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Experiences of Community College Vocational Students Who Were Required to Begin their Studies by Taking Remedial Courses and Successfully Attained their Associate's Degrees: A Phenomenological Study

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their Studies by Taking Remedial Courses and Successfully Attained their Associate's

Degrees: A Phenomenological Study

by

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Experiences of Community College Vocational Students Who Were Required to Begin

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Degrees: A Phenomenological Study

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University of Nebraska, 2013

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The Great Recession and national skills gap crisis have reframed community

college efforts to shift from access-based institutions to that of persistence and

completion-focused colleges. Within the post-recession context, this research examines

what success looks like for today's vocational community college student, as well as the

current research on the barriers to completion. This qualitative, phenomenological

study will explore the experiences of community college students who are graduating

with vocational degrees and how they overcame known barriers to complete their

degrees. In addition to summarizing the responses to each of the sub-questions, three

primary themes emerged from the research that further answer the grand tour

question. These themes are summarized as follows: First, faculty as champions of

degree completion; second, motivation and creativity; and third, switching paths.

The path dependence theory framework affords a greater appreciation for how

the critical path switch in the lives of students prior to beginning their community

college tenure assisted them with beginning their college career and persisting through

until graduation. Along this optimal path, students are greatly supported by classroom

faculty and faculty advisors who validate their role as scholars and champion degree

completion. The goal of this research is to be of further assistance to community

college leaders and their advocates as they strive to increase completion rates.

Acknowledgements

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Chapter One: Introduction

The American community colleges, which have historically focused on open doors and student access, are responding to national demands for greater accountability, performance based funding, and increased student completion. This paradigm shift was catapulted to American consciousness with President Obama's 2009 American Graduation Initiative (AGI). President Obama shone a glaring spotlight on the community colleges' dramatic completion shortfall -- only 34 percent of all community college students attain a two or four-year degree (Wheary & Orozco, 2010). The President's demanding initiative calls for five million more associate and baccalaureate degrees within the next decade. In order to meet this daunting goal, community colleges would need to increase the number of associate's degrees conferred annually by 16% (Kotamraju & Blackman, 2010)

Community college organizations and advocacy groups have responded with a plethora of degree completion initiatives that are striving to address the completion gap – a primary criticism of the community colleges. In fact, "of the students entering public two-year colleges in 1996, 47 percent had dropped out within five years with no credentials, and many of the 18 percent still in college were unlikely to finish their studies" (Grubb & Lazerson, 2004). These high levels of non-completion are an impetus for a fundamental paradigm shift for community colleges away from a primarily access focused mission to that of persistence, retention, and completion. Following President Obama's American Graduation Initiative, the American Association of Community Colleges in 2010, launched their Call to Action, which motivates community colleges to

produce 50 percent more graduates with degrees and certificates by the year 2020. The second premise of the Call to Action was "we believe that completion matters and that every student counts" (AACC, 2010).

The mantle of associate degree completion has now been proclaimed by lawmakers (SREB, 2010), community college advocates (AACC, 2011 and Jobs for the Future, 2012), funders (Lumina, 2012), accreditors (SREB, 2011), students, and their parents as well. For many of these constituencies, the completion debate has centered around those students who are focused on an academic transfer or associate's of arts degree. While the completion efforts of these students are important to the national debate, between 60 and 75 percent of community college students nationally are enrolled in some form of vocational, professional-technical or workforce training program (Brown, 1999, Grubb 1996, and Grubb & Lazerson, 2004). Unfortunately, the completion rates for vocational students are consistent with their academic transfer peers as "6 out of 10 (58%) of those enrolling in occupational associate degree programs fail to earn a credential of any type within six years" (AACC, 2011).   If the United States is going to move the proverbial needle toward greater completion rates for all community college students, it is critical that the national community college completion debate incorporate the unique dynamics surrounding the needs, challenges, and goals of community college vocational students in addition to academic transfer students (Kotamraju & Blackman, 2010; Zhai & Monson, 2004).

Research Problem

The introduction provides a national context for the research problem addressed in this dissertation. The research problem is framed within the national completion debate and attempts to better understand how vocational community college students obtain their associate's of science or associate's of technology degree. Currently, vocational students are not the center of the national completion agenda that focuses primarily upon transfer-oriented community college students. There are many facets to this research problem that are further explained in this section.

The first reason for focusing on community college vocational students is purely demographic. If community colleges are going to dramatically impact their completion rates they cannot do so by only focusing on academic transfer students when nearly two-thirds of their students are vocationally focused. For vocational community college students there remains a lack of clarity regarding an agreed to or easily understood indicator for success for students enrolled in full or part-time, for-credit community or technical college vocational programs. For example, is success measured as a skills-based certificate or an associate's degree? (Carnevale, 2000; Lohman, 2005; Tinto, 1993; and Vacik, 2006).

Disagreements exist among community college leaders, faculty, and students some of whom believe that skills attainment and gainful employment are the ultimate measures of student success (Lohman, 2005), while others are striving for a more current perspective that illustrates the need for vocational students to be credentialed upon graduation and therefore included within the national community college

completion agenda (Kotamraju & Blackman, 2010; Grubb & Lazerson 2004; and Jacobs & Daugherty, 2006). For the purposes of this dissertation, the research will focus on better understanding the circumstances around one point of student success and that is degree completion.

The repercussions of not understanding how vocational students are successfully completing their vocational degree programs, runs the risk of alienating the clear majority of community college students and leaving them out of the completion equation altogether. Nationally, this would equate to falling woefully short of the President's American Graduation Initiative goals and the American Association of Community College's (AACC) Call to Action goals. In addition, our nation would struggle bridging the job skills gap and fail to compete in a globalized economy (Carnevale, Smith, & Strohl, 2010; Dellow, 2007).

One could assert that those with the most at stake within the national completion discussion are vocational students enrolled in our nation's community and technical colleges. Community college vocational students are typically older than 25, have some form of previous post-secondary education, are more likely to be women and/or persons of color, and many already have families when compared to the traditional four-year college student (Grubb & Lazerson, 2004; Zhai & Monzon, 2004; and Kotamraju & Blackman, 2010). The economic impacts of non-completion are irrefutable for those students who earn an associate's degree when compared to their peers who do not complete their degree (Baum, Ma, & Payea, 2006; College Board, 2010). The Great Recession amplified the need for degree completion. Graduates with

an associate's degree fared better not only with greater income earnings but lower unemployment levels as well. The trends prior to the Great Recession point to clear data that illustrates if vocational community college students do not complete at least one year of post-secondary work and if they are not working in their field of study, their increase in earnings is negligible (Grubb, 1996).

The focus on vocational degree completion may become more acute as employers are trimming their contract incumbent worker training funds due to recessionary cutbacks (Jacobs & Dougherty, 2006). Incumbent worker training, customized or workforce training is the non-credit, certificated alternative to full-time, degree-granting vocational programs.

With greater numbers of minority and low-income students enrolled in vocational programs it is essential that community colleges focus on removing completion barriers to success and curtail the cycle of poverty (Brown, 1999; Torraco, 2011). Community colleges are considered the primary workforce training vehicle for the United States and research points to a potential correlation between increased completion rates and positive regional and national economic success (Kotamraju & Blackman, 2010).

As we delve into understanding of how and why community college vocational students complete their degrees, we can do so by understanding their experiences and histories that explain how vocational students have overcome identified completion barriers (Aragon & Johnson 2008; Reyes, 2010, Roska, 2010, and Sheldon, 2010). We know that community college students have different challenges facing them than four-

year, full-time students including balancing the demands of work, family, and college (Grubb, 1996; Zhai & Monzon, 2004). The literature helps us to explain the primary barriers to completion, however there is little insight as to how students overcome these barriers and complete their vocational two-year degrees such as an associate's of technology or associate's of science degrees.

Our nation's community colleges, their advocates, and policymakers are collectively focused upon the need to increase completion rates in order to bridge our country's skills gap, stem the tide of poverty, and grow regional economies. As determined by the literature review, there is a growing body of research regarding completion barriers for community college students. What is lacking however is a qualitative understanding of the academic experiences that contribute to one point of success for vocational community college students. For the purposes of this dissertation the point of success that will be explored is the attainment of the study participants vocational associate's degree.

Research Purpose

The purpose of this dissertation research is to better understand the experiences of vocational community college students that led to the completion of their associate's degree. Building upon the literature review and conceptual framework, research questions will be formed in order to understand how selected community college vocational students have overcome known degree completion barriers. This phenomenological study will help us understand what is now a gap of knowledge surrounding how and why a small percentage of community college students succeed

and complete their vocational two-year degrees (Creswell, 2007). This research will

inform community college administrators, policy makers, students, student advocates,

and grant makers as to how they can systematically remove completion barriers for

students, specifically those students who are enrolled in full or part-time, for-credit

vocational programs.

<div align="center">**Conceptual Framework**</div>

There are a number of theories and models that could be applicable to this

research including adult learning, validation, motivation, barriers to success, and

student persistence. These theories and models will be explored further in the

literature review. However, path dependence theory provides a broad-based

conceptual framework for this research because of the theory's ability to help us better

understand why students choose to complete their degrees when so many of their

peers do not. Path dependence theory is often applied to better understand economic,

political, and social dynamics. However, it is a broad-based theory that allows us to

delve more deeply into the experiences and histories of students being interviewed.

Components of path dependence that are of specific applicability of this study

include that of self-reinforcing methods (Prado, 2009), the formulation of pathways to

better understanding outcomes (Prado, 2009; Cejda & Stick, 2007), and understanding

non-optimal outcomes (Heller, 2006). From this standpoint, the fact that so few

vocational community college students complete their degrees is a non-optimal

outcome. Conversely, within this theory we can delve into a deeper understanding as to

how and why the students interviewed understood that not completing their degree

would be a non-optimal outcome and why they chose the pathway of completion. This framework was chosen in order to help guide the research question and interview framework.

    The conceptual framework of path dependence theory will provide the foundation for shaping the phenomenological research for this dissertation. The focus of the conceptual framework will be to broadly frame the discussions surrounding why and how vocational community colleges attain their associate's degree in spite of the multitude of barriers facing them, through the exploration of student experiences. This ability to understand the phenomenon that takes place and leads students to degree completion will be sought through one-on-one interviews focused on the experiences of the students interviewed for this research.

    Furthermore, path dependence theory underscores the non-optimal outcome and that is only a minority of vocational community college students complete their degrees. Prado (2009) describes three critical components of path dependence theory as follows:

> self-reinforcing mechanisms, switching costs, and critical junctures.
>
> The first two concepts, which are emphasized by economic theory,
>
> provide an explanation of why institutions are difficult to change.
>
> The third, drawn from political science, suggests that there are key
>
> moments when there may be room for more radical reforms
>
> (Prado, 2009, p. 350).

We will explore the self-reinforcing mechanisms or the barriers to completion as well as critical junctures by reviewing relevant models and research found in this literature review.

The exploration of paths, pathways, and related dynamics have been applied to higher education research in the areas of career advancement for community college chief academic officers (Cejda, McKinney & Burley, 2001), the pathway from community college to obtaining a baccalaureate degree at a private institution (Cejda, 2000), as well as the exploration of reasons for community college students to transfer to a four-year institution prior to completing their associate's degree (Cejda & Kaylor, 2010).   This theory has been used to explain the dynamics surrounding non-completion, specifically for Hispanic students who completed their baccalaureate degree (Cejda & Stick, 2008). Also, path dependence theory has been applied to determine how "more comprehensive paths" of baccalaureate completion could be developed for Hispanic students as well as exploring the histories of those students who successfully obtained a four-year degree (Cejda & Stick, 2008, p.4).

Additional research into pathways include the critical review of higher education pathway barriers for Hispanic youth (Irizarry, 2012) and personal and institutional attributes that influence high-school students' decisions to enter college-level STEM (science, technology, engineering, and mathematics) programs (Engberg & Wolniak, 2013). Through the one-on-one student interviews, special focus will be paid to understanding the critical junctures in the lives of the students that led them to switch

from the dominant "inefficient" path of non-optimal outcomes (non-completion) to the optimal pathway of completion (Prado, 2009, p 351).

In sum, path dependence theory was chosen in order to help guide the research questions and develop interview framework. This theory will allow us to discuss the phenomenon surrounding why vocational community colleges students move from the traditional sub-optimal pathway of non-completion to that of the optimal pathway of completion. Through the exploration of student experiences, we will be able to understand how and why students switched paths and which factors influenced their decisions.

<div align="center">**Research Questions**</div>

One measure of success for vocational community college students is the completion of their associate of technology or science degree.   The selection of this measure of success is based on current research surrounding increased national competitiveness and its correlation with greater community college degree completion rates (Kotamraju & Blackman, 2010). The literature review is coupled with economic research that demonstrates higher wages and lower unemployment rates for community college students who obtain an associate's degree (Grubb, 1996).

The research questions are framed by the path dependence theory that can be applied as a conceptual framework to better understand the experiences of students. The literature informs the research questions by highlighting studies surrounding student persistence and known barriers to completion.

Building on the previously mentioned research and literature, a grand tour research question is considered for this study:

1. How have community college students who enrolled in vocational programs and began their studies with pre-college/remedial courses, overcome selected completion barriers and obtained their associate's degree?

While this grand tour question will allow for open discussions with the students, additional sub-questions are also considered for this research:

A. Studies have shown that work is a barrier to degree completion. How have the selected students successfully balance work and college demands?

B. Studies have shown that first-generation college students face significant preparedness challenges regarding when attending college. How have first-generation students in this study prepared for college (for example; did they attend an orientation or participate in college activities)?

C. Studies have shown that balancing family and college demands can negatively impact student success while in college. How have the study participants overcome challenges balancing family and college demands?

D. Studies have shown that community college students face a multitude of academic barriers that stem from a lack of academic preparedness (for example,

challenges regarding remedial courses and online courses). How have the study

participants overcome these barriers?

E. Were there additional academic or personal barriers that the study participants

identified? If so, how did the students overcome these barriers to achieve

academic success?

The grand-tour research question and sub-questions will be explored through a

phenomenological study of nine community college vocational students, who graduated

with their associate of applied technology and/or science degree in June 2013.

Assumptions

The primary assumptions made prior to the interviews, include that all nine

students interviewed are within good academic standing and are expected to graduate

in May or June 2013. The interview portion of this dissertation began June 2013.

Students who were interviewed were reviewed to ensure that they are representative

of Washington State Community and Technical College vocational students that is, over

the age of 25. Efforts were taken to invite women and persons of color to participate,

and graduating in a variety of chosen professional-technical programs (Grubb &

Lazerson, 2004). All students interviewed have taken at least one pre-college or

remedial academic course. Students interviewed were enrolled in their chosen career

training program either full or part-time and their programs will be for degree-granting

programs, and not enrolled in incumbent worker, contract training, or continuing

education programs.

Limitations

This research is qualitative, which allows for deeper understanding of the reasons why students complete their vocational degrees, however, qualitative research does not allow for a statistically significant sampling or analysis. Furthermore, nine students at one Washington State Community College were interviewed for this research. While interviews took place with the selected students, there is always a desire by qualitative researchers to be able to interview more students if time and financial resources allowed.

Definitions

Prior to delving into the literature review it is important to define the type of college, student, and degree that will be researched in this dissertation. The academic and professional success of community college vocational students is a key component to bridging our nation's skills gap, as well as strengthening our nation's economic recovery.

Community and technical colleges: There are approximately 1200 public community, junior, and technical colleges throughout the United States. The traditional mission of the community college includes academic transfer, vocational education, and adult basic skills (including English as a Secondary Language and GED preparation). Community and technical colleges are also referred to as two-year colleges, given that associate's degrees are traditionally the highest level of degree conferred (Cohen & Brawer, 2003). Additional mission components include continuing education, contract

training, international education, operating high schools on campus, and offering

applied baccalaureate degrees.

Workforce programs: There are a myriad of occupationally oriented educational

offerings at our nation's community colleges. Courses range from short-term

certificated programs focusing on skills-based instruction (one example is flagger

training) to longer-term certificated programs geared toward transitioning those who

are already employed and are seeking specific certifications (such as CISCO networking

or Microsoft certifications). These skills-based or job training short-term courses are

often referred to as workforce development, economic development, or job training

programs.

Often these programs are funded through federal or state grants (such as

Welfare to Work) and are typically non-credit courses. This is not the area of training

offered at community colleges that will be studied in this research although for future

research one could build on that of Grubb's research (2001) that asserts full-time

vocational programs could serve as a bridge to bringing short-term workforce students

back into the fold of higher education.

Vocational Education: The term vocational is used to describe full or part-time,

for-credit community and technical college courses and programs. This definition aligns

with the discussions surrounding The New Vocationalism that is a key component of

discussing the future value of vocational degrees. Vocational education at its core is "to

teach students the essential skills, knowledge, and abilities that link to the world of

work" (Laanan & Sanchez, 1998, pg.5). Examples of the breadth and demand for current

vocational programs include nursing and health care, first responders (police, fire, and paramedics), aerospace (manufacturing, professional pilot, maintenance) and technology (networking, security, and programming).

Career-Training Program Clusters: The National Association of State Directors of Career Technical Education Consortium has defined sixteen national career clusters for high school, two and four-year colleges. For the purposes of these interviews, the community college at which the student interviews occurred offers career training programs within the following career clusters: 1) Agriculture, Food and Natural Resources; 2) Business Management and Administration; 3) Education and Training; 4) Health Science; 5) Human Services; 6) Information Technology; 7) Law, Public Safety, Corrections, and Security; 8) Manufacturing; and, 9) Transportation, Distribution and Logistics. A complete listing of the sixteen career clusters can be found at www.careertech.org/career-clusters.

Community College Students: Community college vocational students are typically non-traditional aged students (25 or older), who work while raising a family, and remain in their community after graduating (Bragg, 2001, Cohen and Brawer 2003, Grubb and Lazerson, 2004). Nearly half of all community college students are first generation in their families to attend college (AACC, 2011). Finally, Elliott (1994) describes community college students as the "New Majority" of students who are older, minorities, women, attending part-time and described as non-traditional.

Vocational Degrees: Community or technical college associate's degrees vary from 90 to 100 credits and may be referred to as an associate of technology or associate

of applied science degree. Vocational credentials were often considered terminal, which is now "obsolete" (Cohen, 2003, p. 249) given the transferability of many vocational degrees and credits.

Significance

The driving forces behind this research are the hard working students who comprise the community and technical college student body. Their determination, persistence, and passion for making a better life for themselves and their families, is nothing short of inspiring. It is critical that our nation's leaders clearly articulate their goals for vocational students, ensure that they are a valued component of national completion and graduation initiatives, and direct resources accordingly. Today's community college vocational students are the future of this nation; they are diverse, many of who have families, and are among the working poor (Zhai & Monzon, 2004).

The success of every community college student contributes to a growing skills-based middle class. The economic and social value of middle-skilled employees in this country cannot be underestimated. We cannot export nurses, first responders, electricians, plumbers, or weatherization technicians, professions representing just a few of the vocational programs community colleges provide. The value of understanding how vocational students successfully complete their degrees is the first step in the financial sustainability of these students, their families, communities, and country.

Finally, the need to increase degree completion rates for vocational community college students is connected on a national level to the public outcry for greater

accountability and increased student success for community colleges as well as four-year public and private colleges. One accountability example that is relevant to this dissertation includes a three-year, statewide community college efficiencies legislation that has driven functional consolidations and the expectation that any savings will be reinvested in agreed to drivers for success including full-time faculty (SBCTC Efficiency, 2012).

Summary

Chapter one introduced the research focus of better understanding how community college vocational students overcome known completion barriers and complete their associate's degree. The value and importance of an associate's degree was introduced. This phenomenological study is framed by path dependence theory that allows for a deeper understanding of the experiences and histories of students, their self-reinforcing methods, and the reasons why they have been able to overcome non-optimal outcomes.

Chapter two will discuss the relevant research pertaining to this study including the dynamics surrounding why students do and do not persist. This includes the conceptual framework of path dependence as well as theories and models pertaining to adult learners, validity, motivation, persistence, and known barriers to completion. Chapter three presents the research methods used to inform the study and analyze the findings. Chapter four includes the research findings and the dissertation is concluded in chapter five with the findings as well as the applicability of the research.

Chapter Two: Literature Review

Introduction

The literature review provides a framework for this phenomenological study given the relevance of the literature as it pertains to understanding the theories and research (Creswell, 2007) significant to the community college vocational student degree completion discussion. The literature review consists of peer-reviewed research focused upon dynamics impacting student success, the American community college system, and the multitude of barriers community college students face when completing their two-year or associate of science/technology degree. The literature reveals three levels of discussion surrounding this topic; understanding the many facets of student success, exploring what success means for vocational community college students, and delving into the barriers to degree completion.

First, it is important to understand the context of student persistence and success as defined by research focuses on adult learning theory, validity theory, motivation, barriers to success, and student persistence. This body of research guides our discussions in better understanding student success including studies focusing on adult learning (Kiely, Sandman, & Truluck, 2004; Merriam, 2008), validity theory (Rendon, 1994; Barnett, 2011), student motivation (Houle, 1961; Morstain & Smart 1974; deCharms & Muir, 1978; Cross, 1981), research focusing on the many facets of student persistence including student engagement and attainment (Bean 1987; Tinto, 1993; Pascarella & Terenzini, 1980a; Robey, 2010; and Wayt, 2012) will also be

discussed. Additionally, some of the barriers students face include dispositional,

situational, institutional (Cross, 1981).

Second, the literature includes a disjointed viewpoint of the role of community

college vocational students and their inclusion within the current completion debate. As

well as the future viability of the American middle class comprised of middle-skilled and

credentialed workers (Grubb 1996; Grubb and Lazerson 2004; Bragg, 2001). Some

assert that degree completion for vocational students enrolled at our nation's

community colleges is tone-deaf to the goals of students as they seek greater

employability and job advancement and not necessarily an academic degree (Carnevale,

2000; Cohen & Brawer, 1996; Lohman, 2003, 2005). It is important to delve into this

debate in order to better understand why the success point of degree completion was

chosen for this dissertation.

Third, the literature reveals the multitude of completion barriers facing

community college students. Current barriers range from gatekeeper math courses

(Reyes, 2010), lack of condensed developmental education courses (Sheldon, 2010), and

a lack of preparation for demands of online courses (Aragon & Johnson, 2008).

Additional barriers include working while attending college (Roska, 2010), and parental

employment and educational attainment levels. The role of faculty is further reviewed

to assess attitudes and encouragement of students and their degree attainment (Cejda

& Rhodes, 2004). This body of research does not specifically address barriers applicable

to only vocational students at community college but those barriers that are of concern

to most community college students. The literature review provides research upon

which qualitative research questions can be framed in order to ascertain how successful

degree-attaining vocational students were able to overcome completion barriers.

Theoretical Facets of Student Success

Understanding the many facets of college student success is critical to a more

informed study of the phenomenon that leads to degree attainment of vocational

community college students.

Adult Learning Theory: If we picture the conceptual framework of this research

as a set of concentric rings, the path dependence framework is the outer layer. This

conceptual theory encompasses the larger questions of this research regarding how and

why students choose to complete their associate's degree. Within that framework,

additional theories and models such as understanding student persistence, motivation,

and the multitude of barriers students face help us to better understand why students

make certain decisions. Another important facet to understanding student decisions is

how students learn or adult learning theory.

As the primary authors who discuss adult learning theory note, there is no one

primary adult theory that can succinctly encapsulate how adults learn. Merriam (2008)

describes adult learning theory as an "ever-changing mosaic" in that the components of

adult learning theory are constantly changing. Adult learning theory is best described as

how adults learn, the processes by which they learn, their interaction with their

instructor, and the larger context within which they are learning. Kiely, Sandmann, and

Truluck (2004) discuss these four lenses of adult learning building upon Merriam and

Caffarrela's (1999) seminal work on adult learning.

Merriam (2008) emphasizes that building upon the concept of transformational learning (Mezirow, 1991) has led to greater explorations as the context within which adults learn. Mezirow's concept of transformational learning is summarized by his focus on the event (such as a divorce, death, etc.) that redirected the thinking of the student to be more open toward higher education. One could draw a parallel between the concept of path dependence theory and switching paths to transformative learning and what Mezirow refers to as "perspective transformation" (Kiely, Sandmann, & Truluck, 2004). Currently, more attention is being paid to the complex sociocultural and even spiritual context within which adults learn. Merriam (2008) builds upon the latest research in the mind-body connection as well as an increased understanding as to how spirituality affects adult learning.

Validation Theory: Validation theory has also been used as a theoretical framework by many researchers to understand how first-generation, low-income, and immigrant students are successful in a college environment (Rendon Linares & Munoz, 2011). Community college students are on average non-traditional students or returning adults, many of who have not attended college or school of any kind in one or more decades. Validation theory allows us some insight as to how adult learners may become successful learners within a higher education environment such as a community college. During a study of traditional and non-traditional students conducted by Rendon & Jalomo (1995):

> Traditional students generally felt confident about being able to
> succeed in college, many of the nontraditional students did not.

Involvement in college did not come easily to them, and depended

on active intervention from significant others (Barnett, 2011).

This theory is particularly relevant to many community college students as this theory

was first proposed by Rendon (1994) to address ways in which first-generation and low-

income college students could be successful.

There are many aspects to validation theory including how faculty and staff can

thoughtfully create opportunities for student validation of learning and success. The

primary reason for the inclusion of validation theory is how college faculty and staff

encourage students to become creators of knowledge and encourage personal growth

within the college setting (Rendon Linares & Munoz, 2011). Rendon (1994) outlines

many ways in which faculty and staff can validate the ability, potential, and scholarship

of students, many of whom do not receive similar validation in their personal lives.

Faculty are a critical component of a student's success through their encouragement,

mentoring, sharing of learning, and creating opportunities for students to support each

other (Rendon, 2011). For example;

faculty build supporting, caring relationships with students and allow students

to validate each other and to build a social network through activities such as

forming study groups and sharing cell phone numbers (2011).

Validation from faculty and staff throughout the College can be incredibly positive

especially if it is delivered early in a student's college experience.

In addition to adult learning and validity theories, additional exploration of

theories and models include understanding student persistence and engagement (Tinto,

1975, 1987, 1993; Bean, 1980; Coleman, 1988; Pascarella & Terenzini, 1980a; Robey

2010; and Wayt, 2012), then student motivation (Houle, 1961, Morstain & Smart 1974;

deCharms & Muir, 1978). Finally, a review of the barrier model to student success will

be discussed (Cross, 1981).

Student Persistence: For the purposes of this dissertation, it is important to

summarize the primary models pertaining to student persistence, although Rendon

(1994) would assert that validation impacts community college students more so than

student involvement and integration (Barnett, 2011). Two primary models are relevant

to this discussion. First, Tinto's Interactionalist Theory (1993) and Bean's Student

Attrition Model (1982). Tinto's theory correlates student retention with that of the level

of student engagement within the college. His seminal work pertaining to persistence

emphasized that student persistence is not an easy or straightforward problem to

remedy (Tinto, 1987).

Tinto's model emphasizes that "other things being equal, the lower the degree

of one's social and intellectual integration into the academic and social communities of

the college, the greater the likelihood of departure." (1993, p. 115–116). Tinto's model

is particularly difficult to align with the non-traditional, first-generation community

college student who is typically working full or part-time, has family obligations, resides

off-campus, and rarely has the time or interest in participating in college activities.

Finally, Barnett (2011) studied how faculty validation impacted both persistence and

integration building upon Tinto (1993) and Rendon's (1994) models. Her conclusion was

that for men and women, younger and older students as well as Hispanics, faculty

validation increased rates of persistence and integration. The results were less clear for students of color other than Hispanic students (Barnett, 2011).

Bean (1982) drew a parallel between student persistence and that of workplace attrition and encouraged colleges to treat students similarly as to how they would treat an employee they wish to retain. Multiple authors have built upon Tinto and Bean's theories (Pascarella & Terenzini, 1980a) as summarized by Bragg (1996), Robey (2010), Wayt (2012), Paulson (2012). Bragg (1996) provides an overview of the persistence research in the early 1990's that underscores the finding that persistence increases as students enroll full-time, work less, and are younger with fewer family demands (p. 1). Wayt (2012) built upon Tinto's (1993) theory to delve more deeply into not only student relationships on campus but those off-campus, concluding that students tended to weigh more heavily off-campus relationships when making decisions pertaining to persistence.

Robey (2010) also referenced Tinto's theory of student persistence in order to ascertain the dynamics surrounding female community college transfer students to a four-year university. During her discussion of the findings, Robey (2010) noted that, "the participants who were married, had children, or were older than the traditional age college students felt more disconnected with the other students and the campus in general" (p. 97). Additional research pertaining to the many facets of persistence will be explored later in this chapter during the discussion about the effects of employment and family upon persistence.

Motivation: The question of the role of motivation is important to this research. Student motivation for learning can be categorized in three distinct areas, goal-oriented, activity-oriented, and learning-oriented (Houle, 1961). Additional motivational research categorizes adult learners into six factors ranging from social relationships, to professional advancement to external expectations (Morstain & Smart, 1974).

Another pertinent motivational model is referred to as Chain-of-Response (COR). This model describes the intrinsic and external pressures students face as they move into education and participate as a productive student (deCharms & Muir, 1978).   A relevant component of this model speaks to the influence of external factors on students,

> the elimination of external barriers, however, will do nothing for
>
> the individual whose weak positive forces for participation were
>
> wiped out by the strength of negative forces encountered before
>
> he reached opportunities and barriers" (Cross, 1981, p. 129).

As we see in the literature, students face a myriad of internal and external factors that discourage and delay as well as encourage and empower. These influences impact the dominant path students will choose while in college, therefore the role of motivation will be considered when framing interview questions.

Barrier Model: In addition, what will be referred to as the barrier model will be used to better understand the histories and experiences of students interviewed and lead to questions surrounding how students overcame these barriers and completed their degrees. Cross (1981) describes three distinct types of barriers for student

persistence based on the 1974 Commission on Non-Traditional Study (analyzed by Carp, Peterson, & Roelfs, 1974), which include situational, institutional, and dispositional barriers to completion.   Lohman (2003) also referenced these barriers to frame her quantitative study regarding why community college students do not complete their programs.

The barrier model consists of three primary components; situational, institutional, and dispositional barriers. Situational barriers may include lack of transportation to college, insufficient childcare, and/or cost of tuition, fees, and or books (Cross, 1981, p. 99). Institutional barriers may include courses offered at an inconvenient time, not enough information about courses, or other administrative or bureaucratic requirements. Dispositional barriers may include low confidence, and lack of self-motivation. Lohman (2003) also referenced trade-related barriers (Shelton, 1984) however for the purposes of this research the dynamic of not completing college for employment or what some refer to as a job-out, parlays appropriately within the situational barriers framework.

When constructing the research approach the theories and models discussed will be interwoven throughout the questions and interview discussions in order to understand the factors students overcame when moving to the optimal path of degree completion. For example, whether or not those interviewed are first generation college students were among the demographic questions initially discussed in the pre-interview questionnaire. Within the path dependence framework, interview questions were

developed with the understanding of the models of persistence, motivation, internal

and external motivators, as well as situational, institutional, and dispositional barriers.

Defining Success for Community College Vocational Students

This section of the literature review will discuss the different definitions of

success for vocational community college students. This section underscores the

reasons why this research focuses on one point of student success and that is, degree

completion for vocational students. The effort to more clearly define degree

completion as a measure of success for all community college students, specifically

vocational students, in today's environment involves reconciling with the past traditions

of vocational education where students were trained to master skills in technical areas,

and to not necessarily focus on soft-skills, academic courses, or a degree.

For many vocational community college students, their education consists of the

transfer of technical skills from instructor to student (Grubb, 1996). The value of this

technical education to students and the workplace is at the center of the first segment

of this literature review. For example, some assert that employer demand for

vocational education students with short-term skills based training is valuable but may

undermine community college completion rates (Blackman, 2009; Van Noy & Jacobs,

2009).

The Complex Definition of Success for Vocational Students: Lohman's (2005)

research sheds light on the points during which students leave their program and the

contributions that led to their departure. Her research assists with our understanding of

the dominant path for many vocational community college students. Lohman's research

points to the phenomenon that adult learners who enter into vocational education programs do so because they want to obtain a certain set of skills necessary for employment or professional advancement, not necessarily academic courses. Of those students surveyed by Lohman, 56% indicated that once they met those self-established employment goals they saw no reason to stay and complete their certificate or degree. Not surprisingly, employment prospects and the urgency to finish was most pressing upon unemployed students who left college for employment after increasing their vocational skills. Lohman's (2005) research suggests another valid manner, short of a full-degree, in which to measure students leaving early for employment as a marker of community college's success, while helping students meet their self-established goals of employability.

The Role of the Employer and Short –Term Training: There remains a lack of consensus about whether or not employers are even looking for students with degrees or seeking short-term skills-based training. Zeiss (1999-2000) wrote:

Every community is crying out for more skilled and productive workers,
and businesses and trade associations are scrambling to develop dependable
sources for providing new workers. Employers are equally concerned about
keeping existing workers trained with the skills needed to be more productive
(Zeiss, 1999-2000, p. 48).

Community and employer collaboration is a central mission function for most community colleges hence the growth of continuing education, contract training, and economic development/workforce training programs (Cohen & Brawer, 2003).

Orr (2001) outlines the various types of employer-driven partnerships with community colleges that focus on skills-based training and not necessarily the granting of vocational degrees. Orr's work details the complexities of the nation's workforce development system as it pertains to community colleges. Questions arise from both Lohman (2005) and Orr (2001) as to how employers and community colleges can mutually benefit from this type of training, and whether or not students are losing out on long-term increased earnings and greater job security.

The Myth Behind Job-Outs: Beyond Lohman's (2005) research that directly asked vocational students about the reasons for their early departure, skepticism remains as to the wide-spread validity of the argument that students are leaving early due to gaining employment. Many community colleges are ill equipped to definitively illustrate that their vocational students are leaving early due to employment (Grubb 1996, 2001). Reasons vary from community colleges lacking institutional research staff to their state's employment data lagging years behind student departures (Azari, 1996). Furthermore, the connection between student departure and employment status is inconsistent across the nation (Laanan & Sanchez, 1998).

Regardless of the reason, community colleges would be better served to not cite employment as a primary reason for non-completion of the majority of their vocational

students, that is until they can definitively show that the students are not completing their degrees because of offers of employment. Indeed, community colleges have so much more to gain by focusing on quality instruction and work-based learning opportunities (Torraco, 2008), increasing completion rates, and promoting the return on investment of public higher education funds and student success (Gilliam & Davies, 2003).

The Evolving Definition of Completion: Those faculty and administrators within community colleges who believe vocational students are more successful in the long-term when they complete their associate's degree would site the work of Kotamraju and Blackman (2010) who provide a present-day context for degree completion for two-year college students. Kotamraju and Blackman assert that within the context of President Obama's American Graduation Initiative (AGI), community colleges can build upon completion best practices offered through national completion initiatives such as Achieving the Dream and those funded by the Gates Foundation, and ensure that the education provided by two-year colleges is applicable to the workforce. Kotamraju and Blackman write, "because community college enrollees are entering with inherent risk factors that prevent them from graduating, they should ensure that they follow through on implementing retention and completion strategies for these at-risk students" (p. 217). With successful completion best practices available to colleges, Kotamraju and Blackman emphasize the two-year college student's need for relevant credentialed training that is quickly applicable in the workforce (Lohman, 2005).

Kotamraju and Blackman (2010) also add to the work of Barton (2008), Holzer and Lerman (2007) who assert that in order to obtain employment and therefore economic security, students should focus on some post-secondary education but not necessarily a four-year degree. Finally, Kotamraju and Blackman note that college students will thrive when there is an incentive to obtain employment after degree completion within a vibrant economy that is globally competitive.

While Lohman (2005) and Laanan (2000) struggle with the need to define successful vocational students as only those with degrees, emerging research in the areas of correlating degree attainment and professional success is compelling. Grubb and Lazerson (2004) find that "85 percent of occupational enrollments in community colleges are now in "modern" occupations, like biotechnology, business, computers and information technology, electronics, engineering, and health (p.17)." Credentials and degrees are beneficial for vocational students to succeed in their chosen careers such as health care and engineering. Such occupations are more likely to enjoy the benefits of professional status and increased employment earnings. Through the majority of its vocational education community colleges strive to work with their students and prepare them for meaningful work that will not only contribute to the regional economy and ensure financial sustainability for students' families.

The Economic Case for Completion: The following data and research is underscored by 2008 recession, and its devastating impacts upon working Americans who had not yet earned an associate's or bachelor's degree. One of the fundamental arguments in favor of a new standard for vocational degree completion is the result of

increased earnings and employment security that comes with an associate's degree.

Grubb (1998) asserts:

> completion of associate degrees enhances wages, employment, and
>
> earnings by significant amounts, in both conventional and statistical senses.
>
> For example, men with associate degrees earn 18 percent more and
>
> women 22.8 percent more than high school graduates, once all the
>
> differences between the two groups have been considered" (p. 10).

In addition, annual earnings increase by nearly $10,000 a year for those students who complete an associate's degree as opposed to a high school diploma. The increase in employment earnings for every year of community college attended is parallel with that of every year at a four-year college and can range from a five to eight percent increase in earnings (Kane & Rouse, 1995 and Sanchez & Laanan, 1998). Perhaps, even more compelling the unemployment rate in 2010 for those who held an associate's degree was two points lower (seven percent) than those with some college, no degree (nine percent) and three points lower than those holding just a diploma (ten percent) (Post-Secondary Opportunity, 2011).

For those students who do not complete their associate degree, they realize a tangible earnings penalty as both men and women without a degree earn less throughout their career (Hecker,1998). In addition, social mobility may be impacted as those students who complete their vocational associate's degree are more likely to move beyond the role of a laborer to a middle-skilled profession (Grubb, 1996 and Lanaan & Sanchez, 1997). This transition is even more secure when students secure

their vocational credential and then work in their occupational field of study (Grubb, 1996).

Specific to the population of Washington State community and technical college students interviewed for this dissertation, Azari (1996) states "salaries of degree and certificate achievers were 13% to 45% higher than course completers after graduation and 9% to 46% higher five years later" (p. 5). Azari concludes from her study of five-year employment success for community and technical college certificate and degree holders that "legislators should consider the benefits reaped by vocational education students, especially students of color, in allocating resources to community and technical colleges" (p.6). Again, community college administrators and advocates must stress the data to community college vocational students and shift resources toward persistence and completion as opposed to access only (Azari, 1996; Buzzell, 1994).

The New Vocationalism: Vocational students who complete their associate's degree earn higher wages and are more secure in their positions during recessionary times. In order to be globally competitive, America's community colleges must offer not only specialized certificates that empower the American workforce to keep pace with technology and remain employable (Carnevale, 2000). Community colleges must continue to expand their efforts to offer vocational degrees that allow students to matriculate to four-year colleges and universities, especially in those workforce preparation programs such as health care, information technology, and advanced manufacturing where community and technical colleges provide the majority of educational opportunities (Bragg, 2001). This expansion also includes a strong focus on

STEM fields or Science, Technology, Engineering, and Math-related areas of study. Community colleges are ideally situated to support growth in the number of STEM graduates given their smaller class sizes and often a more supportive climate for women and minority students (Starobin & Lannan, 2008).

The New Vocationalism, coined by Grubb (1996) as defined by Bragg (2001), calls for seamless transitions for vocational students beginning in high school, then to community college, and then to a four-year degree when applicable. This movement is underscored by greater calls for accountability and success for vocational students who are the key to America's global competitiveness in high-demand careers such as health care and technology. Grubb argues:

> for the conceptions of occupations programs that are relatively broad that
>
> encompass the academic and higher order capacities increasingly necessary
>
> in the work world as well as the worlds of politics and community, that
>
> integrate occupational and academic capacities, and that pay attention
>
> to the personal capacities necessary to get into the world (p. xviii).

Forward-thinking community and technical colleges are providing such opportunities to their students through reverse transfer (Quinley & Quinley, 1998) and the growth of applied baccalaureates.

These two trends alone signal an evolution of thought toward vocational education and that technical degrees are no longer terminal degrees (Bragg, 2001 and Floyd, 2006). To that end:

> because bachelor's degrees are required for entry to a greater number

of career fields, educational leaders and policymakers are looking to

creative models for fitting technical and occupational courses into the

baccalaureate degree framework (Floyd, 2006, p. 68).

Furthermore, "5 to 30 percent of vocational program graduates transfer immediately to

baccalaureate institutions" (Cohen, 2003, p. 238). Community and technical colleges

are playing a greater role in offering applied baccalaureate degrees that are allowing

vocational students to attain a four-year degree that is specialized within their field of

study and professionally positioning these students for career promotions and the

ability to obtain management positions.

Today's vocational education at community colleges is reflective of not only the

need for students to complete their vocational or technology degrees but to then

transfer those degrees to a four-year institution for additional technical and

management preparedness (Floyd, 2006). Options also exist for vocational students to

complete their four-year applied baccalaureate degree at either their community

college or a nearby community college (Floyd, 2006). Finally, an emerging trend is that

of reverse transfer whereby students with a baccalaureate degree enroll in community

college vocational courses in order to obtain an applied skill that can be utilized in the

workforce (Brown, 1999).

By putting the onus upon community colleges to refocus their completion

agenda to include vocational students, our nation will increase its global

competitiveness as the United States bridges its skills gap in the areas of health care,

technology, and manufacturing. Within today's context of the American Graduation

Initiative, the national skills gap, global competitiveness, and the need to stem the increasing hopelessness of poverty, policymakers and community college leaders must embrace the call for a New Vocationalism. Within the context of the Great Recession now is the time to raise the expectations for vocational degree completion to that of parity with community college transfer students, and ensure that the terminal vocational degree remains as a relic of the past (Grubb, 1996).

In sum, a key focus of this research is the success point of degree completion for vocational community college students. As discussed, there are multiple ways in which vocational community colleges can be successful through continuing education, workforce training, incumbent training, or contract training. Significant economic evidence is attributed to associate degree completion and employment security and advancement. By understanding the experiences and histories as to how the students interviewed chose the optimal path for themselves and completed their degrees provides insight that will inform community college administrators as they strive to expand the optimal pathway for vocational community college `students.

Barriers to Completion

The third part of the literature review will highlight the barriers that community college students must overcome when striving to complete their associate's degrees. The specific barriers will then serve as the primary basis for the research questions asked of students identified for this research.

Situational Barriers

Community college vocational students are non-traditional and face immediate

challenges when arriving at their community college. For example, "being married and a

parent tended to reduce women's likelihood of enrolling in college at a later age"

(Jacobs and King, 2002, p. 212). There is some variation between younger and older

females with children as younger women with children had a harder time juggling

college and parenting demands (Jacobs & King, 2002), the degree to which having

dependents while in college varies slightly among single and married parents (Paulson,

2012).

Non-traditional students - men and women alike – who may have been out of

school for years if not decades and are not comfortable with traditional classroom

learning environments (Grubb, 1996; Jacobs & King, 2002). In addition, estimates range

from 25-50 percent of community college students require some form of remedial

education in order to get them up to college course level.

Completion and Employment Status**:** Within the broader framework of

community college student retention and completion discussion is the complex

relationship between the student's post-graduation employment and the student's

employment status while enrolled in College. The role of employment and its impact on

the lives of students is nuanced. On the one hand the goal of vocational community

college programs is to provide an education so that graduates can start or advance their

careers. And yet, many community college students have had intervening work

experiences prior to enrolling in community college (Anible, 2007) have families, as well as work full or part-time while attending college. So while the end goal of a vocational community college student's degree is a career, for many students the lure of employment prior to graduation is too enticing (Lohman, 2003) especially if the student is unemployed. Furthermore, employment while in college is a primary completion barrier (Roska, 2010; Paulson, 2012).

Anible (2007) discusses the influence of student's intervening work experiences prior to enrolling in college. Anible explores the influence of this work experience and questions whether prior work experience hinders or bolsters community college persistence. The outcome of his research underscored that those students who did not have an intervening work experience prior to enrolling in college were twelve times more likely to persist than those who worked prior to attending college.

The exploration of the relationship between employment before and during college is important given the majority of community college students work while attending college (Brown, 1999). Roska (2010) paints a bleak picture of a student's chance to complete his/her associate's degree while attending a community college and working at the same time. Roska asserts that nationally ten percent of students who attend community colleges complete their degree, transfer to a four-year institution and finish their bachelor's degree. This low completion rate, Roska contends, is compounded by parental education status and income as well as the intensity of student employment.

Roska (2010) used the National Center for Educational Statistics Youth Longitudinal study based on the 1996-97 cohort of youth and weighted information around family and outside work to run predictor models. Roska's study leads one to conclude that employment levels, parental income, and parental education rates should be considered as additional research questions when delving into the barriers of completion for community college students.

The impact that part or full-time employment has on the success of community college students should not be underestimated as it remains a barrier to completion for younger and older women alike (Jacobs & King, 2002). Other situational barriers are as diverse as the community college student body itself. A review of retention literature was conducted by Zhai & Monzon (2004) that included the primary differences between the typical community college student and that of traditional four-year college students. Specifically community college students are continually balancing work, family, and college demands.

Dispositional Barriers

The second area of barriers discussed is that of dispositional barriers. For example which life factors are barriers to students. What impact does race, gender, age, and being a first-generation student have on the success of a community college student. These dispositional factors will be explored.

Student Demographics: More recently building upon the student attrition modeling work of Bean (1980), Vesper (1990), and Allen (1999) derive a model that

includes motivation as a component of persistence but acknowledges this is not the complete explanation for why minority and non-minority students succeed. Allen concludes through his research that for minority students, motivation and high school rank influence their focus on completion. Conversely, for non-minority students, high school rank and parental education levels were enough to influence their persistence without a strong presence of motivation.

First-Generation Students: First-generation college students often face an uphill battle when navigating college life. Pascarella et all (2004) describes the dynamics that can negatively impact student success:

> compared to their peers, first-generation college students tend to
> be at a distinct disadvantage with respect to basic knowledge about
> postsecondary education (e.g., costs and application process),
> level of family income and support, educational degree expectations
> and plans, and academic preparation in high school (p. 250).

Pascarella's insight is pertinent to community colleges given not only the majority presence of non-traditional students but of non-English speaking immigrants who also attend community colleges to enhance their English-speaking skills (Torraco, 2011).

Parental education levels are a key factor impacting student success at college (Coleman, 1988). One theory focused on why first-generation college students succeed includes the social capital that comes from graduating from college, which is presumably passed on to the children of college graduates. Pascarella explains:

first-generation students are likely to enter college with a lower stock of

cultural/social capital than their peers, one might anticipate that their

levels of academic, and perhaps even social engagement during college

will function in ways that may help them make up for this deficit

(Pascarella et al, 2004, p.252).

Pascarella has led a number of studies surrounding how meaningful first-year student

experiences (FYE) can neutralize pre-college barriers to persistence (Pascarella, 2004).

He notes that even when controlling for pre-college factors such as high school grade

levels and parental education levels that first-year experience programs influence

persistence levels albeit slightly (Pascarella, 2004). Theories surrounding the role of

motivation, parental education levels, and student engagement will contribute to the

phenomenological research questions and how those will be presented to students.

Age, Gender, and Race: The dispositional factors of age, gender, and race have

varying amounts of influence on student success. Paulson (2012) explored how gender,

race, and age impacted underprepared community college students. She concluded

that younger students were less likely to persist than older students. In addition,

according to her review of Washington State community and technical college students,

78 percent of Caucasian students graduated when compared to 50 percent of Hispanic

students. Finally, Paulson did not perceive a gender completion gap. Some researchers

found that retention and grade point average were not related to age, gender, or race

(Glass & Garrett, 1995). Others believe that older students were less likely to finish their

credential (Tinto, 1993). As to the issue of race, student experiences can vary widely on

college campuses. Zhai & Monzon (2004) include negative racial interactions at their community college as barriers to completion, while others note that employment while in college is a higher barrier for most students when compared to race (Jacobs & Dougherty, 2002).

Institutional Academic Barriers

Institutional academic barriers are simultaneously among the most complex and yet important barriers that must be weighed by community college leaders, as they are the barriers that can be institutionally controlled and therefore removed. What the literature surrounding institutional barriers illustrates is that there is an emerging body of research focused on community college student success and yet the research remains segmented. Specific barriers are researched. For example, among institutional barriers research focused on remedial/pre-college math, online education, and the role of faculty to name a few. These well-defined pieces of research, while helpful to targeted segments of the community college, challenge community college practitioners and researchers alike to place together this research similar as to how one would piece together a puzzle, in order to obtain a clearer picture of the barriers to community college completion.

Completion and Math: Reyes (2010) discusses her study that determines whether or not students are more successful completing "gatekeeper" courses such as college algebra when this course is offered in an eight week format when compared to a sixteen week course length. The completion and grade attainment of 231 students was reviewed both sections of the eight and sixteen week courses. Reyes also wanted to

determine if the algebra course length made a difference when comparing gender and/or ethnicity. Reyes concluded in her study that the length of the course was arbitrary and did not make a difference in the completion rates for students no matter their gender or ethnicity.

Completion and Developmental Course Length: As community colleges strive to reduce or remove completion barriers they seek to try out different course structures to see if student success improves. One example of these experimental changes is compressing course lengths to improve student persistence. Sheldon (2010) would disagree with Reyes' (2010) contention that compression of developmental courses, which are intended to help students prepare for college level course. These courses are often referred to as remedial or in the Achieving the Dream vernacular "gatekeeper courses." Sheldon's hypothesis that development course length does not have an impact on certificate or degree completion is rejected as she concludes that compressed academic courses positively impact student success. The only note of exception is that female students completed these courses at higher levels regardless of the course format.

The significance of Sheldon's research is that developmental courses are increasingly viewed as gatekeeper courses for adult learners as they strive to complete their certificate or degree vocational program in a timely manner. Success in these gatekeeper courses may affect college completion. Developmental course participation and success is worthy of further explanation as the number of mandatory developmental courses and student's ability to complete those courses in a timely

manner may affect students' ability to efficiently complete their degree coursework. Another potential barrier to student completion includes the burgeoning area of online education.

Online Educational Delivery and Impacts on Course Completion**:** At today's community college campuses online course delivery is increasing dramatically due to three reasons; first, The Great Recession has created a surge in enrollment and online courses are one way to meet the increased demand; second, with dramatic public budget cuts online courses are a cost effective way to deliver education with adjunct faculty; and, third, technologically-savvy students and time-crunched working adults appreciate the flexibility online courses offer. However, online courses, despite their apparent flexibility and affordability, can be a barrier to some students who are not as comfortable with the demands of online education.

Over 300 online education students were surveyed to determine reasons for not completing their courses as Aragon and Johnson (2008) sought to determine the primary reasons why online students at a rural Mid-western community college dropped their online courses. Aragon and Johnson concluded that age, gender, and ethnicity as well as technological knowledge had little or no statistical correlation with course completion. They concluded from their research that students with a previous GPA of 2.5 or above had a higher completion rate than those students with a lower GPA. Aragon and Johnson made two compelling points as a result of their research regarding the need for enhanced student advising prior to students enrolling in online courses:

first, steer students with grade point averages lower than a 2.5 away from online

classes; and, second, provide students with feedback regarding time management and

online classes.

Completion and the Role of Faculty**:** The role of faculty in the completion

discussion is important and worthy of further review, as faculty can create a climate of

student success (Cejda & Rhodes, 2004) or serve as a barrier to completion and job

placement after graduation (Grubb, 2001). Within the community college system,

vocational faculty are often hired for their professional expertise and not necessarily

their academic credentials. This could inherently create conflict for example if an

automotive instructor who only has an associate's degree or vocational certificate

prides his course on preparing students technically for the automotive industry and

does not place as high of value on academic courses. "Occupational educators often

demonstrate some resistance to general education, because they feel it takes away time

from necessary technical instruction" (Jacobs & Dougherty, 2006). Vocational students

take their cues from their faculty about the value of academics and its role in ensuring

degree completion as students often form close working bonds given they work with the

same core technical faculty during their community college education.

Faculty are also the key to creating learner centered communities that are

central to the New Vocationalism concept which empowers students to not only focus

on the acquisition of technical knowledge but to also be able to apply that knowledge

within their coursework and chosen profession (Dare, 2001). It is important to

recognize that with all the completion barriers discussed in this literature review, barriers to creating a learner-centered model within the community college environment include "a focus on teaching rather than learning" (Perrin, 2000).

It is important to note that while faculty can be perceived as a barrier to completion, faculty also play a key role in removing barriers to completion and empowering students to persist. It is worth additionally delving in the role of faculty so that a balanced presentation of the literature is provided in this dissertation. For example, Cejda and Rhodes (2004) expanded upon their earlier qualitative research of Hispanic student completion at a community college and examined the role faculty played in student decision making in their research.

Cejda and Rhodes (2004) facilitated a qualitative research approach to explore ways in which faculty encouraged certificate and degree completion among their students, specifically Hispanic students. They concluded that the faculty identified as exemplary in their advocacy for students proactively encouraged and reassured students as to their success and regularly pointed out the building blocks to successful completion (one certificate or skills set at a time). In addition, supportive faculty clarified the connections between academic credentials and additional pay when employed to students thus encouraging them to complete their credential. The role of faculty is critical and will be examined more fully in the research.

Student Success and College Orientation: Research is growing in the area of how a student's first-year experience at college affects their persistence as a student

(Duggins & Williams, 2011; Miller & Pope, 2003). In Derby and Smith's (2004),

quantitative analysis is used to measure persistence of students given their participation

in mandatory orientation. Derby and Smith tracked a cohort of first-time college

students and measured their success (for example whether they completed their

associate's degree) and compared it to whether or not the students attended

orientation. Their findings showed that,

> greater proportions of students dropped out and did not take the
> orientation course, while greater proportions of students who took
> the orientation course re-enrolled after brief breaks in enrollment
> and persisted beyond the traditional two-year period for degree
> obtainment (Derby and Smith, 2004, pg. 771)."

Mandatory orientation for students is quickly becoming commonplace at community

colleges across the nation as research such as Derby and Smith (2004) assists

community colleges with a best practice that can result in increased persistence rates.

Summary

As outlined in the introduction of the second chapter, the first part of the

literature review focuses on models and research that shed light on the forces that both

keep students on the non-optimal path of non-completion. Second, we explored the

literature that clarifies what success means for full or part-time, credit-seeking

vocational students. The definition of vocational student success is directly tied into the

student's ability to be self-sufficient which is why the definition of the optimal path for

vocational community college students chosen for this research is degree completion.

Third, specific degree completion and persistence barriers were reviewed which have sought to frame our primary research questions focused on the histories and experiences of vocational community college students and how and why they switched paths to complete their degrees. In addition, the literature also framed our research sub-questions focused on the problematic relationships with employment, challenges surrounding first generation students, the impacts of family responsibilities, academic as well as dispositional dynamics.

Chapter Three: Research Methods

Introduction of Qualitative Research

The literature review provides a clear overview of the multitude of barriers community college students face while striving to complete their degrees. The structure provided in the literature review, including the conceptual framework of path dependence theory combined with an understanding of the dynamics of student persistence, comprise the theoretical underpinnings of this phenomenological study. Building upon this foundation is the research that underscores the selection of degree completion for vocational community students as the success point examined in this study. Finally, we reviewed the multitudes of barriers many community college students face. Upon the foundation of literature, a phenomenological approach to the research will be used to understand the experiences of vocational community college students who completed their associate's degrees and specifically how they overcame known barriers to complete their degrees.

This study is organized based on Creswell's approach toward developing a qualitative study (Creswell, 2007). This phenomenological study is organized as follows: Research Design, Researcher's Role, Bounding the Study, Data Collection, Data Analysis, Verification, and Reporting the Findings (Creswell, 2007). Creswell notes that the purpose of qualitative research is "to learn about the problem or issue from participants and to address the research to obtain that information" (Creswell, 2007, p. 178). The problem that we are exploring is the experience of the interviewed vocational

community college students and the reasons why they have completed their associate's degrees, while the majority of their peers do not.

By focusing on the experiences of the interviewed students we can begin to understand the phenomenon underlying their success. Merriam (2009) describes phenomenology as the type of research that "comes to focus on the experience itself and how experiencing something is transformed into consciousness" (p. 24). The phenomenological approach to this study is complimentary to the path dependence theoretical framework that allows for the exploration of the experiences surrounding how and why the students interviewed switched life paths and selected an optimal pathway toward degree completion. The path dependence framework allows for a deeper understanding as to why the study participants chose to enroll in community college, persist, and overcome known completion barriers in order to attain their associate's degree. The literature assists us with narrowing our definition of degree completion as an optimal pathway and guides our semi-structured interviews through an increased understanding of the barriers students face when striving to complete their degrees.

Research Questions

The research grand tour question and sub-question are as follows:

1. How have community college students who enrolled in vocational programs and began their studies with pre-college/remedial courses, overcome selected completion barriers and obtained their associate's degree?

Additional sub-questions are also considered for this research that are intended to answer the grand tour question:

A. Studies have shown that work is a barrier to degree completion. How have the selected students successfully balance work and college demands?

B. Studies have shown that first-generation college students face significant preparedness challenges regarding when attending college. How have first-generation students in this study prepared for college (for example, did they attend an orientation or participate in college activities)?

C. Studies have shown that balancing family and college demands can negatively impact student success while in college. How have the study participants overcome challenges balancing family and college demands?

D. Studies have shown that community college students face a multitude of academic barriers that stem from a lack of academic preparedness (for example, challenges regarding remedial courses and online courses). How have the study participants overcome these barriers?

E. Were there additional academic or personal barriers that the study participants identified? If so, how did the students overcome these barriers to achieve academic success?

The grand-tour research question and sub-questions are explored through a phenomenological study of nine community college vocational students, who are qualified to graduate with their associate of applied technology and/or science degree by June 2013.

Research Design: In order to obtain answers to these research questions, a qualitative phenomenological study was conducted in order to ascertain how successful community and technical college students overcame identified barriers to complete their vocational degree. The population sampled included nine community college students attending one community college in Washington State. For this study, the College is referred to as Washington State Community College ("Community College"). This college was chosen because it resembles a mid-sized suburban community college with a variety of adult basic skills, general academic transfer, professional-technical, and continuing education programs, a common mission and program mix for community colleges nation-wide.

The participant selection process found in the maximum variation sampling technique that was utilized (Creswell, 2012, p. 208), in order to cast a wide net of study participants. With that said, there were specific selection criteria used in order to determine the final nine interviewees, however from there an effort was made to interview a varying group of students. First, the students needed to be in good academic standing at the Washington State Community College and enrolled in a vocational career-training program. In addition, these students began their college

career with pre-college or remedial courses (Merriam, 2009). These students graduated in June 2013 with their associate of technology or associate of science degree.

Two announcements about the research opportunity were distributed around the campus via email primarily from the Vice President of Student Services to career training faculty. The study participants heard about the opportunity primarily from their faculty members. The first announcement was sent a week prior to the scheduled on campus interviews and then a reminder was sent the day before the interviews. A specific reminder was sent to the faculty who taught in those career programs from which students were not originally participating such as information technology. A snowball sampling technique was utilized to obtain from the students the names of additional students to interview. One additional study participant was identified through this process.

As noted in the limitation portion of this study, the pool of participants lacked ethnic diversity. While this was not a desired outcome of the study, it is not altogether surprising given the fact that over two-thirds of the community college's student population is Caucasian. With that said, a more ethnically diverse pool of study participants could have added valuable perspectives to the study that could have led to a deeper insight into how both Caucasian and students of color overcame completion barriers.

Finally, it is worth describing the academic context of the study participants and how exceptional it is that they graduated with a degree. In Washington State, vocational degrees are not necessarily obtained with the intent to transfer to a four-

year college or university, although as noted from our literature review the assumptions

surrounding terminal vocational degrees are evolving (Quinley & Quinley, 1998; Bragg,

2001; Cohen, 2003; and Floyd, 2006).

The Researcher's Role

It is critical that within a qualitative, phenomenological study, the researcher

discloses her bias prior to the study. Merriam (2009) discusses this approach toward

the self-reflection process a researcher must conduct prior to a phenomenological study

so not to presuppose or misinterpret the interview feedback. Two phenomenological

approaches toward discussing the researcher's role include Epoche and bracketing

(Merriam, 2009). Epoche is a process by which the researcher discloses her bias so as to

not judge the interview feedback. Bracketing is a term that enables the researcher to

set aside bias and prior understanding and therefore not interfere with the research.

"Prior beliefs about a phenomenon of interest are temporarily put aside, or bracketed,

so as not to interfere with seeing or intuiting the elements or structure of the

phenomenon" (Merriam, 2009, p.25).

Epoche: For the purposes of this research, it should be noted that the researcher

does recognize bias as a technical college administrator for fourteen years and as an

adjunct faculty member. As a first-generation college graduate and the daughter of a

barber and paper mill machinist, the researcher's bias as it pertains to this research is

one of an advocate for community and technical colleges and its students. The

researcher has a great deal of admiration and respect for community college students

because of the countless hurdles these students face in order to succeed in their

programs of study. In addition, as a woman who was raised in a working-class, split

household, one of which was in the community where some of the students will be

interviewed, great care was taken to not make assumptions about the lifestyle or

barriers students face because of their upbringing or community.

During the course of the dissertation development, the author's bias has shifted

toward the need for community colleges to place an increasing emphasis upon degree

completion, especially for vocational students. This viewpoint is not necessarily aligned

with the current prevailing opinion at the colleges of which the author is familiar. At the

two-year colleges of which the author is most familiar for example, the dominant

opinion remains that vocational students are successful if they obtain employment,

even if that means students do not complete a certificate or credential of any type. The

intent of this research is to understand the benefits of one point of student success, that

of degree completion, and clarify how successful students manage the multiple barriers

that most community college students face in order to obtain their associate's degree.

Therefore, the author bracketed her judgments regarding the role of advocate for

vocational community college students, the belief that degree completion should be the

dominant goal for community colleges, and any judgment pertaining to admiration for

the tenacity of the interviewed students.

Permissions: Written and verbal permissions were obtained by the "Community

College" president to conduct this research (Appendix A). In addition, permission was

granted by the "Community College's" Institutional Review Board to conduct student research. Both verbal and written permissions discuss the purpose of the research and the author's strict adherence to the University of Nebraska's Institutional Review Board approval process.

Institutional Review Board: Permission was granted the University of Nebraska Lincoln Institutional Review Board (IRB) to conduct this research. The research protocols involved in this study met the criteria for expedited review. Specifically, the written and in-person interviews provide no more than minimal risk to the individual being interviewed. Secondly, the information received from those being interviewed will not place them at risk for "criminal or civil liability or be damaging to their financial standing, employability, insurability, reputation, or be stigmatizing" (UNL Policy 4.002, 2008). The names of those interviewed will be kept confidential throughout the research.   The final criteria of expedited research are met and are in alignment with this proposal since no aspect of this research is of a classified nature.

Bounding the Study

Site Description: For this study, one community college was chosen. It will be referred to as "Community College." In Washington State, 34 community and technical college districts are located throughout the State in order to serve local communities. Statewide, the 34 two-year colleges served the equivalent of 190,630 full-time students (annual FTES) during academic year 2011-12, of which 48 percent were vocational community college students (Prince, 2012). For this research, in order to obtain a non-

probable sample of students who were inclusive of the students who attend

Washington's community and technical colleges, a community college was chosen.

Washington State Community College: "Community College" (also referred to as

the College) is located approximately forty-five minutes north of the Oregon border.

While "Community College" is located within a small city, the outlying areas of its

service district are rural. The College's service area was dramatically impacted by the

decline in timber harvesting that began in the 1990's and left an economic pall over the

Olympic Peninsula and much of rural Western Washington. Major industries include

pulp and paper manufacturing. High unemployment rates persist. "Community

College" is recognized as a smaller comprehensive community college and also employs

data-driven decision-making and policy governance through the Carver board

governance method.

The College is a comprehensive community college with a balanced enrollment

distribution that is focused on workforce preparation (49 percent), transfer degrees (31

percent), and basic skills programs (19 percent). An additional component of the

"Community College's" mission includes its higher levels of high-school FTEs.

Washington State's Running Start program (which allows high school students to earn

college credit while still in high school) is more prevalent on community college

campuses due to the strong interest in transfer degrees among Running Start students.

Finally, as previously mentioned, the "Community College's" surrounding communities

have been economically depressed because of the downturn of the natural resources

industries, reflected in the fact that 67 percent of it students are eligible for financial aid, among the highest percentages across the state's 34 colleges. Additional academic information about the College is included in Table 3.0.

Table 3.0: "Community College" At-A-Glance

Relevant Data	"Community College"
Total Enrollment	3,595
% Workforce	49%
% Transfer	31%
% Basic Skills	19%
AAS Degrees conferred	267
Apprenticeship FTE	5
Running Start FTE	259
Job Intent FTE	2,514
% Eligibility for Financial Aid	67%

*Data Provided by Annual SBCTC Report (Prince, 2012)

Population: As discussed in the research design description, a non-probable sampling method will be used to attempt to ensure that the demographic make-up of the selected interviewees resemble that of the college populations. For example, at the "Community College" the student body make-up is as follows:

Table 3.1: Demographic Make-up of Student Bodies

Relevant Data	"Community College"
Median Age	29 years
% Female	60
% Persons of Color	23

*Data Provided by "Community College" Quick Facts and "Technical College" About Us

Interviewees will initially be identified by working with student services staff at the community college. After obtaining a list of students who are expected to graduate in June 2013, the initial focus was upon students who completed a pre-college/remedial course and are receiving their applied associate's degree. Efforts were made to secure a pool of students who were graduating from a range of career training programs. In total, students who were interviewed were graduating with degrees from seven distinct career training programs ranging from diesel/heavy equipment, nursing, to information technology. In addition, efforts were made to interview students who were diverse in age, life experiences, and their diversity. The ages of students interviewed from this study ranged from 27 to 47 years old.

Ethical considerations: Due to the researcher's status as a technical college vice president (at the time of the interviews), care was taken to not intimidate or influence any student or staff. The college where the research is taking place is outside of the author's community. In addition, the author did not share her business card or title with those being interviewed and only shared that the researcher is a doctoral student and

an administrator at a Washington State technical college. A token of appreciation was offered to those students being interviewed in the form of a gift card to be used at the store of choice for the participants.

Data Collection

Upon selecting the pool of interviewees, an initial introduction was made via email. Once the initial introduction was made, a process overview was provided and permission was sought verbally and verified in writing. (Creswell, 2012).

Pre-interview survey: Interviewees were asked to fill out a pre-interview written survey to make more efficient use of the individual's interview time. This survey included pertinent demographic information as well as a listing of the barriers identified in the literature review and research questions. The barriers identified in the pre-interview survey were extracted from the literature review as well as the research questions. The pre-interview survey is included as Appendix B.

The survey instrument was field tested through two pre-research interviews. These interviews took place prior to the research for this study and were utilized for a University of Nebraska qualitative research course assignment. The research was conducted with two vocational students (who attended another Washington State two-year college). These students met the basic criteria for this research; they were graduating in June 2013 and had successfully completed pre-college/remedial academic courses. Based on feedback from these two interviews, both survey tools were altered.

Regarding the pre-interview survey, key components of the pilot test interviews led to the inclusion of certain barriers. For example, during one of the pilot interviews a student presented herself initially as Caucasian, during the course of the interview it was revealed that a switch in this student's critical path came when she connected higher education with her goal of reconnecting and being accepted back into her Native American tribe. Therefore, the race and gender discrimination concern barrier was left on the pre-interview survey to allow room for the students to discuss race and gender issues as they related to their higher education experience, if they chose to do so. In addition, during the pilot tests there was some question about what first-generation student meant so that term was re-worded on the pre-interview survey to read "no one in your family attended college.'

Interview Protocol: Research included the pre-interview written survey, followed by a semi-structured open interview (Creswell, 2007) with the selected students. The emerging design approach was applied in order to achieve a saturation of understanding regarding how students succeeded (Creswell, 2012).

The interview protocol was developed in a similar way to that of the pre-interview survey instrument. The initial development of the Protocol focused on first addressing the research questions and then pilot testing the research grand tour question and sub-questions. Following the previously mentioned pilot interviews, additional prompts and questions were added to better understand how students overcame barriers pertaining to college academic readiness.

During the pilot test interviews, it was revealed that campus resources and student engagement assisted the students significantly with their attempts to balance college demands with that of work and family. On-campus employment assisted these students with overcoming the barriers that employment can present to students. Both students discussed in depth their relationships with key faculty members who helped them overcome personal and academic barriers ranging from addiction to domestic violence. In addition, both students discussed their challenges with online education as they were both non-traditional college students. With these pilot tests in mind, additional questions surrounding academic readiness, experiences with online education, student engagement, campus resources, and differing types of employment including campus employment, were added to the Protocol. The Interview Protocol for Students is located in Appendix C.

Data Analysis

A systematic approach to coding was utilized allow for the incorporation of multiple interviews with students (Creswell, 2012). Components of this approach may be more commonly applied to grounded theory studies, however some of the steps of organizing the data and developing themes and phenomenon can be successfully applied to this study as well.

The interviews were recorded and the interviews transcribed. During each interview notes were taken by the interviewer to capture the observations and non-verbal communication that the audio recording was incapable of recording.

Immediately following each interview, interview summaries were drafted to capture the major points made by the interviewee. Notes were made regarding referencing points in the interviews that could answer the sub-questions.

Following the completion of the interviews and the transcription, an open coding approach toward the data analysis (Creswell, 2012) was used in order to ensure that the answers to the sub-questions emerged from the words of the interviewees themselves. All of the transcripts were reviewed by the researcher to highlight in vivo codes as well as potential themes (Creswell, 2004). After the transcripts were coded, field notes were compared to ensure that no codes or potential themes were missed. Pre-selected codes were not used so that the code words and themes emerged directly from the voices of the students.

Open coding allows for the researcher to be unrestricted in their approach to the data, which is why this approach was chosen for this study. Codes incorporated *in vivo* codes or those words used by the interviewees themselves. Care was taken to not use local slang or acronyms but words that readers would consider as common sense (Creswell, 2007).

In addition, the research was analyzed in a way that highlights unique or surprising codes (Creswell, 2007) as well as codes that connected with the path dependence theory conceptual framework. A table was developed to illustrate the primary codes, including in vivo codes and their locations within the transcript. HyperResearch software (http://www.researchware.com/) was used to assist with

identifying and verifying common in vivo codes. This process aided the development of answering the research sub-questions and primary themes that will assist in answering the grand tour question.

Once the transcripts were coded, an axial coding approach was used to organize the codes into categories (Creswell, 2012). This approach allowed primary themes or what Creswell (2012) refers to as "core category or phenomenon" (p. 428) to emerge, which shed light on the experiences of the interviewed students. The coding and study participant experiences were first utilized to answer the sub-questions.

After answering the research sub-questions, three primary themes emerged to answer the grand tour question. These themes describe the phenomenology and clarify the experience, or an "essence description" of how community college vocational students overcame known completion barriers and successfully completed their degrees (Creswell, 2007). The summary of the students' experiences and the discussion of the phenomenon of student success may guide community college leaders and advocates toward solutions that can support vocational students in overcoming known barriers and completing their degrees.

Verification and Validation

Verification efforts were made to address the accuracy of the findings. For example, the transcripts were checked by the researcher to ensure that mistakes were not made during the transcription process (Creswell, 2007). After the codes are identified, a list was developed of the codes first through open coding, then by defining

by in vivo codes, then organizing by the grouping of themes. HyperResearch software will be used to verify the codes.

Validity measures were used to develop to effective justifications for themes (Creswell, 2007). Once the themes were developed efforts were made to richly describe the findings using quotes from both the students and those that influenced their success. Descriptors were used to comment upon the college setting and describe the students, demeanor, non-verbal, and verbal communication.   After the findings were summarized, efforts were made to allow for the interviewees to review the final findings for feedback and validation (Creswell, 2007). The study participants were emailed a copy of the Chapter Four findings and asked for feedback if they would like to offer any input prior to the dissertation defense. Particular attention was paid at this time to acknowledge and account for the author's bias toward this research.

Reporting the Findings

The findings included answering the research sub-questions and then expounded upon the primary themes that answer the research grand question. Information from the demographic pre-interview survey was included in the findings.   Appendix D provides a visual aide to illustrate the alignment between the research question and sub-questions, pre-interview survey questions, and the interview protocol. Since this is a phenomenological study, care was taken to richly describe the experiences that students had during college, specifically how the students overcame the barriers

outlined in research sub-questions A through E. Upon answering the sub-questions, three themes were discussed that answered the grand tour research question.

Finally, it is critical that the privacy of the interviewees and those faculty and staff mentioned during the interviews were preserved. Pseudonyms were assigned to all of the interviewees and the college faculty and personnel noted in the interviews. The pseudonyms were not revealed to the interviewees during the validation process.

Summary

The research methods outlined in this chapter allow for deeper understanding regarding how and why vocational community college students overcome known completion barriers. The path dependence conceptual framework and the literature review provide a foundation for the qualitative, phenomenological research that described for us how and why the study participants completed their associate's degrees. Verification and validation measures were taken to ensure consistency of the coding, the answering of the research sub-questions, and the subsequent theme development that answers the grand tour research questions. These measures will make sure that the findings are of significance.

Chapter Four: Results and Data Analysis

Introduction of the Findings

This chapter presents the findings that emerged from the data analysis described

in the previous chapter. In order to understand the lived experiences of the participants

of this study, it is important to place each participant within their individual context.

Therefore, the chapter begins by introducing the respective participants. Based on the

literature review, sub-questions were developed regarding selected barriers to degree

completion. The second section of this chapter answers the research sub-questions in

narrative form, to provide the reader with examples of the experiences of the

participants regarding these barriers and their efforts to persist to graduation. From the

analyses of the interviews, three themes emerged that answer the grand tour question.

In presenting the answers to the sub-questions and the themes, the author draws upon

the available literature to compare and contrast the findings of this study with previous

research. The final section of the chapter addresses the grand tour question, how have

community college students who enrolled in vocational programs and began their

studies with pre-college/remedial courses, overcome selected completion barriers and

obtained their associate's degree?

Data Analysis

Introduction of Study Participants

The nine study participants were selected for this study based on their meeting

the criteria of graduating with an associate's degree in a vocational field as of June 2013.

In addition, they successfully completed at least one pre-college/remedial course during

their community college tenure. The youngest student was 27 and the oldest was 47.

This data point aligns with the understanding that most vocational students are non-

traditional or older than the traditional 18-22 year old college student. The gender

balance of the participants was four male and five female students. Two of the students

were veterans. All nine of the students enrolled in a total of twenty-five remedial

courses, a description of the individual courses taken are included in the introduction of

the study participants. This last data point underscores the tenacity and persistence

necessary in order to complete the pre-college courses and complete their college level

courses in a timely manner.

During the course of their college career, three worked full-time, three worked

part-time, and three others were not employed. The students were graduating with

degrees in business management, information technology, nursing (two students),

chemical dependency (three students), welding, diesel/heavy equipment, and

administrative assistant/ business technology. All students self-identified as either

"white" or Caucasian when asked about their ethnicity. One student identified herself

as a first-generation college student. The following introduction of each of the study

participants is intended to assist the reader with a more robust understanding of the study participants and their experiences.

Carla is a single-mother age 38. She admits that remedial math was a struggle for her. This struggle is clarified as she tested into Math 98/99 and then dropped down to 88/89, and then to 78/79, "just to get the basics." Her college path was boldly shaped by her father's illness and death as well as a divorce from her husband. Carla excelled in hybrid/online courses and is graduating with an information technology degree. She is switching careers to pursue a bachelor's degree in Human Services and a career that aligns with her goals of helping children. She attributes her college success in part to very supportive faculty.

John's path to college was dramatically forged by his friend's dying wish for him to attend college. He began his college career struggling through Math 70 and English 75. He explained of English 75, "that's pre-level English, but meaningless [we] don't get along period." At the age of 39, John graduated with a diesel/heavy equipment associate's of technology degree. John's resolve was tested many times as he failed both pre-college courses during his initial quarters at college. He also found assistance and support in the walk-in math lab. He attributes his success to the math lab as well as supportive career-training faculty. He noted several times that one particularly supportive faculty member gave out his cell phone number, which impressed John even though he never had to use it.

At the age of 39, Jane completed her associate's degree after 13 years of course work. She also began her college career in pre-college math, "I was out of school so long that I had to take two math classes to get up to par." Her path to college was motivated by family and her persistence was also encouraged by her family given the fact that her daughter also graduated in June with her high school diploma and associate's degree. Jane was highly motivated to graduate with her daughter. She did so with a business technology associate's degree while preparing to be an administrative assistant.

Kim graduated in June with her second associate's degree in Nursing, and had already earned a liberal arts bachelor's degree. Her experience with remedial courses was viewed as inconvenient, as Kim tried unsuccessfully to transfer her Math 99 credits from another two-year college. Kim's college path was forged by her divorce from her husband. She found peer support through the college's Nursing Club and financial support in the form of scholarships offered by the college's non-profit foundation.

Pat is a single-mother age 36. She is a veteran and first-generation college student. After taking three pre-college Math classes, Pat expressed her frustration with the online math course, "there's not a lot of assistance in those classes." Her college path was shaped and driven by her goal to advance her career and obtain a management degree. She graduated with an associates' degree in business management and is working toward a second degree in chemical dependency. Pat

credits building a positive team of student peers that helped support her throughout her time at college.

Sam was the youngest of the interviewed students at the age of 27. Sam completed two pre-college math courses upon enrolling in the community college, necessary he says after "five years of being out of school." As a father of three young children, Sam was his family's sole provider and worked through college by taking summers off from school and painting houses full-time. He shared how his family had to sacrifice financially so that he could attend college. Sam was positively motivated at the college orientation and after obtaining his associate's degree in nursing (A.D.N.) he aspires to pursue his B.S.N. and M.S.N. (bachelor's and master's of science in nursing) credentials and return to the community college to teach. Sam underscored that a caring advisor encouraged him to switch career paths toward nursing and credits his motivation to provide for his family with helping him remain on a successful college path.

At the age of 47, Mary works full-time while attending community college to complete her degree in chemical dependency. She describes her remedial math courses as the following, "78/79 was pretty good then 88/89 got worse…98/99 were hard." Mary is working in her field and negotiated with her employer the ability to attend classes during the day while working so that she could complete her degree. Her path to college was formed by overcoming her addiction and continues to be driven by her

desire to help others overcome their addiction. She credits the math lab with her success in overcoming remedial education barriers.

At the age of 33, Tom is a veteran who graduated with a Welding Degree. His persistence to complete is demonstrated by the fact that he enrolled in Math 70 three times and Math 75 two times before he passed those classes. He also noted that he took English 75 twice. "The English class was the hardest one… I couldn't see no point of having English in a welding career." Tom noted that his path was forged by his reality that he needed a better job, although he often alluded to other personal issues of which he did not disclose.

While working full-time and attending college, William at the age of 37 was the only study participant who was interviewed by telephone due to scheduling conflicts. His remedial course challenge was with math, part of which was online, which was a struggle for William. While it was not clear during the interview whether or not William had a particular incident or goal in his life that propelled him to college, he did discuss how supportive certain faculty were and how much he enjoyed helping other students with their financial aid, a key part of his on-campus employment.

Table 4.1: Demographic Summary of Study Participants

Name	Age	Program of Study	Remedial Courses Taken
Carla	38	IT/ Human Services	Math 78/79, 88/89, 98/99
John	39	Diesel Heavy Equipment	Math 70, English 75
Jane	39	Business Technology	Two remedial math courses
Kim	N/A	Nursing	Math 99
Pat	36	Business Management	Three remedial math courses
Sam	27	Nursing	Two remedial math courses
Mary	46	Chemical Dependency	Three remedial math courses
Tom	33	Welding	Math 70, Math 75, English 75
William	37	Chemical Dependency	One remedial math course

Responses to Research Sub-Questions

The following section will directly answer the research sub-questions and compare the interview responses of the study participants to the literature cited in this research.

Research Sub-Question A: The first research sub-question asks the following: Studies have shown that work is a barrier to degree completion. How have the selected students successfully balance work and college demands? For some of the students,

working while attending college was a challenge. For most of the students were able to

leverage employment to compliment their studies and minimize the interference of

working while attending college. Through flexible work arrangements, on-campus work,

multiple part-time jobs, online studies, and financial aid these students removed

employment as a barrier to completion.

Jane, an employee of the State of Washington, shared that not only was her

employer supportive of her attending community college but that she was able to have

her community college tuition waived through the State's employee tuition waiver

program:

> [the community college] working with us on that is enormous you know it really
>
> is because to be able to come in and ya I know I have to show up the first day
>
> and then the instructor signs up… I was never ever turned down from an
>
> instructor to get into a class when their class was full that was that was very…I
>
> mean I get teary-eyed because it was pretty awesome.

Jane only had to pay for books, "which at times cost more than tuition," she noted.

Carla attributed her ability to work and attend college with the fact that she was

employed at her family's business and had the support of her family to attend courses

during the day. This creative approach to working while attending college was shared

by Sam who sequenced his employment and college to leverage his skills as a painter. "I

was a painter before I was a nurse so I painted houses and I would take like winter off

work, do school and come and work when it got warm again and so I would save during

all those months, work like crazy and then come back." Sam was proud to share that he is now working in his field as a licensed practical nurse. He stressed that now "school and work have been fine because it kind of complements itself because you know I am learning stuff on the field and it's applied."

Mary was also able to leverage her education at the community college to obtain a paid internship in her field of chemical dependency. Mary underscored the appeal of paid employment to students prior to graduation, "when they like you and they're going 'well we'll pay you but you gotta work full-time' you go okay(!) " Mary was forthcoming about the fact that while she was compelled to accept an employment offer prior to the completion of her degree, she refused to discontinue her studies. Instead, Mary openly discussed with her employer the importance of completing her degree, "you want me to do this for you, but I need [you] to agree to continue so you're going to have to work around my school schedule until I graduate." Mary was the only student interviewed that shared her concerns about the pressures of accepting employment prior to graduation.

Finally, William leveraged work on campus in student services in order to improve his understanding of not only his courses but college processes as well. During his on-campus work in a division of student services, he was able to ask more questions of faculty and staff due to their proximity. In addition, he felt as if his voice was being heard as he shared with staff how confusing financial aid can be to students. He strived to make other students' experiences easier. "Oh yeah and I love it. That's my favorite

thing to do is kind of walk people through the whole thing. Not just the financial aid part but, so I think I want to be an advisor."

The literature underscores that employment while enrolled in community college can be a significant completion barrier for many students. First, Anible, (2007) emphasized that those students who did not work prior to enrolling in college were twelve times more likely to persist in college than those students who were employed prior to college. All of the study participants in this study spoke of their employment prior to enrolling in the community college, therefore the experiences of the study participants did not concur with this research given that the participants were able to minimize the employment barrier once enrolled in college. Furthermore, for many of the study participants, they were able to leverage their employment experiences to either apply their vocational education or enhance their education by receiving real world experience.

Second, Paulson (2012) also contends that employment is a primary completion barrier for community college students in her study of community and technical college student graduates. Again, the experiences of the study participants did not support Paulson's (2012) research. Third, Roska (2010) led a longitudinal study of youth to underscore his contention that among the reasons why only ten percent of community college students complete their associate's degree and then continue on to complete their baccalaureate degree is due to a lack of parental education and employment while

enrolled in college. Again, the experiences of the study participants do not support the Roska (2010) research findings.

Fourth, the Jacobs & King (2002) research concludes that the completion barriers of employment to community college students should not be underestimated for female students of traditional and non-traditional ages alike.   Again, the experiences of the study participants did not align with the Jacobs & King (2002) research given the students were able to overcome employment barriers.

Responses to Research Questions

Specifically, when answering sub-question A, the study participants overcame the employment barriers by leveraging their jobs to pay for college and collaborating with their employers to allow for flexibility to take classes and complete homework. Moreover, the students obtained employment in their chosen field of study, and worked on campus in order to enhance their personal knowledge of academic processes as well as help other students. These are some of the ways in which the study participants overcame the completion barrier of employment. One student in particular felt pressure to accept employment while still enrolled in classes, instead of discontinuing her studies she worked out a flexible schedule with her employer so that she could remain in college.

Sub-Question B: The second research sub-question highlights how the study participants overcame known barriers as they pertain to academic readiness. This research sub-question is as follows: Studies have shown that first-generation college

students face significant preparedness challenges regarding when attending college. How have first-generation students in this study prepared for college (for example, did they attend an orientation or participate in college activities)?

First-Generation and Readiness: In this study, only one student self-identified as a first generation student and that was Pat. Four other students noted on their pre-interview survey that not understanding college processes was a significant barrier for them. For the purposes of this research, being a first – generation college student did not translate into being any less prepared than most of the study participants. Lack of readiness and understanding about college expectations, processes, and academic rigor was prominently discussed throughout most of the interviews, with the exception of Kim who already held a liberal arts baccalaureate degree.   This sub-question is answered further by exploring whether or not orientation and student engagement assisted the study participants with overcoming any lack of readiness for community college and then comparing these findings with the literature (Pascarella et all, 2004; Derby & Smith, 2004).

Orientation to College: The community college at which the students were interviewed offered a voluntary orientation, although one student believed the orientation to be mandatory. Some of the students attended orientation with mixed results. Overall, most of the students interviewed felt as if they stumbled through their first quarter of college and were not as prepared as they could have been.

Tom noted that after starting college nearly twenty years after graduating from high school, that orientation was not as helpful as it could have been other than showing him around campus. He did not "feel ready" and relied on outside support from the local Veterans of Foreign Wars (VFW) chapter to assist him with using his G.I. Bill for college and living expenses. William also felt that orientation was not helpful to him resulting in a lot of worry about the unknown. When asked how he worked through getting registered for courses and financial aid for the first time, he replied "complete trial and error and a lot of worry...yeah and it was really rough." Moreover, John did not attend orientation and felt even more lost, "I had forgotten all about it, so I came in here going oh boy what am I going to do?" John relied on a friend who was already at the college to assist him with the registration and financial aid process.

Conversely, Sam not only attended an orientation class that was worth one credit and "mandatory" in his words, but he also felt that some of what he learned in the orientation class contributed to his academic success:

One thing that really….has stuck with me over those five years [at the college] was this motivational speaker [at orientation]… he said 'if you're committing to school…school is the important thing.' And so what stuck out to me with him was just you know, 'don't compromise your schooling"….and that stuck with me the whole time.

Sam discussed the sacrifices that he and his young family had to make by cutting back on living expenses so that he could attend college and obtain his goal to be a registered

nurse. While Sam attributed some of his success to the orientation course and the motivational speaker, he also suggested that the orientation could have been more helpful if it would have taught students how to fill out their financial aid forms online, for example.

For the students who attended orientation at the community college, they lacked preparedness and a better understanding of their most perplexing challenges specifically financial aid. While one student was inspired by the orientation's motivational speaker the remaining study participants either did not attend orientation or felt as if it was little more than taking a tour around the campus.

On-campus Engagement: While on-campus engagement can be a predictor of student success according to the literature (Tinto, 1993; Rendon,1994; Wayt, 2012), involvement in college events for the students interviewed in this study can best be described as ambivalent, minimal, and sporadic. When the students participated in college-sponsored events they were typically family-centered, career training program and employment focused.

For example, Tom who was enrolled in the Welding program discussed his involvement with the Welding Club. He expressed ambivalence about the Club "all the Welding students were in it." While there were some activities and opportunity to apply for scholarships, he shared that it made no difference in his studies at the College. Kim was the most involved student as she held a leadership position within the nursing club and attended meetings every three weeks. She summarized the work of the Club

as raising funds for a spring lecture series, a flu shot clinic in the fall, and "some

community service projects." Kim described her perceived benefit of the club:

> it helped as far as you know feeling a little more connected to the campus
>
> because honestly I mean most of us in my program you know are working
>
> professionals….we all have adult responsibilities and I'd say the median
>
> age of my cohort is 36 or 37 so I mean we're adult learners, we're not just
>
> right out of high school…but this [nursing club] made me feel like I was
>
> sort of involved.

Among the students interviewed, Kim and Tom were among the most involved in

campus student activities.

The remaining students were even less involved and sporadically attended

campus student activities. The events that were most frequently attended were family

focused activities to which they could bring their children as well. Others just attended

an employment fair. Most students shared Sam's perspective toward campus-based

activities, as he spoke positively toward the "campus stuff" that the College hosted but

when it came to his personal involvement he summarized his participation as follows,

"probably three or four years ago I did like a pizza thing. I just haven't had time for

three years."

When answering sub-question B, it seems clear from the study participants that

a one-size approach does not fit all when addressing student readiness. For this

purposes of this research, there are no striking differences between first generation

students and those who considered themselves among those struggling to understand

college processes. These findings are not aligned with the Pascarella et all (2004)

research which studied the social capital that parents who attended college are able to

pass along to their students therefore, leaving first-generation students at a distinct

disadvantage. In addition, Pascarella et all (2004) emphasizes that first-generation

students may be able to bridge what he refers to as the social capital gap, through

student participation in orientation as well as being engaged in student activities

throughout their college tenure. The experience of the only study participant who self-

identified as first-generation (Pat) did not align with the Pascarella et all (2004) criteria

given the lack of impact of the community college orientation and her lack of

involvement in campus activities.

Throughout the interviews for this research all students with the exception of

one, noted that the orientation was not helpful to them when preparing for college.

This feedback does not support the expectation that first-year experience programs can

help students persist (Pascarella et all, 2004) and overcome completion barriers

pertaining to readiness (Derby & Smith, 2004). The Derby & Smith quantitative study,

which measured the persistence of students after their participation in a mandatory

orientation, asserted that mandatory orientation positively impacted persistence rates.

For the students who participated in this study it was unclear to them of the purpose of

the orientation, for example was it simply to help students find their classes or educate

them on financial aid processes?   It was also unclear from the student interviews

whether or not the community college orientation was mandatory.

Student engagement is traditionally viewed as a critical component to college readiness and success, (Tinto, 1987; Robey, 2010), however the study participants were lightly involved with campus activities unless they were related to their career training programs (such as the Welding Club), employment related, or events that involved student families. This study illustrates that student engagement for the students interviewed was not a predictor of student success nor was it a significant contributor to persistence for the study participants. The dominant student engagement theory proposed by Tinto (1987) emphasizes that the lack of academic and social integration at college can contribute to a decrease in the persistence rates. This theory is not supported by the experiences of the study participants given the fact that only a few participated in formal college activities. Robey (2010), building upon Tinto's theory of student persistence, found that female community college transfer students who were married, and a non-traditional aged student with children felt more disconnected with other students and the community college. Some of the study participants met this criteria of being married, of non-traditional age, and having children but their experiences did not align with the literature as few were involved in campus activities and no students spoke of feeling disconnected from the campus.

When answering sub-question B directly, we find that the study participants bridged the readiness gap, by relying upon friends who had attended college previously, others upon community resources such as the VFW (Veterans of Foreign Wars), one student had previously attended college, and others made it through by a process of "complete trial and error" (William). Moreover, while most of the study participants

were not significantly engaged in on-campus events they did attend events that either supported their families, career-training program, and/or assisted with their employment search efforts such as a job fair.

Sub-question C: This sub-question addresses the demands that many non-traditional community college students regarding balancing college and family demands. The sub-question C, addresses the following questions regarding balancing family and college demands: Studies have shown that balancing family and college demands can negatively impact student success while in college. How have the study participants overcome challenges balancing family and college demands?

Pat attributes her ability to juggle work, family, and college demand with having a supportive employer of eight years, who allowed her to take time from work to attend daytime classes. She also cited the availability and flexibility of online classes. "If it wasn't for online classes, there would be no-there was no way I'd be able to graduate, I mean anytime soon." Pat remained in college in spite of being unemployed and really not understanding why she lost her job. As a self-described veteran with a 'get it done' attitude, she noted how she juggled working, family, and college:

> Literally there were times when I would take my lunch and do homework
> and then I would come home and cook dinner for my daughter and then
> I would put her to sleep. Then I would stay up 'til (laughter) you know the
> wee hours of the morning to finish it.

Similar to Pat, Jane worked full-time and attended college part-time while raising a family.

Jane remained motivated to complete her associate's degree after striving toward graduation for fifteen years while working full-time and raising a family. She emphasized, "in our family actions speak louder than words." Jane's willingness and ability to attend college part-time has paid off. Jane has not only inspired her children to attend the community college but friends of the family as well. Her positive attitude was contagious.

Sam was also motivated to complete college in order to raise his family. Sam shared that he and his wife sacrificed financially so that they could pay for college by living in an apartment with three young children to get through the nursing program. "A lot of my motivation was my family…a lot of it…you know we are not going to stay in a two-bedroom apartment forever." He persevered in spite of being so overwhelmed by the financial aid process that he stopped multiple times before finally successfully completing his financial aid. Sam cited the college's support in helping him prioritize college first so that he could complete his degree in a timely manner, even though that meant he had less time to focus on this family.

The research illustrates that college students with families struggle to persist or even begin college at all (Jacobs & King, 2002). The Jacobs and King study focused on how women of differing ages addressed the demands of college and family. The Jacobs and King (2002) study concluded with two findings regarding women, first that married

women with children were less likely to enroll in college at a later age; and second, younger women with children had a more difficult time balancing family demands. The experiences of the study participants does not align with the findings in this literature since the students overcame family barriers and persisted throughout their college tenure.

When answering sub-question C, the study participants overcame the barriers cited in the research as they related to balancing family and college demands. They did so by deploying practical strategies of completing their college studies during breaks at work and at home when their children were either watching television or asleep. They also understood that they would need to sacrifice time with their family or the expediency to which they would finish their degree. This lack of alignment does not mean that the participant experiences weren't challenging as the study participants worked diligently to juggle college, work, and family demands. However the students found ways to overcome challenges associated with family and juggle their time to meet the needs of their family as well as college coursework. In addition to balancing college demands at home, the students interviewed also faced academic challenges while at the community college.

Sub-question D: This sub-question strives to address the multitude of academic barriers that the non-traditional community college students experienced and how they overcame these challenges. The interview discussions answer this sub-question: Studies have shown that community college students face a multitude of academic barriers that

stem from a lack of academic preparedness (for example, challenges regarding remedial courses and online courses). How have the study participants overcome these barriers?

Remedial Courses: The first academic completion barrier discussed is that of pre-college/remedial courses, and then the relevant literature will be explored (Reyes, 2010; Sheldon, 2010). All students interviewed for this research were enrolled in at least one pre-college or remedial course. These courses posed significant challenges for most students interviewed. They were able to pass their remedial courses with the help of faculty, tutors, walk-in labs, and some outside friends.

Mary enrolled in five different pre-college math courses beginning with Math 78/79.   When asked if there were academic barriers that she faced while at the community college she, without hesitation, said, "math!" Mary describes her experience as starting with Math 78/79, "78/79 was pretty good then 88 and 89 got worse… 98 and 99 were hard" she notes while laughing. She shared, "the way I got through that really was I lived in the MAC Center here, the Math Achievement Center where they have tutors, teachers, they're amazing at the MAC."

Carla realized that she too had not used math regularly for nearly 20 years and that she needed to better understand the basics. "I tested into Math 98/99…then I ended up dropping back all the way to 78/79, just to get the basics… I did that on my own." Sam also realized that he had been out of school for five years and was "nervous" about the math. He resorted to focusing on learning, "I found that as I go in

there and have this attitude of wanting to learn and that I'm going ask the questions, I'm gonna, even if I think I look stupid."

Pat expressed concern about the pre-college math classes were structured as self-paced. Pat noted that there were tutors assigned to help but "I've struggled with tutors here." John also struggled with the limited time that the tutors were able to work with students, as each week they were limited to thirty minutes. "It was only a half hour a week and in that half hour I didn't get anywhere." John enlisted help from his friends outside of the college as well as the College's math lab - an open walk-in lab where he could work on his homework and get help when needed. Conversely, Robin found that the tutoring center was a great resource for her. "The Tutoring Center, the Math Achievement Center was a huge help from me…if those students wouldn't have been there, I don't think I would have made it through Math on my own."

Kim expressed frustration at the remedial course testing and prior credit determination process since she already held a bachelor's degree and was working on her second associate's degree. She was required to take Math 99. When asked if Math 99 was a challenge for her Kim responded, "no it was an inconvenience for me…because it was a requirement." While Kim may represent a minority of community college students given the fact that she already held an associate's and bachelor's degree, her story highlights the need for colleges and states to continually address direct transfer agreements and the need for enhanced articulation. Articulation and prior learning credit is a component of American completion initiative discussion. Colleges have

tremendous opportunity to address tutoring and open lab resources for students taking

remedial courses. The drop-in open labs run by faculty were the key to success for

students like John and Mary.

The developmental course literature focuses on the role of remedial courses as

barriers or gatekeeper courses that often discourage students from furthering their

studies (Reyes, 2010; Sheldon, 2010). Reyes (2010) sought to research whether the

gatekeeper course of pre-college algebra could be less of a barrier to students if the

length of the course was shortened from 16 to eight weeks. Her conclusion was that the

length of the course was arbitrary and did not impact completion rates. Conversely,

Sheldon (2010) concluded that compressed remedial academic courses positively impact

student success.

This study also sought to better understand how students overcame the barriers

of pre-college or remedial courses. The length of the course was not part of the

interview questions given students at the community college did not have a choice to

enroll in remedial courses of regular or compressed lengths, therefore this study does

not align with the literature.

Online Courses: Online courses also were a challenge to many of the students

interviewed as confirmed by the literature (Aragon & Johnson, 2008). This study we

discover ways in which the study participants overcame known online course

completion barriers. Each study participant knew his or her best learning style and in

the case of John, he avoided online classes altogether, "no, I wasn't going to do that…I

knew I needed help and online there was nobody there to help me if I needed it."

Others leveraged college resources in order to successfully enroll in online classes and were able to successfully complete these courses and therefore better balance college, work, and family demands

Carla took a number of hybrid classes and online courses. Hybrid courses as defined for the purposes of this study are referred to as those courses where the students can find their assignments, resources, and turn in their homework online through learning management systems such as Blackboard, Angel or most recently Canvas. Students then met in class weekly to discuss homework assignments, ask questions, and review upcoming course material. Carla stressed that she took a lot of hybrid classes and when asked about her academic performance she replied, "fine, I actually love online classes." She continued:

> I think that you get more support in the online classes than in the classrooms. Because in the classroom setting, you're in a whole group of people, so they have to help everybody. But when you're in the online setting, you can send them an email, you can set up an appointment, and then you have one-on-one time. Enjoyed the classes.

Carla's primary strategy was to be very structured and log on to the learning management system every day. Carla and Pat both addressed the self-discipline portion of online courses and the need to interact with the web-based courses daily.

Pat successfully enrolled in hybrid courses through her business management program. She emphasized that her instructor was very responsive to email which helped Pat progress through the business management program while managing work and family demands. For example, Pat notes she would read her course materials while her kids were watching television as well as during lunch at work.

Conversely, when William enrolled in online courses, he felt as if he was on his own as a student and did not receive help. "Part of the whole math problem is a lot of it is online. So you know when you do get in front of an instructor, it's really quick and you don't really get a lot of help it seems." With some help from tutors, and persistence he was able to complete his online courses. William's example highlights the challenges that many community college students face when taking online courses.

One size does not fit all when it comes to community college students' ease with online education. Some of the study participants struggled with online courses due to their lack of familiarity with online course technology and the lack of immediate instructor response. Successful approaches that worked for the students interviewed for this research included enrolling in hybrid courses, regularly and proactively engaging faculty online, and seeking tutoring resources when needed.

The Aragon and Johnson research (2008) informs this study as it sought to better understand why students were dropping their online courses at a mid-western community college. Aragon and Johnson concluded that students who had less than a 2.5 grade point average were overall not as successful as those students with a higher

g.p.a. In addition, Aragon and Johnson concluded that counseling students in advance

of online courses as to the time management demands of these types of courses would

serve the students well. While the Aragon and Johnson study does address the issue of

student time management that came up during the study participant interview. This

study does not support literature given the lack of conversation during the study

participant interviews about grade point average.

Faculty Validation: Supportive faculty advisors and classroom faculty were cited

among the primary reasons students were able to overcome known academic barriers,

in this study. In fact, faculty were referenced as a critical part of every interviewed

student's college success. Faculty - as classroom instructors and advisors - and the

validation and encouragement they provided to students is arguably the primary reason

students remained upon their higher education path. The literature confirms that while

most students discussed challenges that they had with individual faculty members,

overall the positive validation (Rendon, 1994, Rendon Linares & Munoz, 2011) from

faculty was so influential in the lives of the students interviewed that positive faculty

influence superseded negative staff or faculty interactions.

John stressed that faculty were critical to his success, one example was the

faculty who supported the Math Lab, where he visited everyday to get through math.

He cited a math instructor who teaches a math class "that anybody can come in and sit

down and do their work and get help…kind of a little lab thing, anybody is welcome to

come in…so every day after class she held her classroom to do that and I was right there

behind her." John's diesel program faculty were very encouraging as well. He was struck that one of his faculty members gave out his cell phone number in case students needed anything. John never called, but was impressed that instructor gave out his number.

Kim was also quick to point out how positive her experience was with the faculty of the community college, with the exception of one faculty member (who is no longer working at the College) who wasn't clear or responsive and resistant to change. "That [faculty] really stood out because I found this [nursing] program really quite exceptional."

Pat emphasized both the important role that one key faculty member played in her continued success as well as the key role of her faculty advisor. She noted of her career training program faculty member, who supported her as a student but also held her accountable to complete her studies:

> I guess I've known him for two years now, so he's-when I wanted to quit, he
> wouldn't let me. And not so much- I would never quit, but I just- I am up here,
> and I can't handle it. And he would talk me through it, calm me down, and kind
> of break it down so that I understood, and just one step at a time. But the
> overall picture was absolutely overwhelming.

Pat noted how fortunate she was to also have had this same supportive career training faculty member as her faculty advisor. "I think every student should be assigned

somebody, and I know that faculty's strapped as it is, but it really makes a huge difference."

Finally, William had a negative faculty advisor experience but was able to find faculty support from both academic and other career training program faculty. William shared a negative experience that occurred with his faculty advisor toward the end of his time at the community college. He felt that his advisor was holding him back and was trying to keep him at the College longer than he needed to be " basically it's a money issue and so I could've moved on, I ended up moving on when I, as soon as I could but she kinda tried to keep me longer."

Contrary to that experience, William spoke highly of both his academic faculty and other career program faculty in the chemical dependency program. He referred to a specific career training program faculty member and "her excitement for teaching us:"

> You know it rubbed off...mainly just her enthusiasm just teaching
>
> and then in our future and being able to other people and how she felt about
>
> being able to do that really struck a chord on my future. She motivated a
>
> lot, motivated us a lot with her enthusiasm. Like we can really make a
>
> difference.

This de facto mentor helped to encourage William to continue his studies at the bachelors and masters level. He is now enrolled in a baccalaureate program.

Rendon (1994) underscores the theory of faculty validation specifically in the areas of validating the ability and potential of their students. The study participants provided multiple examples of how faculty provided validation of their ability to succeed, in some cases in spite of negative influences from family, friends, and in a few cases other faculty. Furthermore, Rendon Linares & Munoz, 2011 further define faculty validation. Specifically, by faculty not only validating student potential as encouraging mentors, but also faculty purposefully creating opportunities for students to support each other. Some study participants cited peer influence and encouragement as a key contribution to how the students managed academic and some personal barriers. This study does support the Rendon (1994) and Rendon Linares & Munoz (2011) research on the positive influence that faculty validation can have upon the lives of students.

As we answer sub-question D, the study participants overcame known academic barriers such as remedial and online courses as well as negative faculty and staff interactions by reaching out, being assigned to, or finding positive, validating, and supportive faculty (Rendon, 1994; Rendon Linares & Munoz, 2011). Students engaged these supportive faculty through a variety of ways including seeking their support at open math or English labs. Students were assigned faculty advisors and some of these same advisors were also the students' career-training program faculty. Finally, some of the students connected with their faculty through their career-training program. All of these venues provided opportunities for students to form collegial relationships that allowed for mentorship, guidance, and support.

Sub-question E: The final sub-question allowed the students to bring forth any additional academic or personal barriers that were not addressed in the pre-interview survey or interview protocol. This sub-question allowed for the students to bring up any concerns that they believed were integral to the research. Sub-question E is as follows: Were there additional academic or personal barriers that the study participants identified? If so, how did the students overcome these barriers to achieve academic success?

Some of the students interviewed discussed barriers that they faced during the course of their studies that involved extraordinary financial, bureaucratic, or administrative challenges that were not anticipated prior to the interviews. These challenges led them to seriously consider discontinuing their studies. For others, these experiences were a minor annoyance. Furthermore, the literature review does discuss challenges pertaining to financial aid (Cohen & Brawer, 2003) to age, race, and gender (Tinto, 1993, Zhai & Monzon, 2004). It is worth discussing some of these challenges specifically regarding support services on campus and how the study participants overcame such challenges. It is unclear whether or not lessons could be drawn from this section however it does highlight the confusion that many students face when transferring colleges, registering for financial aid, and applying for the GI Bill, for example.

Kim was discouraged by the fact that the credits from her previous degrees did not completely apply toward her associate's degree at the community college.

As far as the credit transfer situation and I don't know if that needs to be a statewide kind of thing where there's just better communication between all of the colleges I mean it was all within the same state it was all within…a pretty delineated piece of time too…having to jump through all of these hoops…. before I could start the program was a big discouragement.

Furthermore, there was a glitch with Kim's registration where through no fault of her own she was not registered appropriately for a class she took. Kim felt as if she were treated suspiciously by some of the college staff even though she had done nothing wrong.

Carla also faced a problem with financial aid and reflected that the experience was significant enough to where she felt as if she were going to quit college. In her words, "financial aid was a barrier." Carla worked through the financial aid appeal process "it was stressful…more than once I got a letter 'your financial aid is suspended' oh well then, where does that leave me?" Carla was able to successfully appeal the financial aid suspension with the help of "awesome teachers."

Pat stressed that the GI Bill and financial aid processes were confusing but that the staff in those areas were still helpful. She stressed, "geez…I'm graduating and I still don't understand that [financial aid and GI Bill] process." Pat shared that "they're [financial aid and veteran's staff] all really good…very helpful… I am sure it's confusing to everyone." The final sub-question allows us to understand that while community college vocational students are often non-traditional adults who are familiar with and in

many cases even successful in the workforce, find higher education and its administrative processes daunting.

As noted in the data collection section of Chapter Three, the question pertaining to age, gender, or racial discrimination was left in the pre-interview survey. This intentional question was designed to facilitate any further discussion during the study participant's interview. No student reported any discrimination while at the community college which is in not in alignment with Tinto's (1993) research which illustrates that older students have a more difficult time obtaining their degree as well as Zhai & Monzon, (2004) who cite instances of discrimination as a barrier to completion for some college students.

A question pertaining to financial issues as a barrier were also asked during the pre-interview survey. This question was asked in an open-ended manner in order to invite any concerns that the study participants may have had about their financial struggles. During the interviews, sub-question E invited the study participants to address any other concerns that they may have. Two students in particular addressed financial aid issues. Cohen and Brawer (2003) discuss some of the over-arching reasons as to why financial aid may be a struggle to the students:

> Mechanisms for distributing state financial aid to students are imperfect because of the limitations on part-time attendance, problems assessing the financial conditions of student's families, and the difficulty in accommodating adult, independent students (p. 150).

This study underscores the complexities of the current financial aid system for independent adult learners. Finally, Cohen and Brawer also highlight some of the reasons for difficulties some community college students face when articulating among community colleges and universities including the role of faculty (p.213).

In addition to the responses to each of the sub-questions, three primary themes emerged and also contributed to developing an answer to the grand tour question. These themes are summarized as follows; first, faculty as champions of degree completion; second, student motivation and attitude; and third, switching paths.

Theme One: Faculty as Champions of Degree Completion

Faculty were viewed by some of the students as champions of degree completion in the literature (Cejda & Rhodes, 2004; Jacobs & Dougherty, 2006). In this study, some of the faculty referenced by the study participants were clear about their expectations of students to obtain their two-year degrees. The primary reasons behind degree completion, included increased wages and professional progression. In addition, faculty discussed keeping pace with evolving professional expectations including the need for not only associate's but baccalaureate degrees as well, due to evolving accreditation and professional expectations. Nursing is the most prominent example as accreditation and employee expectations increase nationwide for Registered Nurses to be credentialed at the B.S.N. (Bachelors of Science Nursing) not just A.D.N. (Associate Degree Nursing) level.

Faculty expectations regarding degrees were also made very clear to John in the diesel program:

> They [the career training program faculty] made sure I understood that
>
> when you know, sure you can survive without a degree, he says but when
>
> you get that degree not only will you feel better about yourself but it
>
> helps you get further into your career and helps you learn more and
>
> get a better pay scale and better able to provide for your family.

John strongly believed in the benefits of completing his degree. In fact, he shared a story about another student who was within one quarter of graduating and wanted to stop and take the certificate. "I talked him out of it, I hope," John said. Finally, John stressed that with the expectation for degree completion set by faculty that few opted for a certificate, "I don't think I ever met one person that was just there for the certificate."

As mentioned previously, Carla realized part way through program that she was not studying to be in the "right" professional field for her personally. Carla credits her faculty with advising her well and encouraging her to finish and then transfer to a bachelor's program in her desired field. She is now enrolled in a Human Services baccalaureate program.

> My goal is to be a CPS (Child Protective Services) investigator. I realize that I am
>
> too much of a people person to not be a people person, and an IT person is not

a people person. So I want to work with kids. I want to help… that's where I

need to be.

As Carla's faculty members inspired her to complete her degree, even though her

degree did not directly correlate to her chosen career field, Sam's faculty not only

inspired him to complete his associate's degree but to continue and complete his

baccalaureate as well.

As a student in nursing, Sam felt as if faculty set the expectation that he would

not only complete his degree but also obtain his bachelor's degree in nursing.

What's cool, they didn't say like, 'it's important to finish nursing school.'

They say it's important to finish your bachelor's in nursing. So they're

kind of projecting this future on you, and it's helpful, I mean it's positive…

because nursing school is really tough.

Sam continued, "when I go back to school I'm going to go for my master's in nursing and

try to teach here… I like it here."

All of the students interviewed cited at least one faculty member who validated,

encouraged, inspired, and/or helped them to succeed. This theme illustrates how

faculty can play a key role in keeping students remain focused on their academic path

for their duration of their degree work. These experiences aligned with the Cejda and

Rhodes (2004) qualitative study. For example, in this study, faculty who were identified

as exemplary in the their advocacy for students supported students through their

college courses encouraging them to complete their degrees, one certificate or set of a

skills at a time. These exemplary faculty members also connected credential attainment with additional pay once employed.

The study participant experiences however, did not align with the Jacobs and Dougherty (2006) research that suggested vocational instructors demonstrate resistance to general education, and therefore degree attainment. No students interviewed for this study discussed an experience with a faculty member where they were discouraged from taking academic courses necessary to complete their degrees. While some students did not recall instructors specifically extolling the virtues of completing their degrees, they stressed that they were not discouraged from completing their degree. For most of the students faculty validation, expectations, and support helped them to stay on track and overcome the many barriers students faced including academic, work, and family related barriers.

Theme Two: Motivation and Creativity

It is at this point in the analysis that the author will acknowledge one bias in this research and that is the motivation and positive attitudes that the students portrayed were inspiring. All students stressed their personal motivation as defined by Cross (1981) to stay in college and obtain their degree. The study participants also demonstrated significant creativity and innovation when finding ways to overcome the multitude of completion barriers outlined in the research sub-questions.

Kim was motivated to return to college to obtain her bachelor's of science nursing and remained in college in large part because of a community college

foundation scholarship. "I got awarded that [scholarship] my second quarter of nursing school and it has paid my tuition in full throughout the rest of the program…that took a huge financial burden off my shoulder…at the time I was putting my then husband through his bachelor's."

For all of the students, their stories of sacrificing for themselves and their families were inspiring. Their motivation transcended not only their desire to graduate but to continue their studies, work in their chosen career fields, help other students succeed and their neighbors in need throughout the community. Their positive attitudes toward overcoming challenges and barriers were also very evident throughout the interviews. Pat summarized her thoughts on what it took to keep her motivated throughout college while juggling a full-time job and raising a daughter as a single-mother, "I just think it's important to finish anything you start…I have that type of mentality."

In addition to motivation, these students were also very creative about how they overcame significant barriers. Their creativity when finding a path forward is highlighted when reviewing their experiences with remedial courses. For most of the students remedial courses were a significant barrier to completion. Some students needed to repeat the courses or step down a class or two in order to truly understand the math concepts given the considerable length of time that had passed since graduating from high school.

Also, some of the students discussed the need to just get through the process of remedial courses, which could be paraphrased as sheer persistence. Others discussed how they proactively sought out assistance from math tutors. Pat stressed, for example that she thought the college should advertise more about the tutoring center, as it was helpful to her. Jane also underscored,

> I mean the free tutoring in the library, I mean those youngsters in the
>
> Library…they were great, because it was nice to be able to have that ability
>
> to pull from that and yes even my daughter has gone over and used them for
>
> tutoring and stuff so yes I'm a big fan of that cus I think it was very helpful.

Other students relied upon support from the math faculty in the open math labs. Lisa underscored how helpful the faculty and tutors in the Math Assistance Center (MAC) were to her and how this center was one of the reasons that she was able to stay in college, "they're amazing at the MAC." Mary not only accessed the MAC as she struggled with 80 and 90 level pre-college math but also called on a friend at another community college to meet with her every other week.

These students creatively addressed each of the barriers outlined in the research sub-questions. Individually they leveraged college resources, identified faculty advocates, maximized personal and community connections, to ensure that they had the support and knowledge they needed to complete their courses and succeed academically. The study participants' creative approaches to overcoming each

completion barrier highlighted in the research sub-questions, are summarized in Appendix E.

Finally, it is important for community college leaders to acknowledge that while some students are intrinsically motivated to succeed because of personal or professional reasons, many other students may successfully be externally motivated by their peers, advisors, faculty, and staff. Cross (1981) underscores how impactful negative forces can be in the lives of students and how critical personal motivation is to student success. Moreover, most of these study participants combined their motivation with creatively solving some of their most challenging academic problems by leveraging college, personal, and professional resources to satisfactorily complete their courses.

Theme Three: Switching Paths

The last theme answers the grand tour question by concluding where this research began and that is by connecting the final theme with the foundational theory for this research, or the path dependence theory. For many of the students interviewed their successful college path was formed by a critical life switch or change, or what Prado (2009) considers switching from the dominant "inefficient" path of non-optimal outcomes to the optimal path of higher education and degree attainment (p. 351). The most prevalent reason for this switch involved personal reasons such as a divorce and their need to independently support their family, a death in the family or of a close friend. Other paths were shaped by life transitions such as leaving the military, or overcoming addiction. These life changes clarified the need for the interviewed

students to not only attend college but complete with their associates' degree and even continue their studies at the baccalaureate level.

For two students in particular, the death of a family member and close friend prompted their college career. At the very beginning of his interview, John stressed that the only reason he thought of attending college was because of his close friend who was dying. "Yeah the reason I first got into college is a buddy of mine was dying. He made it his wish was that I would go back to college." Throughout the interview, John stressed that when college courses were difficult – such as remedial courses- he thought of his friend who passed away after John enrolled at the community college. John, like many community college students struggled with multiple pre-college or remedial math courses, "I was struggling to try and understand and learn it just to pass. I managed to get a "C" out of the class," noted John. When asked how he thought that he got through those courses, he quickly replied, "not letting my buddy down."

Carla also discussed the life changes of a divorce and death of her father and how those events influenced her determination to finish her first degree. "Besides the fact that my dad had passed away, and my ex-husband left me with 'why are you going to college, you'll never finish it.' I am going to finish it, and I am going to keep going," Carla concluded with a confident laugh. Carla experienced another path change near the end of her degree process once she realized that she was not enrolled in the career-training program that was best suited for her career aspirations.

I started school, my ex-husband left me on Sunday, I came to community

college on Monday, took my IT class… because that's how I did that. I went

'hmmmm…that looks interesting' and that's how I chose my degree.

In spite of Carla's realization that her career aspirations were in another area that better

suited her personality and personal goals, she completed her first degree and is

currently enrolled in a baccalaureate program that is more aligned with her goals of

working in the field of social work.

> No matter where I go, no matter what I do, how is that [completing
>
> her associate's degree] going to hurt me? It will never hurt me.
>
> It's always going to be an asset. I have to finish it.

Carla recognized her program faculty and their support during this time as they helped

her understand that even though she would not be graduating with a degree that

directly applied to her career goals, the faculty helped her to understand that her

degree would be a professional asset no matter her chosen career field.

> Other students interviewed cited recovery from addiction, separating from the

military, striving for management, and family as primary influencers for both attending

college and completing their degrees. For example, Mary cited her past as the primary

predictor for her chosen degree field of chemical dependency.

> I never thought of that, but I kind of thought, well that would be kind of
>
> cool…so that's when I decided to start doing that…we a lot of times have
>
> those barriers that are of are past, legal issues, whatever. And a lot of fields
>
> aren't open to that but this field [of chemical dependency] is, so [we are]

able to understand, hey I've been there too, I get it.

While Mary's college path was predicted by personal challenges in her past, others were motivated by their present circumstances.

Pat was at the time of graduation unemployed, however throughout much of her college work she was employed full-time and encouraged to complete her degree in order to be eligible for future management work. She noted,

> I was excited actually to – I wanted to become the supervisor…and I felt
>
> that going through this process was important to complete so I could
>
> become an actual manager…I was driven from the beginning to get it
>
> done so I could become a manager-better pay.

Jane, like Pat, was also motivated by her present circumstances.

After 15 years of working toward her associate's degree, Jane's daughter was scheduled to graduate, which provided the impetus Jane needed to complete her studies:

> It's [graduation] is a big deal because I'm graduating with my daughter too…
>
> that was one of my big incentives really to fulfill this desire. I mean I always
>
> wanted to do it but I thought it would be really cool to do it with my daughter,
>
> because she did the Running Start program at the community college and
>
> she will also graduate with her…transfer degree (associates' of arts).

Finally, it is worth noting that Jane's pride in herself and her daughter were palpable during the interview as was her excitement regarding participating in Commencement with her daughter, an event she described as "awesome."

The theoretical framework for this dissertation is built around the critical path theory that is most often used in economic and political research, but can be applied toward better understanding the circumstances that occur in the lives of the students interviewed (Cejda & Stick, 2008). Cejda & Stick (2008) applied the path dependence theory to explain the histories of Hispanic students who completed their baccalaureate degrees. Among the similarities of these two studies, this qualitative study also relied upon the path dependence theoretical framework to provide a conceptual foundation that assists with better understanding the positive and negative circumstances within which students choose to attend college and set out upon a path of achievement.

Summary

The answers to the sub-questions and additionally the three themes that together answer the grand tour question. Beginning with the path dependence conceptual framework, we understand that for the students interviewed in this study events occurred in their lives that compelled them to enroll in community college. These events ranged from divorce, to a death of a loved one, family, or the desire to advance professionally. Once enrolled at the community college these nine students overcame five primary sets of barriers including employment pressures, lack of readiness, balancing family demands, academic challenges, and other barriers.

The study participants overcame these challenges through deploying practical strategies such as finding flexibility in their work schedules, turning to their family for support, seeking supportive and validating faculty to assist them throughout their college career. In addition to the practical strategies, the student interviews provided additional insight in the form of three themes that complemented sub-question answers. These themes are faculty as degree completion champions, motivation and attitude, as well as switching paths. This culmination of answering the five sub-questions, along with the three themes results in a robust answer as to how vocational community college students, who successfully passed remedial courses, completed their associate's degrees.

Chapter Five: Conclusion and Research Applicability

Introduction

At the conclusion of this research, it is important to be reminded of the problem that this research sought to highlight and possibly remedy by gathering qualitative insight from vocational community college students. That is, how community college vocational students overcame known completion barriers in order to attain their associate's degree. This research provides highlights student experiences regarding how they graduated with an associate's degree in their chosen professional-technical field, when nearly two-thirds of their peers did not. Their perseverance, motivation, humility, and gratitude is inspiring. Their stories provide awareness as to how community colleges can further break down completion barriers and help more students succeed. Indeed, student completion matters to our economy but it matters most to community college students and their families.

Research Problem

The research problem focused on better understanding the experiences of community college students enrolled in vocational programs and how they overcame known degree completion barriers. The primary reasons for seeking understanding of these students' experiences includes encouraging the inclusion of vocational students in the national community college completion initiative body of research, as well as ensuring that community college graduates are viewed as a critical component of our nation's competitiveness.

The research included in the literature review informs us that students who obtain their associate's degree are more secure in their employment and earn more annually than those students who attend college but do not earn a credential (Post-Secondary Opportunity, 2012). Vocational students are more likely to earn a higher salary if they work in the field from which they prepared at the community college (Grubb, 1996). This need to better understand how to ensure that community college vocational students complete their associate's degree frames the central research question for this dissertation. By interviewing community college vocational students who graduated in June 2013 and inquiring as to how they overcame known barriers to complete their associate's degree, we can better understand not only the numerous challenges students face but gain insight as to how community colleges can assist more students with degree attainment. The societal benefit for increasing graduation rates for community college vocational students includes bridging the nation's skills gap (Carnevale, 2000), decreased poverty rates (Toracco, 2011), and greater accountability for taxpayer-funded community colleges.

Research Questions

The questions that guided this research were designed to include a grand tour question that focuses on the experiences of community college vocational students and how they overcame known completion barriers. This grand tour question is answered by its sub-questions that focus on how students overcame specific barriers including employment, family, readiness, academic barriers, and others. Finally, three themes

emerged that led to answering the grand tour question. The following section will discuss the answers to the sub-questions and the grand tour question.

Sub-Question A: Sub-question A focused on employment – related barriers. Once students arrived at the community college, they were able to deploy a number of strategies to ensure that employment was not a barrier to their coursework. From working with their employers and finding flexibility in their work day to addressing college coursework demands, to working part-time, to leveraging the GI Bill and scholarship funds, outside employment was not an impediment to these students. This finding is contrary to the literature, however it is important to review why there may be differences among the studies cited in the literature review and this study.

Literature Review Discussion: First, the Roska (2010) conducted a longitudinal study of youth to underscore his contention that among the reasons why only ten percent of community college students complete their associate's degree and then continue on to complete their baccalaureate degree. He asserts this lack of completion is due to a lack of parental education and employment while enrolled in college. While the experiences of the study participants do not support the Roska (2010) research findings, this gap may be due to the differences in methodology regarding the longitudinal, quantitative nature of the Roska study as well as the traditional ages of his participants. Again, this study is a phenomenological, qualitative study whose participants were of a non-traditional age.

Second, Anible, (2007) concluded that those students who did not work prior to enrolling in college were twelve times more likely to persist in college than those students who were employed prior to college. The Anible study was a longitudinal study of a combination of non-traditional and traditional college students as well as those with military experience. There are components to the Anible study that are more applicable to this study given Anible's conclusion that non-traditional students were more likely to complete their baccalaureate degree after a series of intermittent work and college experiences.

In this study, all of the participants spoke of their employment experiences prior to enrolling in the community college, therefore the pre-college employment experiences of the study participants did not present a barrier to completion as concluded in the Anible (2007) study. Given the differing methodologies of the Anible study and this research, insight from the Anible study pertaining to the intermittent academic path of non-traditional college students can shed some light on why some of the students in this study briefly stopped their studies to work. Some of the students then re-entered college (for example: Sam) or continued their college studies part-time for an extended period of time (for example: Jane).

Two additional employment studies were also reviewed as among the literature for this study include the Jacobs & King (2002) and Paulson (2012) studies. Jacobs & King concluded that the completion barriers of employment for community college students should not be underestimated for female students of traditional and non-

traditional ages alike. The discussion pertaining to the differences between the Jacobs & King (2002) and this study centers on the lack of distinguishable differences between the male and female study participants in this research as both genders deployed strategies to overcome employment as a completion barrier. The outcome of this study could have aligned more with the Jacobs & King findings if only women of non-traditional and traditional ages were interviewed.

Finally, the Paulson (2012) study also contends that employment is a primary completion barrier for community college students in her study of Washington State community and technical college student graduates. While there are some similarities among the study participants as both this research and Paulson's included community and technical college students from Washington State, Paulson's quantitative study included a larger pool of students of all ages and ethnicities. Therefore, it is difficult to compare outcomes between this study and Paulson's given the expanded scope of participants and quantitative approach. It is important to note that another group of students could have presented different findings that underscored the literature and emphasized how significant a barrier employment can be for community college students.

Sub-Question B: As we answer sub-question B regarding first-generation college students and overall college readiness, the study participants deployed a number of strategies in order to navigate such barriers. Some students sought assistance from peers, family members, and even former high school teachers. Other students

participated in some campus activities especially those that were aligned with their

career-training programs, employment opportunities, or were family-oriented in nature.

Yet, while half of these students cited lack of preparedness as an issue, they overcame

this barrier in spite of an orientation program that did not meet their readiness needs

and being involved sparingly with campus activities. Their experiences do not align with

the literature that illustrates through first-year experience programs and engagement

college students can overcome readiness barriers.

Literature Review Discussion and Orientation: In this study, one student self-

identified as first-generation, four others cited a lack of knowledge about college

processes, being a barrier for them. This lack of readiness and understanding of college

systems for all five students was similar to those traits identified by Pascarella et all

(2004) when describing a first-generation college student. With a different interview

pool of students, more first-generation college students may have been selected which

could have illustrated a more striking distinction between first-generation college

students and those students who lacked the readiness and understanding to

successfully begin college.

The students interviewed in this study found ways to work around their lack of

college readiness, with the support of peers, family members, and friends as they were

able to navigate college processes with little official guidance. The community college

referenced in this study could serve students consistently and effectively by mandating

in-depth orientation which focuses on how to navigate the registration and financial aid

processes, especially for non-traditional students. These actions would then align with the literature that illustrates how first-year experience programs increase student persistence rates (Pascarella, 2004).

First-year experience opportunities could be explored at this community college that could include mandatory orientation with a cohort of first-time college students (Derby & Smith, 2004). For the purposes of determining whether or not this study aligns with the Pascarella et all (2004) and Derby and Smith (2004) research, it is difficult to gauge given the orientation offered at the community college is not comparable to a first-year experience program referred to in the literature. Typically, first-year experience programs are mandatory, involve student cohorts, and extend the length of the quarter. A first-year experience or mandatory orientation effort may have benefitted the study participants given many of the students cited gaps in their understanding of college processes, expectations, and how to transition from the workforce to the college classroom.

Literature Discussion and Student Engagement: For the two students who were most engaged in student activities their focus was on that of student clubs that aligned with their career training program, such as the nursing and welding clubs. The rest of the students were very time conscious and chose to participate in activities in which they could bring their children, or activities at which they could meet potential employers. This approach should not come as a surprise to those community college leaders involved with student government but it can serve as a good reminder when

encouraging career training program based clubs and campus activities geared toward working adults with family and employment demands.

It is important to underscore again with the Tinto (1987) theory that the study participants interviewed for this research were non-traditional and applying Tinto's theory to this cohort is problematic given the study participant's age, employment, family demands. Furthermore, Robey (2010) looked at a very specific cohort of women students transferring from a community college to a four-year university. The study participants selected for this research were not transfer students but vocational students. Moreover, the vocational students in this study did not reference feeling disconnected from the college. Assumedly, due to the fact that the students in this study were taking career-training courses that are often taught by a small cohort of faculty for up to six hours a day, the students felt connected to the community college via their faculty, a finding that is underscored in Sub-Question D.

Sub-Question C: While studies show in sub-question C that balancing family and college demands can negatively impact student success while in college (Jacobs & King, 2002), the experiences of the study participants included a number of proactive strategies to balance these demands. These strategies included working around the sleeping schedules of their children, reading while their family watched television, and completing homework after their children went to sleep often working on their schoolwork late into the evening. For some of the students, their families motivated

them to succeed either because they wanted their children to be proud of them or because they wanted to earn a higher income for their family.

Literature Review Discussion and Family/Work/Life Balance: The Jacobs and King (2002) study highlighted the barriers to both older married women and younger women with children. The experiences of the study participants do not align with the findings in this literature since the students overcame family barriers and persisted throughout their college tenure. This lack of alignment between this study and the Jacobs and King research does not mean that the participant experiences weren't challenging as the study participants worked diligently to juggle college, work, and family demands. At times, family demands were challenging to students, such as one student whose father passed away. Another student was raising her daughter as single parent while working full-time, and yet another student was working, going to college full-time and supporting his family of five as the sole breadwinner.

It is important to underscore with the Jacobs and King (2002) study, another group of community college female graduates of both traditional and non-traditional ages could have shared experiences that aligned more succinctly with the Jacobs and King study. All women who participated in this study are considered non-traditional students. The study participants shared how they juggled family and college demands and how in many ways these family demands were a positive influence as family was among the primary motivators that helped to focus their studies and persist through to graduation.

Sub-Question D: This sub-question allows us to better understand how community college students overcame known academic barriers such as remedial/pre-college courses, online education and technology, as well as faculty relations.   First, the study participants were dogged in their dedication to complete their remedial courses. While some did not pass their pre-college courses until after multiple tries, they did so because they sought help of peers, faculty, and tutors. Many students seized the opportunity to access faculty assistance in open math and English labs, set-up for one-on-one help.

Literature Discussion and Online Education: Reyes (2010) and Sheldon (2010) seek to understand one approach to reducing the completion barrier of remedial courses, and that is through compressed remedial course lengths. The literature does not align with this study given that the community college at which this research took place did not offer compressed remedial courses, and if they did, the study participants were not aware of such offerings. If the community college offered differing course lengths, a more direct comparison among the studies could have been made. It is understood that this study provides insight as to how a more holistic approach to assisting students through remedial courses may be the answer to removing pre-college/remedial courses as a barrier to completion, as opposed to strictly focusing on the lengths of remedial courses.

These students also navigated online courses in a variety of ways. Some excelled at these courses because they had the self-discipline and technological savvy to complete these courses that supplemented their busy college and home lives. Others

struggled with the lack of personal attention that online courses provided and still others managed better through hybrid courses.

Aragon and Johnson (2002) concluded that students who had less than at 2.5 grade point average were overall not as successful as those students with a higher g.p.a., and that the community college at which their study took place could have counseled students in advance of online courses as to the time management demands of online courses. While the Aragon and Johnson study does address the issue of student time management that came up during the study participants' interviews, this study does not support 2002 literature.

There are a few reasons why this study does not support the Aragon and Johnson (2002) study. First, given the lack of conversation during the study participant interviews about grade point average and the fact that specific questions were not asked of the study participants if they dropped online courses and if so, why did they do so? Second, questions were asked about the experiences that students had with online courses and some students shared how they struggled through online courses or avoided them altogether.   Finally, as opposed to the Aragon & Johnson (2002) study, some students in this study excelled in online courses that enabled them to effectively juggle family and work demands and graduate on schedule.

Literature Discussion and Faculty: Some of the participants had a negative interaction with some faculty members for a variety of reasons, and yet all students interviewed identified faculty champion who could assist with navigating college

challenges. Each student identified at least one faculty member who mentored,

supported, encouraged, and facilitated opportunities for peer engagement and support.

The role of faculty as key contributors to validating student success is in alignment with

the faculty validation research conducted by Rendon (1994) and Rendon Linares &

Munoz (2011). Rendon's (1994) research was intended to address ways that first-

generation and low-income students could be more successful. While in this study first-

generation status was requested, income status was not requested. Further alignment

with the Rendon (1994) study could have been achieved if income status was requested

of the study participants. Informally, income status could be inferred through many of

the conversations with the study participants as some mentioned financial challenges

and sacrifices that they had to make to successfully complete their associate's degree.

Sub-Question E: Regarding the final sub-question focused on additional

experiences identified by the study participants, this question allowed the study

participants to discuss how they have overcome barriers to achieve academic success.

Literature Discussion and Various Barriers: No student reported any

discrimination while at the community college which is in not in alignment with Tinto's

(1993) research which illustrates that older students have a more difficult time

obtaining their degree as well as Zhai & Monzon, (2004) who cite instances of

discrimination as a barrier to completion for some college students. It is important to

note that one student cited concerns with a faculty member who discouraged him from

writing an essay about his religion. As noted under the limitations section of this

research, the lack of ethnic diversity among the students is a restriction of the research

and could have resulted in a different outcome regarding student discrimination at the College. Furthermore, the student accounts of struggles with financial aid and course articulation are contextualized by the Cohen and Brawer (2003) seminal work on American Community Colleges.

Theme One: From the experiences of all of the students interviewed, faculty members contribute to student success through their encouragement, inspiration to students, and academic support. This theme illustrates how faculty played a key role in keeping students remain focused on their academic path for their duration of their degree work by helping students understand the importance of completing their associate's degree. These experiences aligned with the Cejda and Rhodes (2004) qualitative study. In the Cejda and Rhodes study, faculty were identified as exemplary in their advocacy for students through their college courses encouraging them to complete their degrees, one certificate or set of a skills at a time. These exemplary faculty members also connected credential attainment with additional pay once employed. While the focus of the Cejda and Rhodes study was that of faculty support for Hispanic students and no Hispanic students participated in this study, the supportive actions of faculty and the championing of degree completion do align.

The study participant experiences did not concur with the Jacobs and Dougherty (2006) research that suggested vocational instructors demonstrated resistance to general education, and therefore degree attainment. No students interviewed for this study discussed an experience with a faculty member where they were discouraged

from taking academic courses necessary to complete their degrees. Some students clearly understood that while they were enrolled in traditional vocational programs, leaving with a certificate was not sufficient nor did it align with faculty expectations. No student was discouraged from completing their degree. For most of the students, faculty validation, expectations, and support helped them to stay on track and overcome the many barriers students faced including academic, work, and family related barriers. Finally, it is possible that another group of community college vocational graduates could have had a different experience that aligned more closely with the Jacobs & Dougherty research.

Theme Two: For all of the students, their stories of sacrificing for themselves and their families were inspiring. Their motivation manifested itself into a positive attitude that helped greatly when faced with personal and academic barriers. Their positive attitudes toward overcoming challenges and barriers were evident throughout the interviews. The Cross (1981) literature underscores the interplay between the negative forces in the lives of college students and the influence of their positive attitudes as well as external motivated by their peers, advisors, faculty, and staff. Cross (1981) underscores how impactful negative forces can be in the lives of students and how critical personal motivation is to student success.

An additional component to the motivation shown by the students is the creativity illustrated to find workable solutions to their challenges outlined in the sub-questions. Creativity and innovation in problem solving is not outlined in the Cross

literature. It should be noted that while this study supports the Cross assertions

regarding the impact of negative forces in the lives of students, another group of

students could have exhibited more negativity in their approaches toward finishing

college.

Theme Three: The theoretical framework for this dissertation is built around the

critical path theory that is most often used in economic and political research, but can

be applied toward better understanding the circumstances that occur in the lives of the

students interviewed (Cejda & Stick, 2008). Cejda and Stick (2008) applied the path

dependence theory to explain the histories of Hispanic students who completed their

baccalaureate degrees. The differences between the studies include the fact that in this

study the participants were Caucasian and obtained their associate's degree while the

Cejda and Stick study focused on Hispanic students who completed their four-year

degrees. There is alignment with both qualitative studies that also relied upon the path

dependence theoretical framework to provide a conceptual foundation that assists with

better understanding the positive and negative circumstances within which students

choose to attend college and set out upon a path of achievement.

Grand Tour Research Question: This research illustrates that the community

college students interviewed forged their path as community college students because

of personal changes or professional goals. Some of these events caused dramatic

changes in the students; other reasons for switching path events may have been less

dramatic but nonetheless were impactful for the study participants. The conceptual

framework of path dependence (Prado, 2009; Cejda & Stick, 2008) allows us to better understand how these critical events led students to their community college and in the case of some students propelled them to persist and complete their degrees.

Therefore, as we seek to understand how community college vocational students overcame known completion barriers, the sub-question responses and additional themes are instructive. The barriers identified by the literature review focused on the areas of employment, readiness for college, balancing family demands, academic challenges, and other barriers raised by the students. This study provides insight into how nine community college students overcame these barriers, beginning with remedial courses, in order to graduate with their associate's degree (an abbreviated summary of these strategies is provided in Appendix E).

In addition to answering the sub-questions in order to answer the grand tour question, three themes emerged that also assist with the answering the grand tour question of how the students overcame known completion barriers. These three themes included the role of faculty, motivation and attitude, and understanding the dynamics that led students to switch life paths and begin their college careers.

With respect to theme one, every student interviewed cited at least one faculty member who they felt was their advocate, helping them overcome both personal and academic. The support that each student received from their faculty advocate, assisted them throughout their community college tenure. Furthermore, most of the students

underscored that their career-training faculty encouraged and expected them to complete their associate's degree.

The second theme underscores the motivation and creativity demonstrated by the students that compelled them to persist through college and overcome multiple personal and academic barriers in order to complete their degrees. This motivation and innovation manifested itself as a positive attitude that was a common characteristic of the students.

Finally, the third theme explores how and why the study participants were motivated to attend college. This life switch is underscored by the path dependence theory which helps us understand how this switch to an optimal path may have motivated some of them to persist and eventually graduate. It is this knowledge, illustrated by the experiences of the interviewed students that provide us with insight and verification that often in spite of tremendous challenges from death and divorce, to more positive influences such as motivation to advance professionally and family support, students can succeed.

Research Applicability

Due to the phenomenological and qualitative approach of this study, the research applicability is fundamentally directed toward the college at which the interviews took place. The author contends that there are larger policy implications, opportunities for administrative action, and opportunity for community college administrators to leverage this research to assess on their campuses how students

overcome known completion barriers. The author believes there is potential for applicability of this research in the following ways:

First, with a greater understanding of how the path dependency theory allows faculty and administrators to better understand why students enter community college, colleges can be intentional about proactive advising and faculty support necessary to keep especially non-traditional students upon their chosen optimal path.

Second, this research can provide additional verification that faculty encouragement and support of students matters and significantly helps students overcome negative barriers in their lives including death of loved ones, divorce, addiction, and unsupportive friends and family. In the very least, a positive, kind, or encouraging word to students at a critical time can be incredibly influential. Effective faculty advising and instruction that both challenges and inspires non-traditional students can also contribute to student persistence.

Third, this research suggests that faculty set the bar for the value that students place on degree completion. Students interviewed for this research were very clear about the faculty who set clear expectations for degree completion and proactively worked with students to continually remove barriers to completion. The faculty for example, listened to students concerns and provided encouragement when needed, they gave out their cell phone number in case students needed assistance, and they were available for consult at the College's open laboratories. The interviewees listened

to faculty expectations and tried to meet those expectations when clearly articulated. The study participants were also attuned to the absence of such expectations.

Fourth, given that employment for most community college students is necessary, community colleges can be much more engaged in giving students tools to work with their employers to be more flexible as well as advocate for expanded work study and internship programs so that students can be paid while working on campus. Positive on-campus work experiences can benefit staff and faculty through regular student interaction and help students demystify college rules and operations.

Fifth, it is important for colleges to understand how students are creating their own paths to completion by their creatively working around and then proactively removing barriers. One approach toward helping students understand how to leverage college resources to address their academic and personal challenges is through an mandatory orientation that helps students understand college processes in a meaningful way (for example, assistance with financial aid and registration forms, not just a walking tour of the campus). Furthermore, this orientation could help students understand that as they meet certain potential barriers during their college tenure where they can go to get on-demand services and support, instead of relying solely on their motivation and resourcefulness.

Finally, on-campus events should continue to incorporate non-traditional student needs and interests including job fairs, scholarship opportunities, and family-focused events. Special attention should be paid to part-time students who do not

spend a lot of time on campus but could benefit from greater exposure to college life

beyond their classroom or online course.

Recommendations for Further Research

More research is needed in order to further explore the completion barriers of

professional-technical students and the ways in which students overcome those

barriers. Additional research is warranted in the areas of understanding how and why

pre-college/remedial math and English courses remain a barrier to students, especially

non-traditional students. In addition, further research would be beneficial to

community college leaders as they assess the effectiveness and scalability of promising

approaches (such as I-BEST, compressed remedial courses, etc.) to helping community

college students pass their remedial courses.

Online education barriers for non-traditional students could be researched

further to better understand the challenges these community college students face

when taking online courses as well as researching how students succeed in these

courses. The empowering role that faculty can play in the lives of community college

students is understood, however more research is necessary into the role of student

services. For example, can the financial aid or registration staff be a barrier to students

or are they instrumental in helping students succeed? What are their roles in

encouraging student persistence?

One surprising finding of this dissertation was the important role that math and

English open labs, and to a lesser degree tutoring services, had in assisting the study

participants with completing their degree. More research is needed to understand which components of these services were most beneficial to students.

Further research that involves a broader diversity of students interviewed as well as the programs they are studying. Among this more diverse group would include students who were not successful in completing their associate of technology degree, as they comprise the majority of community college students. Moreover, future research could compare and contrast vocational versus transfer community college students in order to assess if there are any specific completion barriers for either type of student.

Community colleges struggle to consistently implement best practices nationwide given their unique size, funding structure, student demographics, and the communities in which they serve. Unfortunately, because of their unique characteristics, community colleges nationwide are challenged to find a one size fits all completion solution. Finally, best practices in the areas of retention and completion need to be researched so that community college leaders can apply different practices at their colleges.

Implications for Practice

This dissertation research is intended to provide valuable insight to community college administrators and instructional leaders alike with the goal of improving community college associate degree completion rates for vocational students. There are a number of implications for practice; however, because of the qualitative nature of this research at this one campus, community college administrators are encouraged to

first assess the applicability of this research by interviewing their college's students. Therefore, these implications are provided as proposed parameters for individual campus applicability.

First, this research underscores the value of faculty and their positive influence upon students. Faculty training and professional development opportunities focused on student validation and the value of completion could positively improve program completion rates. Second, this research also highlights the need for student employers to be flexible while their employees are in college. Efforts should be made within Student Services to assist students with the tools to better manage working while in college.

Third, additional areas for applicability for practice includes the expansion of academic hybrid courses which allow for online flexibility for working adults as well as in class instructional interaction opportunities for those students who are not as technologically savvy or as disciplined as those students who are more successful with on-line courses.

Fourth, students interviewed for this research spoke of significant challenges with pre-college/remedial courses. For remedial as well as college level courses, perhaps the most promising area of applicability is that of the role of open subject specific laboratories such as the writing, math, or career training program specific laboratories. Campus surveys of what resources are most used by students and the hours necessary to support students who are working while in college could prove to be

beneficial to non-traditional community college students who need extra support,

beyond traditional tutoring resources.

Limitations

There are four primary limitations with this research. The first limitation is the

fact that only one community college was chosen for the research site. Furthermore,

the college chosen for this research is located in a geographically unique part of the

state. Another college located in a different part of the state or country could yield

varied input from students. Second, while students interviewed varied in age, gender,

and vocational programs attended, there was no ethnic diversity among those

interviewed, despite efforts made to recruit an ethnically diverse pool of students. The

experiences and input from a more ethnically diverse interview pool could have yielded

additional insight. Third, in spite of efforts to have included all of the vocational

program clusters as defined by the National Association of State Directors of Career and

Technical Education Consortium, not all of the career clusters are represented by

students in this study. Fourth, only students who graduated with an associate's of

science or technology degree were interviewed for this study. Nearly two-thirds of

community college students nationally do not complete their certificate or degree.

Therefore, more understanding about why community college students do not complete

their degree is to be gained by interviewing those students who did not complete their

degree.

Conclusion

This dissertation sought to gain insight from successful community college vocational program graduates as to how community colleges can reduce and remove completion barriers for the nearly two-thirds of community college students who do not complete their certificate or associate's degree. Among the most valuable insight gained from this research is that the study participants arrived at their community college compelled by a switch in their life path that led them to change toward an optimal path of seeking an associate's degree. The components of their education, work, and family life contributed to remaining on that optimal path. This path dependence was bolstered by the role of supportive, validating faculty.

These findings can propel community college leaders to work with faculty instructors and advisors to develop collaborative policies, procedures, and practices that assist students with understanding the forces in their lives that led them to college. By developing proactive strategies for overcoming work, family, and academic barriers while validating community college students as learners and scholars, one can only anticipate that more non-traditional vocational community college students will succeed. This approach leverages the path dependence approach and may be especially beneficial to non-traditional vocational students.

Furthermore, community college leaders can continue to build an organizational culture focused on completion. Faculty expectations that challenge students to complete and continue to work toward their baccalaureate degrees in the career

training areas where employers expect a skilled employee with academic preparation for management level positions should not be underestimated. Additional advocacy is encouraged to increase on-campus student employment opportunities subject specific open labs where students can frequently access faculty and tutor assistance.

Final Thoughts

I want to personally thank the students of the Washington State community college whom I interviewed as they are nothing short of inspiring to me. These nine students personify the scores of technical college students that I have had the privilege of serving during my administrative tenure at three technical colleges. These students are among the hardest working group of people I know. Balancing college courses, employment, family and community demands, their tenacity and endless optimism is awe-inspiring as they strive to make a better life for themselves and their families.

If our nation's community colleges can truly remove known academic and institutional barriers for non-traditional, professional-technical community college students, I believe our economic vitality will re-emerge with a resurgence of the American middle class fueled by the success of our community colleges. As a technical college president, I truly believe that there is no more fulfilling personal or professional mission than facilitating access to the American dream for our nation's community college students, indeed it's what I will continue to spend my career working toward. Thank you again for this opportunity.

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Appendix A

Research Permissions

June 6, 2013

RE: Institutional Review Board request from Amy Goings

Dear Amy:

This letter serves as your official notification that your IRB request dated May 31, 2013, called "Doctoral Dissertation: Experiences of Community College Vocational Students Who Successfully Attain their Associate Degrees: A Phenomenological Study" was approved by the Lower Columbia College Institutional Review Board on June 3, 2013.

If there are any changes to your instrument, please let us know.

Thank you for your request.

Sincerely,

Wendy Hall, Chair
LCC Institutional Review Board

Wendy Lapic Hall, M.P.A.
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Lower Columbia College is a public two-year community and technical college, founded in 1934.
LCC serves more than 4,000 students per quarter, most from Cowlitz and Wahkiakum counties, Washington.

LOWER COLUMBIA COLLEGE

February 15, 2013

Acknowledgement of Doctoral Research
Conducted by Amy Goings, MPA
April-August 2013

This document acknowledges that I approve of Amy Goings, MPA conducting doctoral research focused on degree completion barriers for students enrolled in full-time career-technical programs.

I understand that Ms. Goings will begin her research in April 2013 and will complete her research by August 2013. Ms. Goings has expressed to me her willingness to minimize any impacts when working with college student services staff and faculty as she seeks to identify students that she wishes to interview including three to four full-time professional– technical students who will complete their degree by June 2013.

Ms. Goings has reassured me that she will only conduct research after approval from the University of Nebraska's Institutional Research Board and will conduct her research while abiding by the Universities research guidelines.

I acknowledge that Ms. Goings' research will be of assistance to the community and technical college system and I am pleased that she will be doing so at my College. I have signed below acknowledging her research and encouraging the staff, faculty and students of Renton Technical College to work with Goings to complete her research.

Christopher C. Bailey, President   Date : 2-15-13
Lower Columbia College

Appendix B
Pre-Interview Questionnaire

Pre-Interview Questionnaire

Thank you for your interest in my dissertation research which is focused on how and why community college students enrolled in technical programs complete their associate's degree. The first of the two-part interview is this demographic information sheet. Please take a few moments to fill out this from. Again, this process is strictly voluntary so if you do not feel comfortable answering any questions please skip it and proceed to the next question.

Demographic information: Please complete the following information:

Gender: M / F

Age: _____

Ethnicity: _____

Employment Status (unemployed/working part or full-time): _____

Are you a Veteran: Yes/ No

Current graduation plan: Please note which degree you will be awarded at graduation (for example, Associate of Technology Degree, Welding Technology):_____

Barriers to success: When reflecting upon your college work, please check all areas below that have been barriers, stumbling blocks, or areas of frustration to you. If you run out of room, please free to write on the back of this sheet of paper.

> Personal Finances (for example, not enough financial aid)
> Employment Status (for example, working too many hours or unemployed)
> Racial and/or Gender Discrimination
> Math Courses
> Online Courses
> Pre-college or Developmental Academic Courses
> Faculty, (please provide an example):
> _____
> Administration/College Bureaucracy (please provide an example):_____
> Lack of Knowledge about College Processes (example please):
> _____
> No One in Your Family Attended College

Childcare

Public Assistance/Unemployed

Personal Life Changes (for example, death, birth, marriage, divorce, separating from the military), please provide an example:

_____

Lack of Motivation

Employment Offer

Promotion Offer at Current Employer

Please note any other barriers that you would like to note prior to the interview?_____

_____

Appendix C
Interview Protocol Worksheet for Students

Date:
Location:
Interview: Amy Goings, MPA
Interviewee:

Instructions for the Interviewer:
Introduce yourself as Amy Goings, doctoral candidate at the University of Nebraska Lincoln and administrator at another two-year college in Washington State. My doctoral research is focused on understanding from students like you completed your associate's degree while most of your peers do not.

Thank you for returning the pre-interview questionnaire. My goal for today is to ask you some questions aimed at understanding your experience here at "Community College" and some of the reasons for your success in completing your associate's degree in _____ program. After completing this interview I may have some follow-up questions which I will contact you via telephone if necessary.

I also wanted to explain to you that your name will not be used in my study or in my notes. I will assign you a pseudonym for reference purposes so while I will quote you and incorporate your feedback I will not use your name or the names of the individuals referenced by you.

One final note, I will be taking active notes during this session as well as tape-recording this session so feel free to talk freely and not worry about me keeping up.

Icebreaker question:
Congratulations on nearly completing your associate's degree, you must be very proud.

1. Can you share with me if there were times in your college career that academic barriers were at a level where you questioned whether or not you would succeed?

    A. Prompt: Did you take pre-college or remedial courses?
       Were they easy or difficult?
       Were they a barrier for you? If so, why?
       How did you get through these courses?

    B. Prompt: Was there a particular academic or technical course that was difficult for you?
       Which one?

Why did you think it was so difficult?
How did you get through the course?

C. Prompt: Were there particular staff or faculty that you felt were not helpful to you? If so, why?
Can you give me an example?

D. Prompt: Conversely, tell me more about those faculty, staff who were a positive influence for you.
Did these faculty stress to you the importance of attaining your degree?
Were there other staff/faculty who stressed the importance of your degree versus a certificate? Could you provide an example for me?

E. Prompt: Did you feel as if you were ready or oriented to start college?
Did you attend orientation? Was it helpful?
Can you provide me with some examples of how the orientation was helpful or not?

F. Prompt: Were there resources on campus that were made available to you that you feel were critical to you are ability to stay in college and complete you degree? For example, childcare, etc.

2. Was there a critical point in your college career that you believe helped you switched paths toward completing your degree?
A. Prompt: A particular incident? Course? Instructor?
B. Prompt: Or a personal incident-which you may or may not want to share given your comfort level?

3. Additional questions (if time and if relevant to the student's experience): Did you take an online course during your college career?
A. Prompt: If so, which course?
B. Prompt: How did the course go for you? Were you satisfied with your performance and final grade?
C. Prompt: Did you receive adequate instructional support from the instructor and college?
D. Prompt: Which strategies did you use to successfully complete the course?

4. Were you engaged in college activities? If so, can you please describe them for me?
A. Prompt: Looking back do you believe those college activities helped or slowed your academic studies? Can you provide a specific example to support your answer?

5. Did you work on campus during your time at college?

     A. Prompt: Could you describe your on-campus job? For example was it work-study? Internship?

     B. Prompt: Looking back do you believe those college activities helped or slowed your academic studies? Can you provide a specific example to support your answer?

     C. Prompt: Was this on-campus job your only employment?

6. Is there any other college experience that you would like to share with me that you believe influenced your ability to obtain your degree?

7. Do you have any questions for me?

Thank you again for your time. I may have follow-up questions for you and if I do I may call and or email you if I need anything clarified. Also, you are free to email me any additional thoughts or questions that you may have. I greatly appreciate your time and willingness to talk with me. As a token of my appreciation here is a gift card for your use.

Thank you.

Appendix D

Crosswalk Among Research Questions and Pre-Interview Questionnaire,
And Interview Protocol

Research Question/Sub Questions	Pre-Interview Questionnaire	Interview Protocol
1. Grand Tour Question: How did students overcome known barriers and attained their associate's degree?	2	1; 2; 6
A. Employment	1.D; 3.B; 3.A; 3.L; 3.O; 3.P	5; 5.A; 5.B; 5.C; 6
B. First-generation/lack of readiness	3.I; 3.J	1.E; 6
C. Balancing family demands	1.A; 1.B; 3.K	2.B; 6
D. Academic barriers	3.C; 3.D; 3.E; 3.F; 3.G; 3.H; 3.I	1.A; 1.B; 1.C; 1.D; 1.F; 3; 3.A; 3.B; 3.C; 3.D; 4; 4.A; 6
E. Other experiences	1.C; 1.E; C.3; 3.M; 3.N	2.A; 2.B; 6

Appendix E

Representation of How Study Participants Overcame Completion Barriers

Critical Switch	➔	Enter Community College		➔	Experiences/ factors identified by students to overcome barriers and complete associate's degree	➔	Graduation and additional education
			Barriers to overcome while attending community college				
(Death, divorce, separation from military, unemployment, overcoming addiction, family expectations, professional advancement)			1. Employment pressures		1. Work around employment schedule (study early or late, while at lunch); work with employer to allow flexibility; GI Bill, scholarships, paid internship, work at college/ work in intervals		Faculty as degr completion champions; industry/ professional expectations; t four year collaboration
			2. Readiness (first generation, orientation, engagement)		2. Meaningful engagement; with faculty/tutors/peers		
			3. Balancing family demands		3. Family as support, motivation, inspiration; work around children's schedules (lunches, early morning, late at night)		
			4. Academic challenges: remedial, online, discouraging faculty, administrative bureaucracy		4. Connected with faculty as champions, advisors who were supportive, validating; open labs for math/ career training programs		