal, 36*(1), 3–11.
- Burbules, N. C., & Callister, T. A. (2000). Universities in transition: The promise and challenge of new technologies. *Teachers College Record, 102*(2), 271–293.
- Cabrera, A. F., Burkum, K. R., & La Nasa, S. M. (2005). Pathways to a four-year degree: Determinants of transfer and degree completion. In A. Seidman (Ed.), *College student retention: A formula for student success* (pp. 155–209). Westport, CT: Praeger Publishers.

- Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Washington, DC: Georgetown University Center on the Education and the Workforce. Retrieved July 2012 from <http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/State-LevelAnalysis-web.pdf>
- Cavanaugh, C., Gillan, K. J., Kromrey, J., Hess, M., & Blomeyer, R. (2004). *The effects of distance education on K-12 student outcomes: A meta-analysis* (p. 39). Naperville, IL: Learning Point Associates. Retrieved October 2011 from <http://faculty.education.ufl.edu/cathycavanaugh/docs/EffectsDLonK-12Students1.pdf>
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage Publications Limited.
- Charmaz, K., & Belgrave, L. L. (2012). Qualitative interviewing and grounded theory analysis. In J. F. Gubrium, J. A. Holstein, A. B. Marvasti, & K. D. McKinney (Eds.), *The SAGE handbook of interview research: The complexity of the craft* (2nd ed., pp. 347–366). Thousand Oaks, CA: SAGE Publications, Inc.
- Chen, X. (2005). *First generation students in postsecondary education: A look at their college transcripts* (NCES 2005–171). Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.
- Choy, S. P. (2001). *Students whose parents did not go to college: Postsecondary access, persistence, and attainment* (NCES 2001-126). Washington, D.C.: U.S. Department of Education, National Center for Education Statistics.
- Clark, B. R. (2008). Order and disorder in higher education. *On higher education: Selected writings, 1956-2006* (pp. 207–215). Baltimore, MD: The Johns Hopkins University Press.
- Clark, R. E. (1994). Media will never influence learning. *Educational Technology Research and Development*, 42(2), 21–29.
- Collier, P. J., & Morgan, D. L. (2007). “Is that paper really due today?”: Differences in first-generation and traditional college students’ understandings of faculty expectations. *Higher Education*, 55(4), 425–446.
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Crawley, A. (2012). *Supporting online students: A practical guide to planning, implementing, and evaluating services* (1st ed.). Jossey-Bass.

- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles: Sage.
- Cronin, J. M., & Bachorz, P. M. (2006). The rising of Phoenix and what it means for higher education. *Journal of Education*, 186(1), 11-21.
- Cuban, L. (2012, December 2). Schools, degrees, and jobs. *Larry Cuban on School Reform and Classroom Practice*. Retrieved December 2012 from <http://larrycuban.wordpress.com/2012/12/02/schools-degrees-and-jobs/>
- DeFleur, M. H., & Adams, J. (2004). Acceptability of online degrees as criteria for admission to graduate programs. *Journal of Computing in Higher Education*, 16(1), 150–163.
- Deggs, D., Grover, K., & Kacirek, K. (2010). Using message boards to conduct online focus groups. *The Qualitative Report*, 15(4), 1027–1036.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). Hoboken, N.J: Wiley & Sons.
- Doyle, W. R. (2009). Online education: The revolution that wasn't. *Change: The Magazine of Higher Learning*, 41(3), 56–58.
- Dumais, S. A., & Ward, A. (2010). Cultural capital and first-generation college success. *Poetics*, 38(3), 245–265.
- Durkheim, E. (1951). *Suicide*. (J. A. Spaulding & G. Simpson, Trans.). Glencoe: The Free Press.
- Emami, M. (2012). Advantages and disadvantages of online education. *Life Science Journal*, 9(4), 3230–3234.
- Engle, J., & Tinto, V. (2008). *Moving beyond access: College success for low-income, first-generation students* (pp. 593–612). Washington, DC: The Pell Institute.
- Erickson, F. (1986). Qualitative methods on research and teaching. In M. D. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 119–161). New York: Macmillan Publishing Company.
- Fischman, G. E. (2001). Reflections about images, visual culture, and educational research. *Educational Researcher*, 30(8), 28–33.
- Fischman, G. E. (2012). *School-photographs as codifications/analyzers*. Unpublished paper presented at the Annual Conference of the American Educational Research Association, Vancouver, BC.

- Fischman, G. E., & Haas, E. (2012). Beyond “idealized” citizenship education: Embodied cognition, metaphors and democracy. *Review of Research in Education, 36*, 169–196.
- Garrett, R. (2011). *Online higher education market update*. Boston, MA: Eduventures.
- Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating cognitive presence in online learning: Interaction is not enough. *The American Journal of Distance Education, 19*(3), 133–148.
- Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.
- Geiger, R. L. (2011). The ten generations of American higher education. In Altbach, P. J. Gumpert, & R. O. Berdahl (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (3rd ed., pp. 37–68). Baltimore, MD: The Johns Hopkins University Press.
- Geltner, P., & Logan, R. (2001). *The influence of term length on student success*. (ERIC Document Reproduction Service No. ED455858)
- Glaser, B. (1992). *Emergence vs. forcing: Basics of grounded theory analysis*. Mill Valley, CA: Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Publishing Company.
- Glass, R. D., & Nygreen, K. (2011). Class, race, and the discourse of “college for all.” A response to “schooling for democracy”. *Democracy and Education, 19*(1), 1-8.
- Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. White Plains, NY: Longman Publishing Group.
- Goldrick-Rab, S., & Cook, M. A. E. (2011). College students in changing contexts. In P. G. Altbach, P. J. Gumpert, & R. O. Berdahl (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (3rd ed., pp. 315–340). Baltimore, MD: The Johns Hopkins University Press.
- Grubb, W. N., & Lazerson, M. (2004). *The education gospel: The economic power of schooling*. Cambridge, MA: Harvard University Press.
- Haas, E., & Fischman, G. (2010). Nostalgia, Entrepreneurship, and Redemption: Understanding Prototypes in Higher Education. *American Educational Research Journal, 47*(3), 532–562.
- Hadfield, J. (2003). Recruiting and retaining adult students. *New Directions for Student Services, (102)*, 17–26.

- Hagedorn, L. S. (2005). How to define retention: A new look at an old problem. In A. Seidman (Ed.), *College student retention: A formula for student success* (pp. 89–105). Westport, CT: Praeger Publishers.
- Hahs-Vaughn, D. (2004). The impact of parents' education level on college students: An analysis using the beginning postsecondary students longitudinal study 1990-92/94. *Journal of College Student Development, 45*(5), 483–500.
- Hansen, K., & Hansen, R. S. (2006). *Using an asynchronous discussion board for online focus groups: A protocol and lessons learned*. Paper presented at the College Teaching & Learning Conference, Orlando, FL. Retrieved April 2012 from http://www.quintcareers.com/KH_Teaching/ABR_2006.pdf
- Hara, N., & Kling, R. (2000). Student distress in a web-based distance education course. *Information, Communication & Society, 3*(4), 557–579.
- Harden, N. (2013, January). The end of the university as we know it. *The American Interest, 8*(3). Retrieved January 2013 from <http://the-american-interest.com/article.cfm?piece=1352>
- Harting, K., & Erthal, M. J. (2005). History of distance learning. *Information Technology, Learning and Performance Journal, 23*(1), 35–44.
- Harvey, & Housel, T. H. (2011). *Faculty and first-generation college students: Bridging the classroom gap together* (1st ed.). San Francisco: Jossey-Bass.
- Hurtado, S., Carter, D. F., & Spuler, A. (1996). Latino student transition to college: Assessing difficulties and factors in successful college adjustment. *Research in Higher Education, 37*(2), 135–157.
- Inman, W. E., & Mayes, L. (1999). The importance of being first: Unique characteristics of first generation community college students. *Community College Review, 26*(3), 3–22.
- Ishitani, T. T. (2006). Studying attrition and degree completion behavior among first-generation college students in the United States. *Journal of Higher Education, 77*(5), 861–885.
- Jencks, C., & Riesman, D. (1969). *The academic revolution* (2nd ed.). Garden City, NY: Anchor Books.
- Johnson, C. (2009). Faculty speak on the impact of time in accelerated courses. *The Journal of Continuing Higher Education, 57*(3), 149–158.
- Kanter, M. J. (2011). American higher education: “First in the world”. *Change: The Magazine of Higher Learning, 43*(3), 7–19.

- Kanuka, H., & Kelland, J. (2008). Has e-learning delivered on its promises? Expert opinion on the impact of e-learning in higher education. *Canadian Journal of Higher Education*, 38(1), 45–65.
- Kazis, R., Callahan, A., Davidson, C., McLeod, A., Bosworth, B., Choitz, V., & Hoops, J. (2007). *Adult learners in higher education: Barriers to success and strategies to improve results*. Boston, MA: Jobs for the Future. Retrieved January 12, 2013 from <http://www.jff.org/publications/education/adult-learners-higher-education-barriers/157>
- Ke, F., & Xie, K. (2009). Toward deep learning for adult students in online courses. *The Internet and Higher Education*, 12(3-4), 136–145.
- Keegan, D. (1996). *Foundations of distance education* (3rd ed.). New York, NY: Routledge.
- Kember, D. (1995). *Open learning courses for adults: A model of student progress*. Englewood Cliffs, NJ: Educational Technology Publications.
- Kerr, C. (2001). *The uses of the university* (5th Ed.). Cambridge, MA: Harvard University Press.
- Kohlmeyer, J. M., Seese, L. P., & Sincich, T. (2011). Online versus traditional accounting degrees: Perceptions of public accounting professionals. In A. H. Catanach & D. Feldmann (Eds.), *Advances in Accounting Education: Teaching and Curriculum Innovations* (Vol. 12, pp. 139–165). Emerald Group Publishing Limited.
- Kramarae, C. (2003). Gender equity online, when there is no door to knock on. In M. G. Moore & W. G. Anderson (Eds.), *Handbook of Distance Education* (2nd ed., pp. 261–272). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Krueger, R. A., & Casey, M. A. (2000). *Focus groups: A practical guide for applied research* (3rd ed.). Thousand Oaks, Calif: Sage Publications.
- Kvale, S., & Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative research interviewing* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Labaree, D. F. (1997). Public goods, private goods: The American struggle over educational goals. *American Educational Research Journal*, 34(1), 39–81.
- Lafer, G. (2002). *The job training charade*. Ithaca, NY: Cornell University Press.
- Lather, P. (1986). Issues of validity in openly ideological research: Between a rock and a soft place. *Interchange*, 17(4), 63–84.

- Lee, J. J., Sax, L. J., Kim, K. A., & Hagedorn, L. S. (2004). Understanding students' parental education beyond first-generation status. *Community College Review*, 32(1), 1–20.
- Lei, S. A., & Gupta, R. K. (2010). College distance education courses: Evaluating benefits and costs from institutional, faculty and students' perspectives. *Education*, 130(4), 616–631.
- Levine, A. (2000, March). *Higher education at a crossroads*. Presented at the 22nd Earl V. Pullias Lecture Series on the Future of Higher Education, University of Southern California, Los Angeles. Retrieved January 2013 from <http://www.usc.edu/dept/chepa/Papers/Levine.doc>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- Lohfink, M. M., & Paulsen, M. B. (2005). Comparing the determinants of persistence for first-generation and continuing-generation students. *Journal of College Student Development*, 46(4), 409-428.
- London, H. B. (1989). Breaking away: A study of first-generation college students and their families. *American Journal of Education*, 144–170.
- London, M. (2008). *Vault's 2008 online degrees survey* (press release). Vault.com. Retrieved February 2013 from <http://www.vault.com/wps/portal/usa/aboutvault/for-media/Hiring-Managers-Slow-to-Accept-Online-Degrees,-says-Vault?id=51>
- Lewins, A., & Silver, C. (2007). *Using software in qualitative research: A step-by-step guide*. Thousand Oaks, CA: Sage Publications Ltd.
- Lubrano, A. (2005). *Limbo: Blue-collar roots, white-collar dreams*. Hoboken, NJ: Wiley.
- Lumina Foundation. (2007). *From the ground up*. Indianapolis, IN: The Lumina Foundation. Retrieved from March 2013 http://www.luminafoundation.org/publications/From_the_Ground_Up.pdf
- Lumina Foundation. (2013). *Strategic plan 2013-2016*. Indianapolis, IN: The Lumina Foundation. Retrieved January 2013 from http://www.luminafoundation.org/advantage/document/goal_2025/2013-Lumina_Strategic_Plan.pdf
- Marsh, J. (2011). *Class dismissed: Why we cannot teach or learn our way out of inequality*. New York, NY: Monthly Review Press.
- Marshall, C., & Rossman, G. B. (2010). *Designing qualitative research* (5th ed.). Thousand Oaks, CA: SAGE Publications.

- Martinez, J. A., Sher, K. J., Krull, J. L., & Wood, P. K. (2009). Blue-collar scholars?: Mediators and moderators of university attrition in first-generation college students. *Journal of College Student Development, 50*(1), 87–103.
- McCarron, G. P., & Inkelas, K. K. (2006). The gap between educational aspirations and attainment for first-generation college students and the role of parental involvement. *Journal of College Student Development, 47*(5), 534–549.
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Washington, D.C.: U.S. Department of Education. Retrieved September 2011 from <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>
- Melguizo, T. (2011). A review of the theories developed to describe the process of college persistence and attainment. In J. C. Smart & M. B. Paulsen (Eds.), *Higher education: Handbook of theory and research* (Vol. 26, pp. 395–424). New York: Springer.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*(2), 340–363.
- Meyer, H. D., & Rowan, B. (2006). Institutional analysis and the study of education. In H. D. Meyer & B. Rowan (Eds.), *The new institutionalism in education* (pp. 1–13). Albany, NY: State University of New York Press.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: an expanded sourcebook*. Thousand Oaks, CA: Sage Publications.
- Morgan, C. K., & Tam, M. (1999). Unraveling the complexities of distance education student attrition. *Distance Education, 20*(1), 96–108.
- Nasseh, B. (1997). A brief history of distance education. *Adult Education in the News*. Retrieved March 2012 from <http://www.seniornet.org/edu/art/history.html>
- National Center for Education Statistics. (2011). *Digest of education statistics, 2010*. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved January 2012 from <http://nces.ed.gov/programs/digest/d10/index.asp>
- National Center for Education Statistics. (2012). *Digest of education statistics, 2011*. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved January 2013 from <http://nces.ed.gov/programs/digest/d11/index.asp>

- Noble, D. F. (1998). Digital diploma mills, part 1: The automation of higher education. *October*, 86, 107–117.
- Nuñez, A. . M., & Cuccaro-Alamin, S. (1998). *First-generation students: Undergraduates whose parents never enrolled in postsecondary education* (NCES 98-082). Washington, D.C.: National Center for Education Statistics.
- Organisation for Economic Co-operation and Development. (2012). *Education at a glance 2012: OECD indicators*. OECD Publishing. Retrieved March 2013 from <http://dx.doi.org/10.1787/eag-2012-en>
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, 75(3), 249–284.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Peshkin, A. (1988). In search of subjectivity: One's own. *Educational Researcher*, 17(7), 17–21.
- Pike, G. R., & Kuh, G. D. (2005). First- and second-generation college students: A comparison of their engagement and intellectual development. *The Journal of Higher Education*, 76(3), 276-300.
- Priebe, L. C., Ross, T. L., & Low, K. W. (2008). Exploring the role of distance education in fostering equitable university access for first generation students: A phenomenological survey. *International Reivew of Research in Open and Distance Learning*, 9(1). Retrieved February 2012 from <http://www.irrodl.org/index.php/irrodl/article/viewArticle/452/996>
- Pryor, J. H., Eagan, K., Palucki Blake, L., Hurtado, S., Berdan, J., & Case, M. H. (2012). *The American freshman: National norms fall 2012*. Los Angeles: Higher Education Research Institute, UCLA. Retrieved January 2013 from <http://www.heri.ucla.edu/tfsPublications.php>
- Reid, D. J., & Reid, F. J. (2005). Online focus groups: An in-depth comparison of computer-mediated and conventional focus group discussions. *International Journal of Market Research*, 47(2), 131-162.
- Rendón, L. I. (1992). From the Barrio to the academy: Revelations of a Mexican American scholarship girl. *New Directions for Community Colleges*, 80, 55–64.

- Rendón, L. I. (1994). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education*, 19(1), 33–51.
- Rendón Linares, L. I., & Muñoz, S. M. (2011). Revisiting validation theory: Theoretical foundations, applications, and extensions. *Student Access, Finance, and Success in Higher Education*, 5(2), 12–33.
- Richardson, R. C., & Skinner, E. F. (1992). Helping first-generation minority students achieve degrees. *New Directions for Community Colleges*, 1992(80), 29–43.
- Rintala, J. (1998). Computer technology in higher education: An experiment, not a solution. *Quest*, 50, 366–378.
- Rodriguez, R. (1982). *Hunger of memory: The education of Richard Rodriguez - An autobiography*. New York: Bantam Books.
- Rose, M. (2012). *Back to school: Why everyone deserves a second chance at education*. New York, NY: The New Press.
- Russell, T. L. (1999). *No significant difference phenomenon*. Raleigh, NC: North Carolina State University. Retrieved October 2011 from <http://www.nosignificantdifference.org/>
- Rust, V. D. (2003). Method and methodology in comparative education. *Comparative Education Review*, 47, iii–vii.
- Saenz, V., Hurtado, S., Barrera, D., Wolf, D., & Yeung, F. (2007). *First in my family: A profile of first-generation college students at four-year institutions since 1971*. Los Angeles: Higher Education Research Institute, UCLA.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications.
- Seale, C., & Rivas, C. (2012). Using software to analyze qualitative interviews. In J. F. Gubrium, J. A. Holstein, A. B. Marvasti, & K. D. McKinney (Eds.), *The SAGE handbook of interview research: The complexity of the craft* (2nd ed., pp. 427–442). Thousand Oaks, CA: SAGE Publications, Inc.
- Shea, P., Li, C. S., & Pickett, A. (2006). A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses. *Internet and Higher Education*, 9, 175–190.
- Sinow, R., & Kyei-Blankson, L. (2012). The value and acceptability of an online degree. In *Hiring Gatekeepers' choice for Employment in the Multimedia Production Industry* (Vol. 2012, pp. 1918–1927). Presented at the World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, Las Vegas, NV.

- Smith, M. L. (1986). The whole is greater: Combining qualitative and quantitative approaches in evaluation studies. *New Directions for Program Evaluation*, 37–54.
- Somers, P., Woodhouse, S. R., & Cofer Sr, J. E. (2004). Pushing the boulder uphill: The persistence of first-generation college students. *Journal of Student Affairs Research and Practice*, 41(3), 2.
- Spady, W. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange*, 1(1), 64–85.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications.
- Stake, R. E. (2008). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (3rd ed., pp. 119-150). Los Angeles: Sage Publications.
- Stieha, V. (2010). Expectations and experiences: The voice of a first-generation first-year college student and the question of student persistence. *International Journal of Qualitative Studies in Education*, 23(2), 237–249.
- Strayhorn, T. L. (2006). Factors influencing the academic achievement of first-generation college students. *NASPA Journal*, 43(4), 82–111.
- Stuber, J. M. (2011). Integrated, marginal, and resilient: race, class, and the diverse experiences of white first-generation college students. *International Journal of Qualitative Studies in Education*, 24(1), 117–136.
- Teclaw, R., Price, M. C., & Osatuke, K. (2012). Demographic question placement: Effect on item response rates and means of a Veterans Health Administration survey. *Journal of Business and Psychology*, 27(3), 281–290.
- Tennant, M., McMullen, C., & Kaczynsky, D. (2010). Learning in the digital age. *Teaching, learning and research in higher education: A critical approach* (pp. 129–142). New York: Routledge.
- Terenzini, P. T., Rendón, L. I., Upcraft, M. L., Millar, S. B., Allison, K. W., Gregg, P. L., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, 35(1), 57–73.
- Terenzini, P. T., Springer, L., Yaeger, P. M., Pascarella, E. T., & Nora, A. (1996). First-generation college students: Characteristics, experiences and cognitive development. *Research in Higher Education*, 37(1), 1-22.

- The White House, Office of the Press Secretary. (2009, July). *Remarks by the President on the American Graduation Initiative*. Speech presented at Macomb Community College, Warren, MI. Retrieved August 2011 from http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-the-American-Graduation-Initiative-in-Warren-MI/
- The White House, Office of the Press Secretary. (n.d.). *Knowledge and skills for the jobs of the future: Support for higher education*. Retrieved January 2013, from <http://www.whitehouse.gov/issues/education/higher-education>
- Thelin, J. R. (2011). *A history of American higher education* (2nd ed.). Baltimore: Johns Hopkins University Press.
- Tierney, W. G. (1992). An anthropological analysis of student participation in college. *The Journal of Higher Education*, 63(6), 603–618.
- Tierney, W. G. (1998). Life history's history: Subjects foretold. *Qualitative Inquiry*, 4(1), 49–70.
- Tierney, W. G. (1999). Models of minority college-going and retention: Cultural integrity versus cultural suicide. *The Journal of Negro Education*, 68(1), 80–91.
- Tierney, W. G. (2013). The conundrum of profit-making institutions in higher education. In L. W. Perna (Ed.), *Preparing today's students for tomorrow's jobs in metropolitan America* (p. 149–176). Philadelphia, PA: University of Pennsylvania Press.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of educational research*, 45(1), 89–125.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University Of Chicago Press.
- Tobias, S. (1993). *Overcoming math anxiety* (2nd ed.). New York: W.W. Norton & Company.
- Trow, M. (1973). *Problems in the transition from elite to mass higher education*. Berkeley, CA: Carnegie Commission on Higher Education.
- Trow, M. (2006). Reflections on the transition from elite to mass to universal access: Forms and phases of higher education in modern societies since WWII. In J. J. Forest & P. G. Altbach (Eds.), *International handbook of higher education* (pp. 243–280). Netherlands: Kluwer/Springer.

- Twigg, C. A. (2002). The impact of the changing economy on four-year institutions of higher education: The importance of the Internet. In P. A. Gram & N. Stacey (Eds.), *The knowledge economy and postsecondary education: Report of a workshop* (pp. 77–104). Washington, D.C.: National Academy Press.
- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*. Boston: Harvard University Press.
- Tyler-Smith, K. (2006). Early attrition among first time elearners: A review of factors that contribute to drop-out, withdrawal and non-completion rates of adult learners undertaking elearning programmes. *Journal of Online Learning and Teaching*, 2(2), 73–85.
- U.S. Department of Education. (2011, March 18). Meeting the nation's 2020 goal: State targets for increasing the number and percentage of college graduates with degrees. Retrieved August 2011 from http://www.whitehouse.gov/sites/default/files/completion_state_by_state.pdf
- Van Gennep, A. (1960). *The rites of passage*. (M. B. Vizedon & G. L. Caffé, Trans.). Chicago, IL: University Of Chicago Press.
- Vedder, R., Denhart, C., & Robe, J. (2013). *Why are recent college graduates underemployed? University enrollments and labor-market realities*. Washington, DC: Center for College Affordability and Productivity. Retrieved January 2013 from <http://centerforcollegeaffordability.org/research/studies/underemployment-of-college-graduates>
- Viégas, F. B., Wattenberg, M., & Feinberg, J. (2009). Participatory visualization with wordle. *IEEE Transactions on Visualization and Computer Graphics*, 15(6), 1137-1144.
- Vrasidas, C., & McIsaac, M. S. (1999). Factors influencing interaction in an online course. *American Journal of Distance Education*, 13(3), 22–36.
- Warburton, E. C., Bugarin, R., & Nuñez, A. M. (2001). *Academic Preparation Bridging the Gap: Academic Preparation and Postsecondary Success of First-Generation Students* (NCES 2001-153). Washington, DC: National Center for Education Statistics.
- Whitt, E. J. (2001). Document analysis. In C. F. Conrad, J. G. Haworth, & L. R. Lattuca (Eds.), *Qualitative research in higher education*, ASHE Reader Series (pp. 447–453).

- Willinsky, J., Fischman, G. E., & Metcalfe, A. S. (2011). The digital technologies of learning and research. In P. G. Altbach, P. J. Gumport, & R. O. Berdahl (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (3rd ed., pp. 341–364). Baltimore, MD: The Johns Hopkins University Press.
- Wlodkowski, R. J. (2003). Accelerated learning in colleges and universities. *New Directions for Adult and Continuing Education*, (97), 5–15.
- Wlodkowski, R. J., & Kasworm, C. E. (2003). Accelerated learning: Future roles and influences. *New directions for adult and continuing education*, 2003(97), 93–98.
- Wlodkowski, R. J., Mauldin, J. E., & Gahn, S. W. (2001). *Learning in the fast lane: Adult learners' persistence and success in accelerated college programs*. Indianapolis, IN: Lumina Foundation for Education. Retrieved February 2013 from <http://www.luminafoundation.org/publications/fastlane.pdf>
- Wutich, A. (2012, May). *Qualitative analysis*. Seminar presented at Arizona State University, Tempe, AZ.
- Zucker, L. G. (1987). Institutional theories of organization. *Annual Review of Sociology*, 13(1), 443–464.

APPENDIX A
IRB APPROVAL LETTER

Office of Research Integrity and Assurance

To: Gustavo Fischman
ED

From: Mark Roosa, Chair 
Soc Beh IRB

Date: 05/09/2012

Committee Action: Exemption Granted

IRB Action Date: 05/09/2012

IRB Protocol #: 1205007783

Study Title: Origins and Destinations: Examining Persistence among First-Generation College Students Who are Pursuing Online Degrees at a Public University

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(2) .

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.

APPENDIX B

SENDERO UNIVERSITY INSTIUTIONAL DATA

Sendero University Online, Degree-Seeking, Undergraduate Students*
Fall 2011 Enrollment

	ONLINE		Total Online
	First- Generation Students	All Other Undergraduate Students	
TOTAL	1,741	1,433	3,174
LEVEL			
Freshman	86	56	142
Sophomore	257	185	442
Junior	834	592	1,426
Senior	564	600	1,164
GENDER			
Female	1,184	841	2,025
Male	557	592	1,149
AGE			
17 and Under	--	--	--
18-24	345	350	695
25-34	806	658	1,464
35 and Over	590	425	1,015
ETHNICITY			
Minority	587	346	933
Non-minority	1,154	1,087	2,241
ENROLLMENT STATUS			
Full-Time	861	689	1,550
Part-Time	880	744	1,624
RESIDENCY			
Resident	953	747	1,700
Non-Resident	788	686	1,474
NEW UNDERGRADUATE STATUS			
First-Time Freshman	48	28	76
New Transfer	723	490	1,213
Continuing	970	915	1,885

	ONLINE		
	First- Generation Students	All Other Undergraduate Students	Total Online
ONLINE CAMPUS ACADEMIC PLANS			
App Sci (Internet & Web Dev)	19	23	42
App Sci (Operations Mgmt)	36	33	69
Communication	29	16	45
Criminal Justice & Criminology	200	121	321
Family & Human Development	124	108	232
Film (Film & Media Studies)	36	44	80
History	98	85	183
Interdisc Stds (Organizational Stds)	126	109	235
Interdisciplinary Studies	86	63	149
Justice Studies	42	34	76
Liberal Studies	227	233	460
Nursing	172	126	298
Political Science	92	100	192
Psychology	229	158	387
Sociology	139	96	235
Technical Communication	45	49	94
Technological Entrepreneurship &	23	19	42

*Enrollment excludes non-degree seeking undergraduate and post-baccalaureate students

APPENDIX C

E-SURVEY CORRESPONDENCE

Initial invitation in four-contact e-mail strategy. This was sent to all potential participants.

SUBJECT: Participate in [Institution's Acronym] Research and Win a \$20 Gift Card

DATE: July 9, 2012

Dear [FIRST_NAME]:

I invite you to participate in a brief survey about your experience as a first-generation college student who is pursuing an online degree program at a public university. I'm a doctoral candidate at Arizona State University, and I am conducting research associated with this survey under the direction of Dr. Gustavo Fischman.

[FIRST_NAME], I believe you have valuable knowledge that could inform my study. Your responses are vital to understanding the experiences of first-generation college students who are pursuing online education.

The survey should take no more than 20 minutes of your time. Once you have filled out the survey, you can enter a drawing for one of ten \$20 gift cards to Amazon.com. Take the survey by Saturday, August 18 to enter the gift card drawing.

To begin the survey [click this link](#), which will take you to an informed consent page, and then on to the survey itself. Your participation in this research is voluntary, and you must be 18 or older to participate.

[FIRST_NAME], as a fellow first-generation college student, I appreciate your time and consideration in filling out the survey. If you have questions about this research, please do not hesitate to contact me at (xxx) xxx-xxxx or xxxx@xxx.edu. Thank you in advance for participating!

Sincerely,

Jennifer D. Shea, M.Ed.
Arizona State University
Doctoral Candidate in the Mary Lou Fulton Teachers College

First reminder in the multi-contact e-mail strategy. This was sent to potential participants who did not respond to the previous request.

SUBJECT: [Institution's Acronym] First-Generation College Student Survey, Win a \$20 Gift Card

DATE: July 17, 2012 - *8 days after first invitation was sent*

Dear [FIRST_NAME]:

I recently sent an e-mail inviting you to participate in a research study by responding to a brief survey about your experiences as a first-generation college student who is engaged in online learning at a public university. I have heard from many of your peers, and I hope that time will also permit your involvement.

The survey is brief and should take no more than 20 minutes to fill out. Once you have filled out the survey, you can enter a drawing for one of ten \$20 gift cards to Amazon.com. Take the survey by Saturday, August 18 to enter the gift card drawing.

[FIRST_NAME], please [follow this link](#) to be taken to an informed consent page, and then on to the survey itself. Your participation in this research is voluntary, and you must be 18 or older to participate.

Thank you in advance for taking the survey. Your responses are important! If you have questions about this study, please do not hesitate to contact me at (xxx) xxx-xxxx or xxx@xxx.edu.

Sincerely,

Jennifer D. Shea, M.Ed.
Arizona State University
Doctoral Candidate in the Mary Lou Fulton Teachers College

Second reminder in the multi-contact e-mail strategy. This was sent to potential participants who did not respond to the previous two requests.

SUBJECT: [Institution's Acronym] First-Generation College Student Survey

DATE: July 30, 2012 - *21 days after first invitation was sent*

Dear [FIRST_NAME]:

I recently sent an e-mail inviting you to respond to a brief survey about your experiences as a first-generation college student who is pursuing an online degree at . I believe you have valuable knowledge in this area, and I hope that time will permit your involvement in this dissertation research study.

The survey is brief and should take no more than 20 minutes to fill out. Once you have filled out the survey, you can enter a drawing for one of ten \$20 gift cards to Amazon.com. Take the survey by Saturday, August 18 to enter the gift card drawing.

[FIRST_NAME], please [follow this link](#) to be taken to an informed consent page, and then on to the survey itself. Your participation in this research is voluntary, and you must be 18 or older to participate.

As a fellow first-generation college student, I appreciate your time and consideration in filling out the survey. If you have questions about this research, please do not hesitate to contact me at (xxx) xxx-xxxx or xxxx@xxx.edu. Thank you in advance for participating!

Sincerely,

Jennifer D. Shea, M.Ed.
Arizona State University
Doctoral Candidate in the Mary Lou Fulton Teachers College

Third reminder in the multi-contact e-mail strategy. This was sent to potential participants who did not respond to the previous three requests.

SUBJECT: [Institution's Acronym] First-Generation College Student Survey, Last Chance to Win a \$20 Gift Card

DATE: August 13, 2012 - *35 days after first invitation was sent*

Dear [FIRST_NAME]:

I understand how valuable your time is, and I hope you will have twenty minutes to contribute toward research that seeks to understand the experiences of a select group of first-generation college students, like you, who are succeeding in online degree programs at a public university.

The survey will close soon and I want to be sure you have a chance to participate. Once you have filled out the survey, you can enter a drawing for one of ten \$20 gift cards to Amazon.com. Take the survey before it closes on Saturday, August 18 to enter the gift card drawing.

To begin the survey [follow this link](#), which will take you to an informed consent page, and then on to the survey itself. Your participation in this research is voluntary, and you must be 18 or older to participate.

[FIRST_NAME], as a fellow first-generation college student, I appreciate your time and consideration in filling out the survey. If you have questions about this study, please do not hesitate to contact me at (xxx) xxx-xxxx or xxxx@xxx.edu. Thank you in advance for participating!

Sincerely,

Jennifer D. Shea, M.Ed.
Arizona State University
Doctoral Candidate in the Mary Lou Fulton Teachers College

APPENDIX D
E-SURVEY INSTRUMENT

Informed Consent. The first page of the e-survey.

The purpose of this study is to understand the experiences of first-generation college students who are enrolled in an online degree program at a public university. By participating in this survey, you are providing valuable information that may impact future first-generation college students who pursue online education.

Your participation in this study is voluntary. You have the right to withdraw from the research at any time without penalty. You also have the right to refuse to answer any question(s) for any reason, without penalty. There are no foreseeable risks or discomforts to your participation in this survey. All information provided will be kept confidential. The results of this study may be used in reports, presentations, or publications, but your name will not be used and any identifying details will be changed to protect your identity.

After filling in the survey you will have the opportunity to enter a drawing for one of ten \$20 gift cards to Amazon.com. Participation in the drawing is voluntary. If you would like to participate in the drawing, please provide your e-mail address in the space provided at the end of the survey, so that you may be contacted if you win. Your contact information will be stored separately from your responses.

If you have questions about this research, please contact Jennifer Shea, Ph.D. candidate, at xxxx@xxx.edu. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

The survey will take approximately 20 minutes to complete. Start the survey now by clicking the “Continue” button below. By clicking this button, you are indicating your voluntary consent to participate in this study and are certifying that you are at least 18 years of age.

Continue

First-Generation College Students in Online Degree Programs E-survey

1. What is your father's highest level of education?

- Did not complete high school
- High School/GED
- Some College
- 2-Year College Degree (Associate's)
- 4-Year College Degree (Bachelor's)
- Graduate Degree
- Unknown

2. What is your mother's highest level of education?

- Did not complete high school
- High School/GED
- Some College
- 2-Year College Degree (Associate's)
- 4-Year College Degree (Bachelor's)
- Graduate Degree
- Unknown

3. What year were you born?

4. Do you identify as:

- Male
- Female
- Other _____

5. What best describes your Ethnicity/Race?

- African-American or Black
- Asian
- Caucasian
- Hispanic or Latino
- Mixed Race
- Native American or Alaska Native
- Prefer not to answer
- Other _____

6. What is your academic level at the time of this survey?

- Freshman (24 or fewer credits earned)
- Sophomore (25-55 credits earned)
- Junior (56-86 credits earned)
- Senior (87 or more credits earned)

7. **What is your major?**
 LIST OF ONLINE DEGREE PROGRAMS AT INSTITUTION
8. **Do you have dependent children under the age of 18 in your home?**
 Yes
 No

If yes, how many dependent children under the age of 18 are in your home?

Question was available if the previous response was "yes."

- PULL DOWN MENU OPTIONS – 1, 2, 3, 4,...10 OR MORE

9. **What was the format of the classes you took in high school?**
 Traditional (all face-to-face classes)
 Blended (some face-to-face classes and some online classes)
 Completely online

10. **Please describe in detail who or what influenced your decision to attend college.**

11. **Did you enter college the semester immediately following your high school graduation?**
 Yes
 No

If no, then how many years after your high school graduation did you begin your first semester at college? *Available if the previous response was "no."*

_____ years

12. **What motivated you to enroll in an online degree program? Please detail your answer below.**

13. **Did you transfer into this online degree program after attending another college or university?**
 Yes
 No

How did you take classes at your previous institution(s)?

Question was available if the response to question 13 was "yes."

- Traditional (all face-to-face classes)
 Blended (some face-to-face classes and some online classes)
 Completely online

How many credits did you transfer in to your current institution?

Question was available if the response to question 13 was "yes."

- 24 or fewer credits
- Between 25 and 55 credits
- Between 56 and 86 credits
- More than 87 credits

14. How far do you live from the institution that offers your online degree?

- 0 – 25 miles
- 26 – 50 miles
- 51 – 74 miles
- More than 75 miles and in the United States
- More than 75 miles and in international location

15. On average, how many credits do you take per 7.5 week session?

- 3 credits
- 6 credits
- 9 credits

16. What is your cumulative grade point average (GPA) at your current institution?

- Less than 2.00
- 2.00 to 2.99
- 3.00 to 3.49
- 3.50 or higher

17. How many hours do you study each week?

- Fewer than 10 hours
- 10-20 hours
- 21-30 hours
- 31-40 hours
- More than 40 hours

18. Are you currently employed?

- Yes
- No

Which of the following most accurately describes your typical work week?

Question was available if the previous response was "yes."

- I work 0 to 9 hours per week
- I work 10 to 19 hours per week
- I work 20 to 29 hours per week
- I work 30 to 39 hours per week
- I work 40 or more hours per week

19. On average, how many times per week do you have individual contact with the following in your online courses:

	< 1 time per week	1-2 times per week	3-5 time per week	> 5 times per week
Instructors				
Fellow students				

20. How do you interact with the instructors of your online courses? Check ALL that apply.

- E-mail
- Phone (voice)
- Phone (text)
- Online discussion boards
- Instant message or chat
- Skype
- Facebook
- Google Plus
- Twitter
- We meet in person
- Other: _____

21. How do you interact with fellow students who are enrolled in your online courses? Check ALL that apply.

- E-mail
- Phone (voice)
- Phone (text)
- Online discussion boards
- Instant message or chat
- Skype
- Facebook
- Google Plus
- Twitter
- We meet in person
- Other: _____

22. Which of the following student services do you access through your institution? Check ALL that apply.

- Academic advising
- Disability resources
- Library
- Military/Veteran Services
- Online tutoring
- Other: _____

23. What are the benefits to studying in an online degree program? Please explain in detail below.

24. What are the drawbacks to studying in an online degree program? Please explain in detail below.

25. Which of the following roles that you play are most important to you? Rank *ONLY* your top three roles, where 1 = most important, 2 = very important, and 3 = important.

- ___ Aunt
- ___ Boyfriend
- ___ Daughter
- ___ Employee
- ___ Friend
- ___ Girlfriend
- ___ Parent
- ___ Sibling
- ___ Son
- ___ Spouse
- ___ Student
- ___ Uncle

26. What have been the most challenging aspects of your online degree program, given the categories below? Explain how these challenges have impacted you and your pursuit of an online degree.

Academically: (eg. study time, subject matter, professor feedback, pace of courses)

Socially: (eg. family, friends, life balance)

Financially: (eg. cost of college, financial aid)

27. To what level of education do you aspire?

- I plan to only take a few college-level classes
- I plan to earn an Associate's degree
- I plan to earn a Bachelor's degree
- I plan to earn a Master's degree
- I plan to earn a Doctorate or professional degree

28. Do you anticipate that you will need to take either a short or an indefinite break from your studies while at this institution (prior to graduation, if that is your goal)?

- Yes
- No

If yes, please check the primary cause for your anticipated break in studies.

Question was available to the student if the previous response was "yes."

- Academic reasons
- Family obligations
- Financial reasons
- Health concerns
- Prefer not to disclose
- Other _____

29. Would you be willing to continue participating in this research study?

- Yes
- No

How would you like to be involved? *Question was available if the response to question 29 was "yes."*

- Focus group (a small group discussion via an online discussion board)
- Individual interview (by Skype, by phone, or in-person)
- Both focus group and interview
- Neither, I changed my mind

Your interest in continuing involvement with this study is appreciated! Please share your contact information so that I may reach you for future phases of the study. *Question will be available if the response to question 29 was "yes."*

Phone: _____

E-mail: _____

30. Thank you for filling in this survey. Before submitting it, please share your e-mail address to enter the drawing for one of ten \$20 gift cards to Amazon.com. Your e-mail address will be kept confidential and will only be used to notify you in the event you win the drawing.

E-mail address: _____

APPENDIX E
FOCUS GROUP CORRESPONDENCE

Initial invitation for focus group participation.

SUBJECT: Focus Group Invitation: [Institution's Acronym] First-Generation College Student

Dear [FIRST_NAME]:

Thank you for filling out the survey about your experiences as a first-generation college student in an online degree program on [DATE]! The knowledge you have shared and the time you have given is greatly appreciated.

I am interested in your valuable perspectives, and invite you to join an online focus group that will occur between [DATE] and [DATE – three days later]. Your total participation should not exceed one hour. You'll be able to join the dialogue at your convenience during this three-day period.

[FIRST_NAME], please register to join the focus group before [DATE – two days prior to start of focus group] at midnight. Registration instructions are provided in the attached PDF document [see next page for instructions]. If time will not permit your involvement, e-mail me as soon as possible so that I can extend the opportunity to another individual.

By joining the conversation, you will receive a \$10 gift card to Amazon.com and will also be entered into a drawing for one of two \$40 Amazon.com gift cards. To receive the gift card(s), you will need to send me your focus group username, so that I can send your Amazon.com gift card(s) after the focus group is closed. Your contact information for the drawing will be stored separately from your responses.

As with the previous phase of this study, your participation is voluntary. Registering for the focus group will be considered your consent to participate. You have the right to withdraw from the research at any time without penalty. You also have the right to refuse to answer any question(s) for any reason, without penalty. There are no foreseeable risks or discomforts to your participation in this focus group. All information provided will be kept confidential. The results of this study may be used in reports, presentations, or publications, but your name will not be used and any identifying details will be changed to protect your identity.

If you have questions concerning this study, do not hesitate to contact me at (xxx) xxx-xxxx or xxxx@xxx.edu. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

Sincerely,
Jennifer D. Shea, M.Ed.
Arizona State University
Doctoral Candidate in the Mary Lou Fulton Teachers College

Registration instructions for focus group participation. Attached in PDF format to the e-mail inviting focus group participation. The original PDF included images to help the participants navigate the registration process.

Three-Step Registration Instructions for Focus Group Participation

Contact Jennifer Shea, xxxx@xxx.edu or (xxx) xxx-xxxx, with any questions.

- 1. Register for an account at <http://yuku.com/portal/register>.** Jennifer has created a discussion forum at Yuku to facilitate the online focus group. Select a username that is not personally identifiable (i.e., do not use your first or last name). Your username will be linked to your focus group posts, which are meant to be anonymous. After clicking “Join Yuku” at the bottom of the registration page, you will be invited to share Yuku with friends. Disregard that, and move on to the second step, which is described below.
- 2. Log in to the e-mail account that you associated with your Yuku registration.**
 - Send Jennifer a message to notify her of your Yuku username, so that she can send your Amazon.com gift card(s) after the focus group is closed. Jennifer’s e-mail is xxxx@xxx.edu.
 - Retrieve the message entitled “Yuku account validation instructions,” which was sent by team@yuku.com to validate your Yuku account. Validate your Yuku account by following the link provided, so that you can post in our focus group community.
- 3. Access the focus group at <http://firstgen.yuku.com>, and bookmark the web address.**
 - **Before Saturday, August 2x at midnight:** Review the “Getting Started” section for an overview and instructions. Post your introduction to the Check In forum, keeping your identity anonymous, to activate your membership in the focus group. You are welcome to view the topics that appear under the “Focus Group” section, but these will be locked until the focus group begins on August 2x. You will not be able to respond to the questions.
 - **Between August 2x and August 2x:** The focus group will be open, and your active participation is appreciated. Return to the focus group regularly to respond to comments made by others who visited after you. Thank you!

Notification of open discussion forums. This e-mail was sent to all registered participants promptly at 6:00 am on the first day of focus group.

SUBJECT: Focus Group Topics are Unlocked

Good morning, [NAME]! The focus group topics have been unlocked, and will be available for comment through [DATE – two days after sending] at midnight. Visit <http://firstgeneration.yuku.com> to share your perspectives.

I'd recommend starting a new topic when you post your initial responses to each question. That way, it will be easy to locate your original posts on the last day when we wrap up our conversation. Feel free to respond directly to comments made by other participants, and return to the focus group regularly to interact with those who visited after you.

I am grateful for your participation, and I look forward to our dialogue. If you have questions, do not hesitate to contact me at xxxx@xxx.edu.

Sincerely,
Jennifer

Jennifer D. Shea, M.Ed.
Arizona State University
Doctoral Candidate in the Mary Lou Fulton Teachers College

Notification of closing discussion forums. E-mail sent to all registered participants promptly at 6:00 am on the third and final day of the focus group.

SUBJECT: Final Day of [Institution's Acronym] First-Generation Focus Group

Hello, [NAME],

We're heading into the final hours of our focus group. If you haven't yet, you might log in at <http://firstgeneration.yuku.com> to respond to any comments that have been appended to your original posts. Be sure to share your final thoughts before the focus group closes at midnight tonight, [DATE].

I am grateful for your comments, and I want you to know that your time and energy has not gone unnoticed! I'll send your \$10 Amazon.com gift card to this e-mail account tomorrow morning. If you win the drawing for one of the two \$40 gift cards, you'll receive it at the same time.

Some of you have inquired about accessing the final report associated with this dissertation research study. I'll e-mail again next summer to share a web address where you can view the dissertation in its published form. Let me know if you have any questions, and thanks again for your participation!

Most Sincerely,
Jennifer

Jennifer D. Shea, M.Ed.
Arizona State University
Doctoral Candidate in the Mary Lou Fulton Teachers College

APPENDIX F
FOCUS GROUP PROTOCOL

Please do not use names in your responses (e.g., your name, instructors' names, family or friends' names). You may skip any question that you do not feel comfortable answering. Feel free to respond directly to comments posted by other participants. Return to the focus group regularly to respond to comments made by others who visited after you.

Check-In Question

To prepare for the focus group, please share a little bit about yourself, including your major and your year in school (i.e., freshman, sophomore, junior, or senior). Also describe a positive experience that you have had in your online degree program.

Participants finalized their registration by replying to this pre-focus group question. The focus group questions were visible, but remained locked until the first day of the focus group.

Focus Group Questions

- 1) Think back to the first semester in which you were enrolled in your online degree program. Did you feel adequately prepared? Why or why not? When you had questions related to your education, where did you go for help?
- 2) What keeps you engaged to continue pursuing your studies? Have there been times when you considered taking a break from your online degree program? Why or why not?
- 3) What was the reaction of your family when you told them that you decided to enroll at [Institution Name]? Describe the ways they reacted when you told them about pursuing an online degree. What impact did their reactions have on your educational experience?
- 4) Please build upon this phrase to create one or two paragraphs: My experience in this online degree program has been...
- 5) Aside from flexibility, describe the top three expectations that you have for the institution offering your online degree (e.g., cost, student services, quality of instruction, technology support). Have these expectations been met? Why or why not?
- 6) Based on your experiences, offer a short paragraph of advice to other first-generation students who are beginning their academic journeys in online degree programs. What do you wish you knew in advance? What works? What doesn't work? What should future students do to be successful?

APPENDIX G
INTERVIEW CORRESPONDENCE

Initial invitation. This e-mail was sent to all potential interview participants.

SUBJECT: [Institution's acronym] First-Generation College Student, invitation to interview

Dear [NAME]:

Thank you for filling out the survey about your experiences as a first-generation college student in an online degree program on [DATE]! The knowledge you have shared, and the time you have given is greatly appreciated.

I am interested in your valuable perspectives, and would like to interview you as part of this dissertation research study. The interview will take approximately 60-90 minutes of your time, and will be split into two conversations, occurring on two different days.

- We can connect via Skype, by phone, or in-person, whenever is most convenient for you.
- After our first conversation, I will ask for your collaboration to submit two images (e.g., photos, paintings, cartoons), which will help facilitate our second conversation. This exercise should take no more than 15 minutes of your time. Additional details will be provided during our first conversation.

[NAME], please reply to confirm your willingness to continue participating in this study. If time will not permit your involvement, e-mail me as soon as possible so that I can extend this opportunity to another individual.

You will receive a \$20 Amazon.com gift card after the second interview. In addition, you will be entered into a drawing for a \$50 Amazon.com gift card, which will be awarded by mid-November. Your contact information for the drawing will be stored separately from your interview responses.

As with the previous phase of this study, your participation is voluntary. You have the right to withdraw from the research at any time without penalty. You also have the right to refuse to answer any question(s) for any reason, without penalty. There are no foreseeable risks or discomforts to your participation in these interviews. All information provided will be kept confidential. The results of this study may be used in reports, presentations, or publications, but your name will not be used and any identifying details will be changed to protect your identity.

I would like to audio-record our conversations, but will not do so without your permission. Recordings will be used for data collection and transcription purposes only. The images and any interview audio recordings will be digitally encrypted and securely stored on a password-protected server that is professionally managed by the Arizona

State University Technology Office. These digital files will be destroyed through deletion of files.

If you have questions concerning this study, do not hesitate to contact me at (xxx) xxx-xxxx or xxxx@xxx.edu. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

Please let me know if you wish to participate. As a first-generation college student myself, I appreciate your time and consideration.

Sincerely,
Jennifer

Jennifer D. Shea, M.Ed.
Arizona State University
Doctoral Candidate in the Mary Lou Fulton Teachers College

Instructions for image exercise. This e-mail was sent immediately following the first of the two-part interviews, to remind participants about the collaborative image exercise that contributed to the second part of the interview.

SUBJECT: [Institution's Acronym] First-Generation Interview, part B

Hello, [NAME],

Thanks for the conversation this morning! It was great to connect with you, and to hear more about [specific discussion details].

As mentioned, I would like to seek your collaboration for two images (e.g., photos, paintings, cartoons) that are related to your college experience. These images would be helpful in facilitating our next conversation, and should be sent in advance of [DATE] to me at xxxx@xxx.edu. Images might include objects, places, or activities, but should not identify people or illegal behaviors.

- **First image** – Share what has encouraged you to continue pursuing your education in an online degree program. Name this file “encourage” (e.g. encourage.jpg).
- **Second image** - Share what could possibly discourage you from continuing your education in an online degree program. Name this file “discourage” (e.g. discourage.jpg).

Let me know if you have any questions. I look forward to hearing from you soon, [NAME]!

Best,
Jennifer

Jennifer D. Shea, M.Ed.
Arizona State University
Doctoral Candidate in the Mary Lou Fulton Teachers College

APPENDIX H
TWO-PART INTERVIEW PROTOCOL

Thank you for agreeing to participate in this interview. During today's conversation, I will be asking some specific questions about your academic experiences at [your institution]. Please do not use names in your responses. I would like to audio-record your interview, but will not do so without your permission. Let me know if you do not want the interview to be recorded or if you change your mind after we begin. Your answers will be kept confidential. Participation in this interview is voluntary, and you are free to skip questions or withdraw from participation at any time and without penalty.

First Part of the Interview

- 1) Tell me a little about what it was like growing up for you? *Probe: What did your family think about education?*
- 2) You mentioned in the survey that you decided to go to college because [reason listed in survey response]. What prompted your decision to select an online degree program at [institution's name]?
- 3) How did your family react when you told them that you decided to enroll at [institution's name]? Is anyone else aware that you're attending college online? *Probes: If yes, who have you told, and what has their reaction been? If no, why not?*
- 4) In what ways are you involved with [your institution], aside from taking your classes online? *Probes: How do you interact with your instructors? Your fellow classmates?*
- 5) What is your greatest fear in regard to your online degree program?
- 6) ***For anyone who previously stopped out:*** You indicated that you moved directly from high school to college. It appears that you may have taken a break from your studies between then and now. What prompted the break in your studies?
- 7) What keeps you to continue pursuing your studies with [your institution]? *Probe: Have there been times when you considered taking a break from your online degree program? Why or why not?*
- 8) Let's say that you're a Human Resources Specialist, and you're deliberating between the top two applicants for an entry-level position on your team. Both applicants have comparable backgrounds, except one earned her degree by taking face-to-face classes, while the other completed an online degree at a public university. Which applicant do you choose and why?
- 9) As we're wrapping up this conversation, is there anything else you would like to share about your experience as a first-generation college student in an online degree program?

Image Prompt

I would like to ask for your collaboration. Would you be willing to submit two images (photos, paintings, cartoons, or the like) that are related to your college experience? These images would be helpful in facilitating our conversation. One image should be related to what has encouraged you to continue pursuing your education in an online degree program. In the second image, share what could discourage you from continuing your education in an online degree program.

- Images might include the following: objects, places, activities. Do not include images that identify people or illegal behaviors.
- Submit these images to xxxx@xxx.edu prior to your second interview. Please name your files in this format: encourage.jpg and discourage.jpg.

Second Part of the Interview

- 1) Is there anything you would like to have shared the last time we spoke, but didn't?
- 2) Think back to the first semester in which you were enrolled in your online degree program. Did you feel adequately prepared? Why or why not? When you have questions related to your education, where do you go for help?
- 3) How would you describe your academic experiences as an online student? *Probe: How has technology impacted your experience (e.g., positive and negative)?*
- 4) What has been your greatest challenge as an online student?
- 5) When you reflect upon your educational journey, of what accomplishment are you most proud?
- 6) Where do you see yourself in 5 to 10 years? Does your online degree program have a role in your future aspirations? If so, how?
- 7) Can you tell me more about the two images you submitted? *Probes: As appropriate to the images that have been submitted.*
- 8) Is there anything else you would like to share today?

APPENDIX I
IMAGES SUBMITTED BY PARTICIPANTS

Discourage Image Encourage Image



(Source: 4734112-F38-ORG)

Discourage Image Encourage Image



(Source: 4766715-F55-BLS)



(Source: 4762605-F25-NUR)



(Source: 4766890-F40-TEC)



(Source: 4763040-F29-BLS)



(Source: 4778441-F34-BLS)



(Source: 4763739-M31-PSY)



(Source: 4829791-M27-PSY)



(Source: 5122959-M30-TEM)



(Source: 5115694-M48-POS)

Discourage Image Encourage Image



(Source: 5081752-F41-TEC)

Discourage Image Encourage Image



(Source: 5096599-F29-HST)

APPENDIX J
PRIMARY FACTORS AFFECTING
PERSISTENCE DECISIONS

Cost

Quality

Many students expressed concern about the cost of their online education, especially in relation to its quality. Excerpts from the data corpus demonstrate this tension, per the associated color coding.

“Thank goodness for financial aid! I would not be able to afford school without it. I think college is beyond expensive and is geared toward the rich. **However, it does make me appreciate my education a hell of a lot more.**” (Sonia, 26-year-old white female majoring in sociology; survey)

“I do not think online [sic] classes should be so expensive. We are not taking up classroom space or using the utilities of the university. **Yes, professors need to be paid,** but honestly, when there are 80 people in a 4 hour class, that means at least \$160,000 is coming in for that one class alone. On-line classes are a great deal for the schools, but still very expensive for students.” (Carol, 56-year-old white female majoring in nursing; survey)

“**Some of my acquaintances do not understand how serious I am about completing this degree or they think that it is easy because it is online.** I do not qualify for financial aid, so I have to pay out of pocket. It seems expensive in the overall because I am not occupying a physical facility.” (Nathan, 38-year-old African American male majoring in political science; survey)

“[Sendero's] financial aid department has made it extremely easy for me to pay for school. They help with loans and grants. The online program may be a little expensive, **but I find that the school I am attending ... and the way the program is set up makes up for the cost.**” (Matthew, 29-year-old white male majoring in nursing; survey)

“I know there are more fees for technology, **but it's worth it.**”

(Kayla, 23-year-old Native American female majoring in psychology; survey)

“When I graduate [from Sendero] I'll have about \$40,000 in federal student loans **I've always been impressed at the number of videos, Skype sessions, interactive/live lectures, pre-recorded lectures w/slide, etc., that the faculty at [Sendero] do. The only thing that's missing from my experience is a classroom with desks.**” (Angelo, 24-year old, white male majoring in political science; focus group)

“I worry about how much my costs will be per month to pay back my student loans once I graduate **The quality of the courses is always interesting, and the quality of [Sendero] instructors only enhances the experience. I would have never imagined that online learning could be such a rich experience.**” (Doug, 54-year-old white male majoring in sociology; focus group)

“I don't have a teacher lecturing; most of the learning is done from reading, **Power Point presentations and the occasional video An online degree program may not be ideal for some people, but for those who cannot afford to attend school any other way it really is ideal.**” (Allison, 27-year-old white female majoring in sociology; focus group)

Time

Flexibility

The word "time" was used 1871 times in the data corpus and code "flexibility" was linked to 259 passages. Although time and flexibility were two key words for this population of students, they were not inclusive of one another. Excerpts from the data corpus demonstrate this tension, per the associated color coding.

"The 7 1/2 week classes seem to have hurt the quality of my work. I feel like I rush through the lessons, skim reading materials. **If I could take more time over a 17 week period like we used to do, I feel like the quality of my work would be what it used to be.**" (Jeffrey, 31-year-old white male majoring in organizational studies; survey)

"I'm a full-time working husband and father. My time is a commodity and it was not an option to work my existing responsibility around the times and availabilities of the in-person classes. **Online classes allow me to schedule when I will learn the material and do the assigned homework.**" (Rich, 43-year-old white male majoring in Internet and Web Development; survey)

"**The benefits are and should be flexibility, some online instructors are not familiar with this concept and still will have certain exams or assignments only available for 30 minutes on one day during the week. This doesn't work for those working and/or have families.**" (Ann, 28-year-old white female majoring in interdisciplinary studies; survey)

"**The classes are definitely less stress free but I almost find myself being less stressed because I have so much more control over when I study and turn in my assignments plus I don't have the added worry of driving to class, being late to class or feeling guilty for missing a class.**" (Erin, 23-year-old Hispanic female majoring in organizational studies; focus group)

"To the people that are in online classes, you know you can't expect them to log on every day, which is, I think, a ridiculous thing ... I have a teacher now that's got a Monday through Friday schedule. **Online is 24/7, you know? You can still include the weekends ... Having a 15-week class stuck in a 7-1/2-week slot, and then cutting it down even farther by limiting the days, it seems ridiculous to me.**" (Lori, 55-year-old white female majoring in liberal studies; interview)

"**Once I switched over to the online program, I no longer needed to take breaks from my course work. Prior to that, I would have to take a semester off here and there because of my work schedule and the inability to attend face to face classes I wish I would have switched sooner so that I could have finished my degree sooner.**" (Haley, 35-year-old white female majoring in organizational studies; focus group)

"I even had an instructor this semester tell the class that no matter who dies in your family, assignments will not be accepted late **Really? Really? It just isn't right cause not everyone is a liar and maybe if each professor didn't have ten million students they could engage more.**" (Tom, 45-year-old white male majoring in liberal studies; focus group)

Job

Career

Students saw jobs differently than careers, where the latter was more desirable than the former. Excerpts from the data corpus demonstrate this tension, per the associated color coding.

“I wanted to create a better life for myself. I realized that you have to work a lot harder to earn a decent living if you do not have a college education. I wanted to have a profession, not just a job, which as far as I am concerned needs to happen with a college education.” (Allison, 27-year-old white female majoring in sociology; survey)

“Having stayed at home with [my] daughter for the first 5 years of her life, when she went to school, I was faced with the decision to either go out and get another J-O-B or to go to college for a degree and a career.” (Judy, 39-year-old white female majoring in interdisciplinary studies; survey)

“A chiropractor I worked with encouraged me to go back to school Because she acknowledged me as an equal I knew that going to school was not out of my reach and I was smart enough to become a nurse and make a career for myself.” (Mallory, 32-year-old mixed race female majoring in nursing; survey)

“I want a career that I love and that I have earned. I do not want to settle for a job because I was afraid to earn a degree.” (Kimberlynn, 23-year-old white female majoring in psychology; survey)

“With the way the economy is and how hard it is to find a job these days I know that the sooner I get my education the sooner I will be on track to a career that will help me and my daughter in the future.” (Monica, 42-year-old white female majoring in liberal studies; focus group)

“With the job market I was unable to find a job for over a year and turned to [Sendero] to help me advance instead I know this degree will always be a benefit to my career so I do not feel bothered by the work I am doing. I am also hoping it will help me get a better job when I graduate here soon.” (Tamara, 28-year-old white female majoring in nursing; focus group)

“I picked up my education again because I wanted to get ahead in life. A bachelor's degree was necessary for me to do that. I felt that I could not compete as well in the job market because I did not have a bachelor's degree, just an Associate's Degree. I wanted to advance in my career but most employers in the white collar work arena preferred applicants with a bachelor's degree. The jobs I was being given to at work were limited and opportunities to earn more money kept passing me by because they were being given to colleagues with a bachelor's degree or higher.” (Sada, 38-year-old Asian female majoring in technical communication; focus group)

“My father was very big advocate on myself, and my brothers attending college That way we would not have to struggle financially to support a family as they did. My father wanted us to be prepared for the outside world, be able to have career opportunities, and most importantly commit to an education outside of high school. He wants us to be the best we can ever be.” (Bethanie, 25-year-old Hispanic female majoring in criminal justice; survey)

APPENDIX K
IMPLICATIONS FOR POLICY AND PRACTICE

Implications for Policy and Practice

Institutional policymakers, administrators, faculty, and staff should be cognizant of several research findings to more effectively respond to the needs of double first-generation college students enrolled within their online degree programs. I outline two general implications below, followed by more specific academic and student services implications.

First-generation college students are members of an “invisible” student population, whether they are enrolled at a physical campus or a virtual campus. Regrettably, there is no way of knowing how many first-generation college students are enrolled in U.S. postsecondary education³⁵, thereby masking their presence even further. This is likely due to two systemic limitations: (a) multiple definitions for characteristics constituting first-generation college students³⁶ and (b) the fact that there is no requirement for institutions to collect or report this demographic variable. If it is not possible to properly identify first-generation college students, it will be difficult to develop interventions and supports to facilitate maintaining their enrollment in postsecondary education. The first actionable items, therefore, involve agreement upon a common definition for first-generation college students and creation of mechanisms for accurate national reporting as currently occurs for gender, race/ethnicity, and age of postsecondary students. With accurate information at national, state, and institutional

³⁵ One study places the number at 17.5% of all postsecondary students (Saenz et al., 2007), while others suggest 24% (Engle & Tinto, 2008), 30% (Choy, 2001; Nuñez & Cuccaro-Alamin, 1998) or higher.

³⁶ See Chapter 2 for an in-depth explanation.

levels, it will be possible to design and fund programs that will produce an appreciable impact on the educational experiences of these traditionally underserved students.

Implications for Academic Services

I offer three specific recommendations related to academic services. First, institutions and faculty members must honor the promise of providing flexible online education by offering double first-generation college students, and by default all online students, options for the duration of their courses. In the present study, Sendero University had moved from offering both 7.5- and 15-week courses to almost exclusively offering 7.5-week courses. Participants experienced a few semesters of this change when data was collected and were adamant about a reduction in the quality of their learning. In addition, they explained that whatever flexibility came with their online degree program was either partially or completely lost in the requirement to enroll in accelerated sessions. Recalling the customer – provider relationship, the provider needs to understand that academics are not the most important activity in double first-generation college students' lives; therefore, institutions must provide options, especially in regard to the duration of classes, in order for this population to effectively meet academic obligations while balancing activities involving their family (i.e., children, spouse), employment, and other day-to-day responsibilities.

Second, a certain level of consistency from one class to the next should not be overlooked, so institutions must develop guidelines for online classrooms that will help ease students' transitions when moving from one online class to the next. Three ways to bring consistency to online classrooms while simultaneously abetting double first-generation college students in meeting deadlines during their evening and weekend study

hours are to (a) require that tests be kept open for a minimum of 24 hours, (b) establish a policy where all assignments are due at midnight no matter their due date, and (c) promote Monday due dates while discouraging Friday due dates. These customer-friendly guidelines will contribute toward positive persistence decisions by enforcing consistency within the flexible structure of the online environment.

Third, institutions must consider ways to facilitate interaction between faculty and double first-generation college students. Even though online classes are primarily asynchronous, there may be opportunity for faculty to occasionally hold online, synchronous office hours using web conferencing solutions³⁷ or video chats³⁸. Additionally, eliminating or renaming any classroom policies perceived to limit student-faculty interaction; for example, the three before me policy, which is a sensible policy from the provider's perspective but less so from the customer's perspective. This faculty-centric policy is detrimental because it sets up a less-than-welcoming environment holding the potential to stymie double first-generation college students' learning. Additionally, institutions must develop a plan to guide online students in the submission of requests for faculty letters of recommendation. Perhaps each syllabus could outline parameters for the type of letters faculty are willing to provide (e.g., support for graduate school or academic internships), as well as the information students must submit in order to obtain a letter of recommendation.

³⁷ Web conferencing solutions are paid services that could accommodate an entire class, like WebEx, Adobe Connect, or GoToMeeting. Faculty and administrators should check with their technology department to inquire about a university license for these products.

³⁸ Two of the most widely used video chat solutions are Skype and Google+ Hangouts. Both are free.

Implications for Student Services

It might seem odd to suggest student services for a population that complained of lack of time, but evidence suggested such offerings might be particularly useful. Near the end of the study, I explored the idea of creating student experiences that would exist outside the virtual classroom. Although these experiences do not currently exist for online students at Sendero University, the idea was raised by focus group participants, who suggested they would make time for an online forum, but only if it was separate from their courses. Participants envisioned an online space where “[Sendero University] students could talk to and answer other students’ concerns,” in a similar manner to hallway conversations. This suggestion was further supported by participants’ lively and community-oriented dialogue, which occurred in both focus groups.

As a former student affairs practitioner and current academic affairs professional, I posit that it would be highly beneficial for institutions to develop a robust, student services program for their online students. This program would foster student-to-student connections while also providing continuity from one semester to the next. After exploring several ideas with interview participants, I recommend establishing a virtual student union accommodating an online forum for student conversations pertaining to the entire college experience (e.g., recommendations for textbook providers, meet-ups in the vicinity of the students’ homes, venting about finances, dialoguing as a student body). Other components of the student union could potentially include career-oriented clubs, student organizations (i.e., student government), and possibly an online lecture series, similar to a synchronous webinar that would be recorded and later made available for an asynchronous audience.

APPENDIX L
RECOMMENDATIONS FOR FUTURE RESEARCH

Recommendations for Future Research

More research is needed to better understand the double first-generation college student experience. In the present study, 55% of Sendero University's online campus population identified as a first-generation college student, which more than doubled the national average of 24% (Engle & Tinto, 2008). This finding necessitates further investigation to verify whether this is a case-specific phenomenon or if it is indicative of online education in general. I recommend a national study involving all public, four-year institutions offering online degrees. Obtaining institutional data for this variable would determine the magnitude of first-generation college students pursuing online education in comparison to the same population pursuing other forms of postsecondary education. Consideration must be given to the impact if greater numbers of traditionally underserved populations, like double first-generation college students, enrolled in online degree programs than in any other type of postsecondary education. Since online degrees are perceived to be less acceptable in the labor market, it would be reasonable to inquire: Is online education being expanded specifically for this population, thus further stratifying the nation's educational system while benefitting postsecondary institutions with added revenue to subsidize their more elite ground-based programs?

Another suggestion is to replicate this study with double first-generation college students at other four-year institutions to add greater validity to the case. Expansion to two-year institutions would also be beneficial in order to gain a holistic picture of the freshmen and sophomore experience. By expanding the study to include a variety of public institutions, the proposed model for double first-generation college student

persistence would come into sharper focus and carry greater utility as a framework for the institutional and policy actors who are involved with online education.

On the other hand, it would also be beneficial to devise a study to understand the reasons double first-generation college students do not persist. A study of this nature would effectively strengthen the proposed model by examining the factors negatively affecting student persistence. Based on the findings of the current study, it is believed that these factors are (a) prohibitive cost, (b) lack of time, and (c) contentment with one's employment. Although low response rates may be associated with this line of inquiry, considering the inactive relationship between potential participants and their former institutions, any information gained would be of tremendous benefit.

The participants in this study raised significant concerns in regard to accelerated courses, and it is important to conduct additional research on this topic for two reasons. First, it is unknown if accelerated courses were perceived negatively only by the participants in this study or if their concerns are shared by a broader population. Second, there is a potential discrepancy between the positive outcomes (e.g., fewer withdrawals, quicker time to degree completion) reported in accelerated, traditional, or hybrid courses and positive outcomes in accelerated online courses, and I found little to no research focusing specifically on outcomes associated with accelerated courses in online courses or online degree programs. It could, therefore, be misleading if the findings related to accelerated courses in traditional or hybrid settings were transferred to wholly online environments without first verifying applicability.

Finally, one of the biggest contributions would be to investigate the perceived value, or acceptability, of online degrees from public institutions. Previous studies failed

to distinguish between the types of institutions offering online degrees. Clarifying perceptions of online degrees earned at public, for-profit, and other types of postsecondary institutions would be a significant contribution to the field. I suggest studying this concern from the perspectives of the online students, as well as the perspectives of employers and other gatekeepers. On a related note, I plan to transform this dissertation research into a longitudinal study by connecting with participants in five years to ascertain how their online degree programs impacted their career trajectories, which will contribute to this line of inquiry and will also come full circle in regard to students' origins and destinations.

BIOGRAPHICAL SKETCH

Jennifer Dawn Shea (née Axt) grew up with nine siblings on a family-owned farm in North Dakota. She went on to earn a bachelor's degree from Jamestown College and a master's degree from the University of Alaska Fairbanks. With more than fourteen years of professional experience in postsecondary education, having held positions in student and academic affairs at Jamestown College, the University of Alaska Fairbanks, Syracuse University, the University of Hartford, and Arizona State University, the highlights of her professional career include sailing with Semester at Sea during a 70-day voyage to eight countries along the Pacific Rim, as well as overseeing the construction and opening of Taylor Place, a 1,200-bed residential facility at Arizona State University at the Downtown Phoenix campus. This dissertation was the crowning achievement of Jennifer's doctoral studies at Arizona State University, which resulted in a Ph.D. in educational leadership and policy studies. Jennifer is engaged in research focusing on postsecondary education, educational equity, online education, qualitative methods, and comparative education. She is an active member of the Association for the Study of Higher Education (ASHE), the American Educational Research Association (AERA), and the Comparative and International Education Society (CIES).