DETERMINING BEST PRACTICES FOR ENCOURAGING COLLEGE COMPLETION: THE EFFICACY OF ANCILLARY SUPPORTS ON STUDENT PREPAREDNESS IN SHORT-TERM TRAINING PROGRAMS AND STUDENT PERSPECTIVES ON PROGRAM COMPLETION

by

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ABSTRACT

College completion is at the pinnacle of issues of contemporary concern in post-secondary education, and impacts community colleges to a greater degree than universities since lower rates of completion are reported for these institutions. Evaluating the Job Training courses at a large urban community college in the State of Michigan permits a different perspective: what factors contribute to the high completion rates of this program, which enrolls a significant percentage of disadvantaged, low income, minority adult learners?

Quantitative analysis of completion rates permit the researcher to examine the effects of two ancillary supports for Job Training: WorkKeys® testing to ensure preparedness, and mandatory orientation. Examining completion rates prior to and subsequent to implementing these processes will provide data regarding their effectiveness; this is accomplished through analysis of three years of institutional completion data for the Job Training program.

Student narratives regarding the obstacles and that which facilitates completion are examined first-hand in video format. This first-person discussion from students about what they believe to be important in obtaining their credential for workforce access provides data for comparison to what educators think leads to academic success. The video is useful in the education and training of future researchers and practitioners in ensuing efforts to increase student completion within the community college.
Exploration of completion, using the student perspective and a psychosocial framework is undertaken, with scrutiny of the differences in the completion rates before and after institutional intervention. Implications for improvement and conclusions about outcomes are examined to inform further research when considering the question of completion.
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Many shoulders have personally borne the burden of my educational endeavor. The first debt of gratitude goes to my Mother, who returned to college as an adult learner and thereby changed my question from “Should I go to college?” to “Where should I go to college?” Until her death on July 4, 2012, Mom was supportive of my seeking a doctoral degree and visualized the graduation ceremony, often saying that she hoped that she would live to see it. Although she did not, the commitment and dedication it takes to complete such an effort are attributable to her teaching and support.

I would also like to acknowledge Joe Maxa, my ever-so-patient husband, for stepping up so many times to help with so many tasks and for his support and encouragement. You truly bring beauty to my world, along with the realization that any struggle is never mine, alone. My brother, Tim Bond, and his wife Diane, have also been
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CHAPTER 1

INTRODUCTION TO THE STUDY

The idea of college completion has become, of late, an increasingly scrutinized factor. In an interview conducted by Lorenzo (2011), O’Banion states that the completion agenda “transcends all other current issues to focus our attention on this national imperative” (p. 17). Rich Williams, a higher education advocate from the U.S. Public Interest Research Group, discusses federal policy initiatives recommended by President Obama and says, “Getting to college is only half the battle”; he further discusses that “getting to graduation poses immense obstacles for low-income students” (Dervarics, 2009).

How pervasive is this concept of completing college? The Lumina Foundation, the largest philanthropic organization in the United States with a singular focus on education has unveiled Goal 2025, and states that their strategic plan for 2013–2016 involves increasing the proportion of Americans with high-quality degrees, certificates and other credentials to 60% by the year 2025 (Lumina Foundation, 2013). The American Association for Community Colleges (AACC, 2013) describes itself as “the leading proponent and the national voice for community colleges.” In 2010, the AACC created a document titled Democracy’s Colleges: A Call to Action, which is a statement of commitment to increase college completion rates by 50%. The organizations that
signed this pledge include Phi Theta Kappa, a student-driven honors organization; the ACCT, which is the Association of Community College Trustees; CCCSE, the Center for Community College Student Engagement; The League for Innovation in the Community College; and the National Institute for Staff and Organizational Development (NISOD).

Phi Theta Kappa created C4, the Community College Completion Corps, to maximize student outreach to other students (C4, 2014). The website for C4 features toolkit materials such as pledge cards, guides, fliers, buttons, stickers, bracelets, an up-to-date calendar of events, and numerous other methods for each college’s chapter to reach out to other students and bring the topic of finishing their educational goals to the fore (C4, 2014). CCCSE has recently paired with Excelencia in Education to engage Latino/a students to boost enrollment, performance, and graduation. Excelencia recently held an American Graduate Day event, and collaborates with partners such as the Hispanic Heritage Foundation, the Hispanic Scholarship Fund, and CAMINO (the College Access, Mentoring, Information and Outreach fund), who in turn is a partner of Lumina’s Goal 2025 Latino Student Success initiative. CCCSE also collects data using SENSE, the Survey of Entering Student Engagement to provide informed tailoring of services and experiences for students in the hope of moving persistence past the first year to graduation (CCCSE, 2013).

There are other notable organizations which focus on the completion agenda, such as Complete College America. This national nonprofit has a unilateral mission: to work with states to significantly increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations (Complete College America, 2014, para. 1). One of the
branches of the Gates Foundation is that of Postsecondary Success, which postulates the goal of “dramatically increase[ing] the number of young people who obtain a postsecondary degree or certificate with labor market value” and which focuses on the completion rates of low-income populations, as these individuals tend to have more limited access to education (Gates Foundation, 2014, para. 5–6).

The Kresge Foundation also has a focus on education; it is one of five areas of grant-making within the foundation. Those additional areas include health, the environment, the arts, and human services. In promoting education as part of its emphasis, the Kresge Foundation promotes its efforts by saying they propose to “increas[e] the number of college graduates in the United States [which] can fuel a new, education-led era of prosperity and help low-income and underserved people change the trajectory of their lives. We invest in work that advances these ends” (2013, para. 1). The League for Innovation in the Community College chose the theme for its 2013 Learning Summit around the focus on student success and completion (League for Innovation, 2013). Other League efforts that clearly describe the commitment to student completion include holding a webinar in 2011, titled “The Completion Agenda: A National Imperative for the United States” (League for Innovation, 2013). It seems that the question of whether completion is prevalent, then, is answered by the fact that is it more than that; it appears to be ubiquitous when considering all of the organizations and efforts being refined and emplaced to create stronger conditions for graduation than have ever existed in the past.
Overview of College Completion

To further set the foundation for understanding the significance of college completion, the percentage of high school graduates entering postsecondary education in 1992 was 81%; of those students, only 42% earned a bachelor’s degree (Goldrick-Rab, Harris, Mazzeo, & Kienzl, 2009). The researchers find that this 81% of graduates desiring higher education is a 28% increase from 20 years prior, while the percentage of students graduating with a baccalaureate degree is a mere 3% higher (Goldrick-Rab et al., 2009). Further evidence of this lack of change in completion rates despite higher enrollment numbers is offered by Habley, Bloom, and Robbins (2012), who state, “Yet, in spite of all that is known [about persistence], there has been little change in retention and degree completion rates in more than four decades” (p. 16). Their statistics, based on data collected through American College Testing (ACT) research, indicates that approximately one third of students do not return for the second year of college, and that 40% of students who enter higher education each year will not “earn a degree, anywhere, at any time in their lives” (p. 16).

Clearly, the number of high school graduates desiring an education has increased substantially while degree attainment for all students remains relatively flat, whether students begin at a community college or a university. Why do students not complete their goals? Approximately 45% of the students in higher education begin their journey at a community college (Goldrick-Rab et al., 2009). According to data retrieved from the National Center for Education Statistics (NCES), in 2004, 58% of first-time, full-time students seeking a baccalaureate completed within 6 years (150% of the normal completion time required to earn the degree), while 30% of first-time, full-time
community college students earned their credential (certificate or degree) within 150% of the normal time necessary to graduate. An even greater perplexity, then, is what variables put community college students at a slightly higher disadvantage for completion? That question is frequently posed in the burgeoning literature and research regarding completion. Transforming that question into determining which variables have a positive impact on student success in the community college, along with a review of the perspective of students about what influences their success, are the key purposes of this study.

Many academicians point to the fact that community colleges enroll students who tend to be more economically disadvantaged, less academically prepared, with higher numbers of underrepresented students as a factor in completion rates (Bragg & Durham, 2012; Cohen & Brawer, 2008; Page, 2013). There may be some merit to this theory; at open admissions 4-year institutions, the completion rate drops to 29% when using the same timeline (150% of time to degree) for completion, lower than that of community colleges (NCES, 2012). Perhaps a better way to phrase the question is to step into the perspective of the student. Rather than comparing graduation rates, perhaps the question to ask is, how do students arrive at the decision to remain in college? Why does one student overcome the obstacles and barriers to complete college, while another student stops out? What are the variables that students perceive as critical to remaining in college?

One method of determining which characteristics can make a difference to a student is by examining a highly at-risk population to scrutinize which students complete their programs and which do not. Viewing this population in terms of completion is a
key element for educational entities such as The Lumina Foundation, which created the Achieving the Dream initiative. Lumina’s 2013–2016 strategic plan, unveiled in February 2013, is termed Goal 2025. Succinctly, this goal involves increasing the proportion of Americans with high-quality degrees, certificates, and other credentials to 60% by the year 2025, while maintaining a commitment to a socially responsive agenda; this entails lobbying for students of color, adult learners, and students who are underprepared. Lumina terms this “The Equity Imperative” (Lumina Foundation, 2013).

Dewayne Matthews, Vice President of Policy and Strategy of the Lumina Foundation, describes their efforts as covering three key areas: supporting effective practice, encouraging effective public policy, and serving as the catalyst to guide educators toward effective change. From this stance, Matthews (2013) mentions two strategies: mobilization—of educational systems, policy makers, and communities, especially large metropolitan areas—and rethinking the design of the higher education system. Such redesign would consist of three major areas: (a) new student finance models, (b) higher education finance and business models, and (c) new credentialing systems that meet individual and workforce needs (Matthews, 2013). These areas are all built around learning. Matthews continues, “We’re in the middle of a transformation, we believe, from a time-based, credit-based system of education to a learning and competency-based system.”

**Purpose of This Study**

The question of completion is a large, multi-faceted issue. In winnowing down the topic to study some of the complexities, beginning from the foundation facilitates the understanding of the supports needed to progress upward. Conceptualizing the student
perspective as that foundation provides a clearer view of what may contribute to student success in the higher education system. Of particular interest is a group highly at-risk, the Job Training students at a large urban college in southern Michigan. The non-credit, job training program consists of immersion studies, in which students attend college for 34 hours per week with the course extending through 18 weeks. The courses of study involve a choice between automotive technician, computer support technician, introduction to construction, construction electrician, green construction remodeling, machinist/CNC technician, and welding fabrication technician. Students enrolling in Job Training are evaluated for academic readiness, using ACT’s WorkKeys® assessment. The 2013 completion rate for Job Training students is 77.9% in August 2013; there may be some decline in the rate as the last cohort of students will not complete until 18 weeks into the new academic year. The completion rate is unlikely to drop lower than 70% since 8 of the 12 cohorts have already completed their training. Thus, the rate of completion for this program could be considered highly successful. Much of the research in completion centers on deficits that lead to non-completion. Analysis of Job Training allows a searching look at what currently works and may provide clues in determining what to emulate in promoting student success.

This study examines two questions regarding the Job Training population: Has there been a change in completion rates since the implementation of recent institutional supports, those of pre-entry testing and remediation, coupled with mandatory orientation? Secondly, what do the job training students at this community college believe leads to their success? A thorough examination of the student voice is undertaken, through narrative studies of the students’ experiences. The Job Training courses are designed as
non-credit to meet clock hour requirements for financial aid; while several of the courses of study do articulate, the model is intensely tied to that draconian “time-based, credit-based” system mentioned by Matthews (2013), which is necessary to meet the requirements for federal financial aid. Articulated credits have limitations in transferability; for workers who are mobile or who continue with their education, the option achieves more immediacy of work skills training but does not create an extended, viable educational foundation. Transferring is likely to mean starting over with their education, unless they transfer to a university with a comprehensive technical core, such as Ferris State University. The ability of colleges to offer short-term training that leads to high value workforce certifications is one that finds proponents among employers, educators, and students. Many community colleges in Michigan and in other states are responding to this lack of formal educational advancement for highly skilled technical workers by proposing baccalaureate degrees at the community college level. Cohen and Brawer (2008) describe the community college baccalaureate as being “based on sound rationale” (p. 452) and point to the vertical mission of the community college as being inevitable, unless K–12 “strengthens the secondary schools” and universities “open satellite centers dedicated to preparing teachers and health professions practitioners, and support them vigorously” adding the opinion that “neither is likely to happen anytime soon” (p. 453). Articulation, transferability and opportunity to continue learning once the student completes a basic level of training are likely to be considerations of students as they identify then pursue their educational goals.

Each of the job training programs does articulate into college studies at the college with the exception of construction; the articulation has the potential to earn 10–13
credit hours toward a credit-based certificate, should the student decide to continue. Those certificates comprise the first year of the associate degree in each respective area. The construction programs are articulated with Ferris State University’s associate degree in construction technology, available on the college’s campus. The associate in construction technology leads to the Baccalaureate in Construction Management. Each of these job training programs provide the opportunity to earn a certificate of completion as well as providing impetus to continue education through the associate degree at a minimum, as long as the student remains at the college or transfers to Ferris State University to make use of the knowledge and credentials already earned. Thus, job training has limiting characteristics in terms of transferability, but also provides opportunity for continued education within specific venues.

Research Questions

This research project examines several questions to better understand college completion, and elicits the student’s perspective on completion both in a survey and in a video format. Reviewing completion data from a consideration of what works, rather than a scrutiny of what deficiencies lead to low levels of completion, provides an alternative perspective for analyzing college completion. Job Training, with its 77.9% completion rate, allows such a thoughtful consideration to what contributes to student success. The questions addressed in this research are:

1. How were the completion rates in Job Training impacted by the requirement of specific scores on WorkKeys® and mandatory orientation?

2. What is the students’ perspective on college completion? Specifically, what do students report leads to successful completion of their programs, and
conversely, what barriers do they find are most detrimental to achieving their goals?

3. An additional product resulting from the dissertation is an educational video. This video examines the student’s perspective on completion in greater depth, hoping to answer from a psychosocial framework, what meanings does the student attribute to completing college? How does this impact their perspective of college completion?

The quantitative data, obtained from the document analysis on completion rates, is complemented by the student narrative of describing what has promoted success and what has been considered to be insurmountable obstacles. The research, by examining a population with at-risk characteristics yet a high completion rate, permits analysis of what characteristics might contribute to college completion. While this question has been examined in the research previously, this study adds nuances through looking at a highly at-risk population with a startling characteristic: a high completion rate. Rather than asking what colleges should be doing and reviewing the issue from a standpoint of presumed deficiencies, the research allows scrutiny of what is working, and working well. This research attempts to discover and share what factors in to the high rate of success for Job Training students.

The Population: Job Training Students

Job Training classes are conducted at the M-TEC (Michigan Technical and Education Center) which exists apart from Main Campus. The M-TEC is located near the Hispanic heart of the city. These technical education centers found within the State of Michigan were developed under the auspices of the Michigan Jobs Commission. These
Centers were developed to address Michigan’s shortage of workers in the technical fields with a focus on high-skill, high-demand, high-wage occupations. There are 18 M-TECs, operated by 16 community colleges; two colleges within the state have responsibility for two M-TEC enterprises. The Job Training programs are all held at M-TEC, except for Machinist/CNC Technician and Computer Support Technician, which are held on the Main Campus to accommodate the equipment required for the training. The M-TEC building supports workforce training, job training, GED (General Education Development), and ESL (English as a Second Language) completion courses for students desiring to improve their skills. The job training programs are a mixed cohort model; each month, a new cohort of students begin these programs, attending the same class until their completion. Since the training is 18 weeks in length, the previous three cohorts are also part of the class. This exposure to students who have mastered skills and knowledge for technology areas provides students with opportunities for collaboration, role-modeling, and team work. Since this mimics the skill development and characteristics needed for the workplace, these soft skills tasks are important to succeed—not only in the training, but on the job.

Completion Data

Completion data may provide clues about how effectively pre-entry testing, using ACT’s WorkKeys® assessment, has measured preparation; theoretically, students who meet the cut score requirements for WorkKeys® should have a higher rate of completion if the test is adequately measuring preparedness in the areas of reading, locating information, and mathematics. Using three years of data, the research can look at the year prior to the implementation of WorkKeys® and mandatory orientation, the year that
the treatments began, and the year following the initiation of these requirements to ensure
college readiness.

**Readiness Testing**

WorkKeys® is a job skills assessment system that helps employers select, hire,
train, develop, and retain a high-performance workforce (ACT, 2013, para. 1). This
series of tests measures foundational and soft skills (ACT, 2013, para. 1). This
assessment is in vogue with area employers and has nine foundational skill assessments:
applied mathematics, applied technology, business writing, listening for understanding,
locating information, workplace observation, reading for information, teamwork, and
writing. Examples of employers using this instrument are St. Mary’s Hospital, who
requires the test for positions such as Patient Services Representative, and Wolverine
Coil Spring, a local industrial manufacturer located within the city (ACT, 2013). The
State of Michigan uses WorkKeys® as hiring criteria in selecting educational
paraprofessionals in the public school system (State of Michigan, 2013c). The State also
uses WorkKeys® for the Michigan Merit Examination (MME), an assessment
administered to 11th and 12th graders. The MME consists of WorkKeys® along with
ACT’s Plus Writing college entrance examination and state-developed assessments in
math, science, and social studies; these measures evaluate outcomes in the public schools
(State of Michigan, 2013b). In addition, the State uses WorkKeys® to prepare ex-
offenders for workforce readiness in its pre-release program (State of Michigan, 2013a).
These examples are among the over 200 employers in Southwestern Michigan reported
by WIRED (Workforce Innovation in Regional Economic Development, 2013) as having
signed a letter of intent stating their commitment for the WorkKeys® program.
Among the nine assessments available from WorkKeys®, three are used at this urban college: applied mathematics, locating information, and reading for information. The successful completion of ACT’s WorkKeys® in those three areas may, depending on scores, lead to issuance of the National Career Readiness Certificate (NCRC), which is a portable credential provided by ACT. WorkKeys® scores are described by levels, which include platinum, gold, silver, and bronze. To earn a certificate at the platinum level, one must score a minimum of 6 on the three core areas, which include applied mathematics, reading for information, and locating information. Gold certificates require a minimum score of 5, silver necessitates a score of 4, and bronze a score of 3 on each of those core areas. The testing organization claims that more than one million people across the United States have earned the NCRC certificate (ACT, 2013). Aligning the college’s testing with an assessment in local use by employers would seem to encourage student success both by completing programs and in gaining employment after completion. For those potential students who do not meet the cut scores required for their program of study, a KeyTrain® lab is available, with tutoring services. Students may increase their skills in any or all of the three areas: reading for information, applied mathematics, and locating information. The KeyTrain® lab activities are interactive; the work includes assessment of skills, review and practice applications, then pre- and post-tests to determine if the student has increased his or her competencies enough to retest. Through retesting, students may meet the cut-scores required for the Job Training program of interest. Enrollment does not occur until the skill level reaches that identified for the course of training. This WorkKeys® assessment requirement has been in effect since
August 2012. Reiterating, evaluating the effect of this testing on completion in Job Training is one of the purposes of this study.

**Orientation**

Prior to beginning their course of study, students attend a mandatory orientation. This 4-hour program consists of learning about critical thinking, identification of one’s learning style, completing a measure of persistence, and introduction to the college’s resources for counseling, veteran’s issues, fitness facilities, the library, articulation, the student code of conduct, job placement, and the procurement of a student ID. Students are taken on a tour to locate their training area prior to beginning class in the upcoming week and receive guidance about what to bring to the first class, ensuring their preparedness. Initially, mention of these topics is made by the counseling faculty leading the orientation; subsequently, the college’s veterans’ official, the librarian tasked for vocational education and the articulation coordinator all present information about the college during the session. The introduction of staff members appears to have the effect of additional questions and a higher level of engagement by students attending orientation. Students participate in a pizza lunch with the faculty member responsible for their training, which provides the opportunity for questions about the training, about employment, and about the career path being undertaken. Students have a clear picture of where they will be, with whom they will work, expectations of the program and the instructor, and the advantages of completing their training goals. At the conclusion of the orientation, students complete an evaluation of the experience. Comments have included an appreciation for getting to know instructors, learn important logistics such as parking, approval of determining their learning style, and pleasure at group participation in an
exercise which defines critical thinking and relates the Job Training setting to that of the employment arena.

The Student Perspective

A high percentage of students in the college’s Job Training programs are students from a minority or low-income background. A significant percentage of these students are returning to society after incarceration. For students with this characteristic, the typical challenges faced by low-income students, adult learners, or students of color are exacerbated by the need to begin to fit back into society, to manage living expenses, to re-establish relationships, to meet conditions of probation and parole, and to find success at re-entry. This is a population desperately in need of a second chance. Scrutiny of what specifically helps the Job Training students make the decision to continue with their education may inform research on what the determinant factors are that contribute to college completion. The use of survey data allows examination of the student perspective. Because narrative is in its most powerful form when accompanied by the context of intonation, gestures, and expression, a video of this student perspective was produced. The experiences and ideas of students may help inform research about their needs and how they navigate barriers to their success. Examining factors such as the completion rates prior to and after implementation of ancillary supports (such as mandatory orientation and testing to ensure readiness and support if students don’t meet the required scores) also provides clues as to whether institutional efforts to increase completion are being successful.
The Theoretical Framework

The theoretical framework for research is a conduit to the understanding of the data; many researchers studying completion have relied on psychosocial theoretical paradigms to guide understanding and provide clarity. Tinto (1993) expanded his sociological model created in 1975 which he labeled interactionalism. The model initially focused on academic and social interaction to include psychological factors such as isolation, adjustment, and incongruence. McClenney (Center for Community College Student Engagement, 2009) focuses on the academic and social student engagement but also examines organizational and psychological aspects in formulating theory about what influences students to remain in school. Habley et al. (2012) propose a model that commingles aspects of economic theory, such as return on investment, with social (engagement) factors, organizational roles (assessing preparation and promotion of a student success culture) with the psychological (motivation and self-regulation) to discuss persistence.

This research relies on psychosocial theory grounded in Frankl’s work, particularly his proposal that the human species finds reward, sustenance, and success in a search for meaning, which is self-deterministic and reliable even under extreme duress (Frankl, 2006). Viewing student success and completion through scrutiny of their psychological characteristics and the social context surrounding them helps decipher many clues about how students perceive success. The meaning that students attribute to their studies and to successful completion will be a powerful element when considering the equation of completion.
Organizational factors also play a key role in student integration, and that theory is examined in this research; it is difficult to examine completion without an understanding of the institutional framework guiding that effort. Chickering and Reisser (1993) discuss the competencies and tasks included in college student development, mentioning a heightened awareness of cultural diversity as part of formulating a successful educational identity; specifically they state that “sensitivity to people from other cultures needs to move beyond intellectual understanding” (p. 146). Cultural considerations, ethnocentrism, and creating a broader basis of social awareness are examined in this study to determine what role they may play in students completing their education.

Such an integrated theoretical basis allows examination of results from different lenses, in conjunction with the student perspective presented in this research. There is a plethora of research and literature engaging the topic of college completion. A multi-faceted theoretical framework, for the purposes of this research, encourages examination of several different viewpoints on the issue of completion, which is a highly researched topic: a thorough investigation ensures that this concept is held to the light for examination. Perhaps academic researchers are following the same challenge that faculty give to their students: with enough critical thinking and examination, the problem of how to increase completion rates at colleges can be thoughtfully addressed.

Clearly, college completion is an issue of extreme importance for those engaged in providing viable educational opportunities within a community college setting. Both access and completion are addressed in President Obama’s philosophy of education. No longer is it sufficient to tout the numbers enrolling at colleges; the whole measure must
be considered so that each type of institution must consider the number of those who attain their college credentials to be the new yardstick for success. An in-depth look into what the job training students at this community college believe leads to their success, as well as an evaluation of the effectiveness of recent supports such as pre-entry testing and remediation coupled with mandatory orientation, may also provide some clues about institutional endeavors that support student achievement in higher numbers.

**Limitations**

The research population is located at a large urban community college in Michigan, resulting in limitations in generalizing the results across a broad range of community colleges. Such limited generalizability results from the potential for individual institutional characteristics specific to this college that potentially factor into the research results. While internal validity is much higher when conducting studies with a population defined by one community college, external validity correspondingly is reduced. A benefit of such targeted research is more depth, albeit at the sacrifice of breadth that would be evident in examining a larger number of institutions (Vogt, 2007). Typically, research with the limitation of assessing a small population can be useful in perusing the data and detail of one community college in order to determine whether other institutions may profit from such an in-depth examination, or whether preliminary findings indicate a future study with a larger scope. The rich data from the student narratives of the video provide researchers with an opportunity to observe student perspectives about completion of their programs. Again, while not widely generalizable, such data can provide considerations for further research if patterns are noted.
Sampling error is minimized for the document analysis, provided to calculate completion rates and to examine other variables that may interact with these outcomes. There are two disadvantages in conducting an exhaustive document analysis using a single subset. First, the study is more limited in scope; in this study, the population of Job Training students at this urban college may be used to confidently generalize only in terms of students who enroll in Job Training courses. Secondly, subjects from a more tightly focused group permitting such inclusive sampling are likely to be a more homogenous group, again limiting the ability to generalize the research results. For example, students who matriculate at the same college for credit courses and are degree-seeking may have very different characteristics and attitudes toward completion; this is clearly evidenced in the demographic population characteristics between Job Training students, a high percentage of whom are from at-risk populations, are adult learners, and who have a much higher completion rate than students pursuing a certificate or degree. The completion rate for Job Training students is 77.9% for the 2012–2013 academic year; for certificate and degree seeking students at this urban college, the graduation rate is 15%, while the graduation/transfer out rate is 33% for 150% of the typical time to earn the credential in 2008 (NCES, 2013). The value in research assessing a single population at one institution lies in both evaluative purposes for the population at hand, and to act as a point of origin for further research. Certainly, the high completion rates and attraction of a high percentage of at-risk students (minority, adult, and ex-offenders) may well provide some variables that could be researched across different populations as the United States increasingly prioritizes college completion in search of a world-class workforce.
Sampling for the survey and for the interview to collect data for the production of the video is by student self-selection; students are asked to volunteer for participation. There exists, then, a higher likelihood of selection effects. Students who choose to participate may also have higher motivation to complete college or have other characteristics that are not representative of their classmates. In addition, the population itself, Job Training students, is unlikely to be representative of a general college population. The nature of the training is short-term (18 weeks), and therefore may be easier for students to attain than the year required for a certificate or 2 years for an associate degree; the training is immersive, though, and does require full-day attendance (34 hours per week), which exceeds the requirement for typical college students. At this large Midwestern community college, students who pursue credit-bearing certificates and degrees are doing so on an increasingly part-time basis. This may be in response to working more hours as the economy continues to impact the lower classes. While at-risk students have fewer supports and multiple barriers, there may be more at stake in completing college as many of them view this as the only remaining opportunity to obtain financial security. Finally, there may be some selection effects in terms of the characteristics of a student who seeks immersion training as an immediate educational track to employment through job training. Because of these facts, caution is advised when generalizing this study beyond the non-credit population at a community college, specifically, at this large urban community college located in the state of Michigan.

Organization of the Study

This first chapter provides an introduction to the concept of completion and to the research being conducted. The current quest for answers regarding enhancing student
success and completion is evidenced in the goals of philanthropic organizations such as
the Gates Foundation, the Lumina Foundation, and the Kresge Foundation. Coupled with
the focus on completion by leadership organizations for the community college such as
AACC, Phi Theta Kappa, NISOD, and the League for Innovation in the Community
College, this demonstrates the current climate regarding completion. The extension of
the concern of colleges from enrollment numbers to completion numbers demands higher
levels of awareness of what is working in our colleges, as educators attempt to recreate
such circumstances for more students to evince higher completion rates.

Chapter 2 reviews contemporary literature regarding completion. Beginning with
an analysis of how completion rates are measured, the literature review analyzes some of
the difficulties in those metrics. Faulty assumptions such as the notion of linear
progression in educational goals and temporal considerations tend to skew, or even
corrupt, the data (Habley et al., 2012). Another confounding factor is that the data
assume that all college students enter the academic arena with the intention of earning a
college degree or certificate, which is not always the case, particularly at the more
affordable community colleges, which offer many types of skill development (Habley et
al., 2012; Habley & Schuh, 2007; Jones-White, Radcliffe, Huesman, & Kellogg, 2009).

Shugart’s eight principles for measuring completion are examined, and related
literature is integrated to thoroughly assess what educational leaders suggest should be
incorporated into forthcoming research and thought, when examining such data analytics.
Three emergent themes were identified in the existing literature: opportunity and
accessibility, institutional practices, and student attributes (such as social, economic, and
academic preparedness.) Those themes are examined in concert with a framework for
institutional response created by the AACC (2012) presented in their publication, Reclaiming the American Dream: Community Colleges and the Nation’s Future.

The framework suggests a movement from existing foundations in student access to student success, from course selection to clear, coherent educational pathways, from low rates to high levels of student success, from tolerance of achievement gaps to a strong commitment to eradicating them, from a culture of anecdote to a culture of evidence, and from a focus on teaching to a more helpful paradigm that targets learning. Frankl’s work is reviewed to provide context for the theoretical foundation, an epistemological supposition that proposes that the most powerful motivation for humankind is the search for meaning. This framework allows context for understanding the students’ perspective when examining college completion.

Chapter 3 reviews the methodology proposed for this study. Beginning with a detailed overview of the research design, the chapter reviews the research questions and outlines the multiple methods used in this research to investigate those questions. The time period and setting for each stage of the study is outlined. WorkKeys® cut scores required for program entry are presented. The survey questions are examined, as well as the time period and setting anticipated for data collection. Subsequently, the time period and setting for the interviews is presented, along with the questions that were posed during this phase of the study. The process for the product, the videotaped and edited responses of students discussing the meaning of their endeavors, is outlined. Data analysis methods were planned and reported, for both the quantitative and qualitative portions of the research. Finally, the limitations of the study are presented.
Chapter 4 presents the findings and results of the study, beginning with a review of the quantitative data comprising the 3-year study of completion rates of the Job Training program. Survey responses are analyzed, using demographics and participant responses to augment the completion data and to add the student perspective on the factors that support and those that impede academic success and completion. Finally, the video portion of the dissertation presents, in first person, the narrative of students who discuss the meaning of an education and what they believe might influence success or failure.

Chapter 5 reviews the data presented in Chapter 4 and draws connections to analysis and interpretation of the results. Reflections about what the data mean within the community college setting are presented and discussed, using evidence from the research for support. The chapter is structured around the research questions, and quantitative data from the measured completion rates, qualitative data from the survey, and project data from the video are interpreted and discussed. Finally, a close look at how the project data fall into the theoretical framework of Logos, based on Victor Frankl’s work, is evaluated, with transcripted, first-hand commentary from students providing evidence for the correlations between the existential meaning proposed by Frankl and that found within the verbiage of contemporary community college students at a large urban Midwestern community college.

Chapter 6 revisits the literature on college completion presented in Chapter 2, to make connections with the findings from this study and provide conjecture about how this study fits into the existing body of literature. The implications of the research, along
Definitions

- The academic year for Job Training is July 1–June 30.
- Completion is defined as obtaining the certificate of completion for Job Training; in the context of other certificate or degree programs, it is used to denote a student’s earning those credentials.
- Student success is considered the continual meeting of educational goals, the continuous achievement of the requirements needed to eventually reach completion.
- At-risk: this term refers to students who have recognizable barriers, such as being first-generation college students, students of color, adult learners, students from an impoverished background, or ex-offenders.
- First-generation is defined as neither parent having earned a baccalaureate degree.
- Impoverished background is defined as being eligible for the Pell grant when the Expected Family Contribution (EFC) = 0.
- EFC – Expected Family Contribution: A financial aid term that college staff use to determine how much financial aid to award to a student (Federal Student Aid, 2014).
- Baccalaureate: A 4-year college degree.
- Ex-offenders: Persons who have been convicted of a felony in their past.
- Persistence: Continuing college from one semester to the next semester.
• Perseverance: Continuing college even in the face of obstacles or recurring barriers to meet academic goals.

• Retention: Continuing college from year to year.

• Cut-scores: The minimum scores required to enroll in a program of study.

• Swirling: Enrolling at two or more colleges to gather sufficient credit hours to meet academic goals.

• Logos: From the Greek, denoting “meaning” construed by an individual.

• Existential: Denoting human existence and the experiences that are circumstantial to the conditions of life. Existentialism is an ontological conception of the human condition, holistic in that it pairs emotional experiencing with rational thought (International Encyclopedia of Philosophy, 2013).

• WorkKeys®: A job skills assessment system provided through American College Testing (ACT) that helps employers select, hire, train, develop, and retain a high-performance workforce (ACT, 2013).

• KeyTrain®: A comprehensive learning system for common skills required by all jobs, based on ACT’s WorkKeys® assessment system (ACT, 2014).

Summary

The question of how to move more students toward completing college is a clarion call to community colleges, universities, philanthropic organizations that support education, and policy makers. Substantial literature exists on the topic, and significant energy has been expended to more adequately understand the concept. This dissertation reviews college completion in the context of Job Training, which is short-term immersion
training in vocational skills that leads to immediate employment. These students have the highest rate of completion of any group within the community college being studied, at 77.9%. Simultaneously, a significant number of the students in this group are from low-income and ethnic minority backgrounds. The organization and a summarization of each chapter of the study were provided, along with definitions. The research questions were presented, and limitations were reviewed. Much of the literature focuses on how to raise completion rates, or on examination of factors and variables that require change to support higher levels of completion. This research proposes to discover and share what factors into the high rate of perseverance and success of Job Training students, as evidenced by the strong rate of program completion. It is a perceptual shift, from what is amiss, to what is thriving, in viewing student motivation and perseverance through completion.
Perusal of the expansive literature targeting community colleges and completion rates leads to identification of three areas that have been consistently discussed as critical factors: (a) opportunity and accessibility, (b) institutional practices, and (c) student attributes such as social, economic, and academic preparedness (see Goldrick-Rab, 2010; McClennen & Oriano, 2012; Tinto, 2012). Each of these factors has been employed with a focus on what goes awry with the educational process in an attempt to understand how to serve students to create the conditions for student success that results in college completion. This section will begin with a review of how student success is measured. This examination is warranted, since flaws in the paradigm of completion research will surely affect its measurement.

Measuring Completion

Throughout the literature, authors suggest that the current retention framework rests on two faulty assumptions: a linear progression in educational goals, and the belief that all college students enter the academic arena with the intention of earning a college degree or certificate (Habley et al., 2012; Habley & Schuh, 2007; Jones-White et al., 2009).
Linearity is defined by Habley et al. (2012) as a process in which the student attends a single institution from matriculation to graduation (p. 14) and adds the notion of temporal expectations (a definitive time base) being equally as culpable in the misrepresentation of completion data. Linear, temporal data are contraindicated as a measure of completion because they suggest that institutional data are the source of information regarding outcomes. Evidence-based initiatives such as Achieving the Dream, which examine the data for each institution, are vulnerable to this conundrum.

Bailey (2003) labels the tendency of students to enroll at more than one institution or to transfer prior to graduation as “swirling” (she attributes the origination of the term to officials at the Maricopa Community College System in Arizona, dating to 1990) and theorizes that the reasons can be as varying as cost, preference of instructors, or availability of classes. It would seem that another influence might be ever-expanding opportunities for distance learning at other colleges or universities, which can be as accessible as one’s own home computer. Efforts among colleges to provide an increasing array of choices to accommodate students, such as the Michigan Community College Virtual Learning Collaborative, offer students the opportunity to take courses at another college within the state for a tuition rate comparable to the student’s regular in-district rate. If an institution is not adept at tracking students who do not intend to earn degrees, or who attend multiple institutions, the calculation of completion rates based on institutional data is instantly confounded.

Several researchers (Bailey, Calcagno, Jenkins, Kienzl, & Lienbach, 2005; Page, 2013; Russell, 2011) attempt to circumvent the more narrow view of a single institution’s statistics through the use of aggregated data such as NELS, IPEDS, or NCES; still, if the
institutional data that provide these larger data sets have been inflated by students attending multiple institutions, the same problems must exist in the aggregate since it exists in the individual institutional data reporting used as the basis for the aggregate data set. This creates an even stronger focus on Habley et al.’s (2012) caution that the current framework rests on another fallacy: the lack of clarity about student goals. When evidence-based models providing data for student completion become clearer about student intentions, the data will begin to reflect a higher level of accuracy. Polling students through the use of the digital campus (typically used for registration) or asking a question on the application form are often methods used by community colleges to determine student goals. Still, the answer to this question, typically posed at the inception of a student’s college career, is dynamic and subject to change, particularly with students who are undecided. Without fastidious follow-up measurement of student goals, the data used to measure the success of college completion cannot accurately answer the question.

Shugart (2013) echoes this concern about the measurement of college completion, and cautions that care must be exercised when engaging in data collection since such information can be misused. This caution results from an example in which his friend, Richard Rhodes, drove to work during his first days of becoming President at Austin Community College. During that drive, Rhodes, previously President of El Paso Community College, discovered a billboard funded by a local business leader that read, “Austin Community College, Graduation Rate 4%—is this a good use of taxpayers’ dollars?” (Shugart, 2013). When investigating this concern, Rhodes determined that the graduation rate referred only to first-time, full-time students, who comprise only 5% of
total enrollment at the college (Fain, 2012). In addition, transfer rates to universities were not included in this data, which then (according to Shugart) raised the success rate to 43%. While this is not a remarkable success rate, it paints a very different picture than does 4% (Shugart, 2013). Preparation for transfer, whether or not a student chooses to remain at the college long enough to graduate, is a core element of the community college mission.

Shugart (2013) frames the problem eloquently:

So here is the challenge we face as an industry: We are being asked to achieve much better results with fewer resources to engage a needier student population in an atmosphere of serious skepticism where all journalism is yellow and our larger society no longer exempts our institutions (nor us) from the deep distrust that has grown toward all institutions. (para 12)

To meet this challenge, Shugart developed eight principles for use in measuring completion:

1. Be careful what and how you are measuring—it is sure to be misunderstood.
2. Measure for improvement.
3. College outcomes measures should be based on college-ready students.
4. Align accountability measures to the proper level of analysis.
5. Performance measures should be primarily value-added.
6. Think educational ecosystem, not just institution.
7. Importance of completion to students.
8. Learning comes before completion. (para. 16—59)

**Be Careful What and How You Are Measuring**

Clearly exemplified in the misrepresentation of Austin Community College’s publicly advertised completion data, misunderstandings can occur when data are
presented out of context or when small sample sizes are compared to a larger whole.

Selingo (2013) suggests that colleges must “unbundle” the degree, to accommodate swirling students who engage in a mobile lifestyle; he finds that higher levels of transferability of courses and stronger collaborative work between institutions will allow for such an action. Clearly, attendance at multiple institutions with graduation from only one infers that the successful completion at one institution partially resulted from the positive impact and contribution of all of the institutions whose courses transfer and meet the degree requirements. Yet, this single institutional measure is how we calculate completion, and those other colleges participating in this student’s education must count this graduate as a non-completion. Shugart (2013) asks even more difficult questions:

Is there any good reason to exclude part-time students from the measures [of completion]? How about early transfers . . . How are the measures, inevitably used to compare institutions with very different missions, calibrated to those missions? How can transfer be included in the assessment and reporting when students swirl among so many institutions, many of which don’t share student unit record information easily? And once a student transfers, who owns baccalaureate completion as an outcome for transfers? Is it really just the receiving institution? Should the mission of helping the 30 million adults in America, with some college but no degree, be represented in the measures? (para. 19)

Measure for Improvement

Shugart (2013) suggests that the measurement of completion should be designed around institutional performance improvement. He points to more finely tuned measures that seek to enlighten specific pathways through the institution. From this vantage, measuring completion of first-time, full-time students makes sense when it is used for edification regarding this population—but other completion rates, based on the mission of the college, must be calculated to inform other populations. Examples might include adult learners, dislocated workers, college-ready students who have completed a course
of developmental education, or the Job Training students who comprise the population for this study. Such granular, protean measures provide more sensible data to both students and the institution in assessing success and developing further measures to support students. For example, suppose the Job Training completion rate for 2009–2010 was 70%; what value would a student or educator engaged in Job Training realize, in knowing that the institution’s completion rate for the first-time, full-time students enrolling in 2009–2010 was 15%, or that the transfer-out rate was 24%? Purposeful measurement must include detailed information for multiple populations, if it is to be used to improve the effort and provide meaningful data to those perusing it.

**College Outcomes Measures**

Shugart (2013) suggests that completion rates calculated for populations that include students who are not yet academically prepared for college conflates two different populations and confounds data, by introducing variables of the success rate of developmental programs (para. 22). He advises that students absorbed in completing course work to build academic foundations should be measured separately. Clearly, such data would be useful in evaluating the institution’s endeavors to support academic readiness, but are less relevant to the question of completion rates (Shugart, 2013).

The example used in the paragraph above, with a 15% completion rate of first-time, full-time students and a 24% transfer rate, suffers from such conflation of data. The researcher compiling these data is careful to observe a 150% timeline to allow adequate time for completion. The measure, then, includes those students engaged in building academic foundations who have not yet had the same courtesy of being evaluated with 150% of the time period that may be necessary to complete college. Students who
required two semesters of developmental course work would not have been able to complete a 2-year degree in the 1½ years they had remaining under this 150% protocol. When adding considerations such as English as a Second Language for immigrants, the timeline may extend even farther. Habley et al. (2012) point to the importance of such considerations, noting that Hispanics, African-Americans, American Indians, and Alaskan natives, who are highly representative of at-risk categories and often in need of developmental coursework, will comprise nearly 50% of the population of the United States by 2050. This is a significant proportion of the community college population, which already reflects enrollment demographics of 42% of students hailing from an ethnic minority (AACC, 2013) and which will presumably be even higher by 2050. Ensuring that completion measures address only those students who have actively engaged in college-level course work leads to a clearer understanding of completion rates, and adds equitable consideration for developmental populations who, when considered as first-time, full-time students, may not possibly complete in the time remaining after finishing the course work that prepares them for college studies.

**Align Accountability Measures**

Inherent in Shugart’s (2013) suggestion that accountability measures must align with the proper level of analysis are indicators of the different types of student goals mentioned previously; as examples, discussion revolved around college-ready learners who are first-time, full-time, adult learners, dislocated workers, college-ready students who have completed a course of developmental education, or Job Training students. Institutions may find additional categories, upon examining their mission, to align accountability and the proper level of analysis. In addition, further granulation of
programmatic, course, or faculty outcomes measurement will help align accountability with the level of analysis. Shugart further recommends that such clarity in alignment and detail be used to inform policy makers, who need to understand these differences to make effective decisions regarding higher education.

Complete College America (2011) has made initial forays into creating analytics to measure the successful completion of all students. With data on 33 of the 50 states provided by the governors of those participating states, Complete College America created national findings based on the calculated medians of each state’s data. This national initiative designed common metrics for reporting, in the search for uniform and consistent data measurement. While such data provide a clearer picture of the success of the national effort toward college completion, Michigan did not report data for Complete College America project. Notably, the initiative calls for improvements in addition to these universal metrics that allow larger measure and the ability to disaggregate data into the state level. The suggested improvement of creating completion goals at the state and at the campus level ensures that the data bring forth the question of performance and vision, rather than being simply an informative report about outcomes.

**Value-Added Performance Measures**

Measuring performance so that the value of the learning, the pathway, or the credential itself is enhanced is an important factor in not only how, but why we collect data and measure the performance of a community college. The trend of accountability, or outcomes measurement, was introduced in the early part of the decade (Dellow & Romano, 2002) and can be conceptualized as the exhortation, “Prove that the institution accomplishes what it claims, in its mission, that it has set out to do.” Such a limited
scope is evolving into the enjoinder, “Don’t just prove what you’ve accomplished; tell us how you will enhance the value or increase your performance based on your measurement of outcomes.” This trend is evident in increasing use of performance evaluations, performance indicators, performance-based budgeting, and performance-based funding (Halpern, 2013; Harbour, Davies, & Gonzalez-Walker, 2010). Shugart’s emphasis here on value-added performance measures reflects this movement of community colleges from demonstrating competencies through outcomes assessment to providing more distinguished work characterized by value-added, or excellence in performance, considerations.

Shugart (2013) mentions that correlating such excellence with exclusivity is wrong-thinking. Community colleges that consider limiting access based on academic levels of preparation are likely to realize higher completion rates, but this comes at the cost of the mission; traditionally, community colleges have prided themselves on access and as being “Democracy’s Colleges,” bringing opportunity to those less fortunate and less equipped to navigate the campuses of universities. Reframing the completion effort to reflect value-added performance measures does seem a more elegant method of achieving the same goal.

**Educational Ecosystems**

Casazza and Silverman (2013) describe a paradigm that shifts the seven disparate segments of education (pre-school, elementary education, middle school, high school, 2-year postsecondary, 4-year postsecondary, graduate and professional school) and integrates them into a single, streamlined ecosystem. Their vision involves “a collaborative, partnership model: entry and exit standards coordinated between levels,
curricula aligned with each other, and instructors reaching across segments to ensure student achievement at each successive level” (p. 5). Shugart (2013) believes that such ecosystems can improve the experiences and achievements of students and proposes that such a design should permeate our thinking, our institutional structure of education, and should be a measure of the results of colleges regarding completion. He suggests that accreditation itself does not lend itself to such a model, but that feathering of organizational lines, sharing of faculty, or contractual partnerships between institutions could help increase measures of student success (para. 32).

Such an ecosystem reorganizes education through providing transparency of expectations at multiple levels, strengthening the preparation for ascending through the different stages, and responding to individual needs of students as they occur rather than waiting until difficulty is encountered, then addressing it at the next level. An example of this is addressing insufficient academic preparation at the high school level rather than waiting until these students enroll in college and test into developmental education, or bringing opportunity such as middle college activities to high school students who are ready to move on before reaching college age (Casazza & Silverman, 2013, p. 5). Shugart (2013) believes that colleges must step beyond their self-absorption and competitive tendencies to think along the lines of an ecosystem. He further believes that the advantages to students in terms of articulation and carefully defined pathways can accelerate learning and completion, when leadership is committed to such ecosystems (para. 30). Collaborative partnerships that function as educational ecosystems provide students with clearer options, and allow educators to reach across those previously defined segments to work with students and enhance learning in a timely fashion.
Measuring for completion in such an ecosystem, while challenging to accomplish, would provide a more informative, accurate picture of goal attainment by students, and could provide vital data to leadership, governing boards and policy makers (Shugart, 2013).

**Importance of Completion to Students**

Shugart (2013) recommends that colleges be very intentional about communicating the importance of graduation to our students. He believes that the students apprehend our messages that emphasize affordability, college readiness, and small class sizes, but also include a lack of commitment to clear pathways to articulation that are created by ecosystems. He further believes that students are cognizant that these messages lack prioritization of graduation, and stipulates that a value proposition for attendance must remain clear about the goal of completion. Casazza and Silverman (2013) echo this idea of communicating the value of completing college by developing an equation: “High Expectations (HE) + Comprehensive Support (CS) = Student Persistence (SP)” (p. 8). In their view, HE is the factor that requires colleges to become facile in articulating the challenges inherent in learning, ensuring that rigorous standards apply to all students, then providing the support mechanisms for success (Casazza & Silverman, 2013). This, they believe, is the catalyst to increasing persistence through graduation.

Communication of the commitment to completion and challenging students with high expectations may be even more important in the community college setting, as there are other priorities that compete for students’ time and attention. Pulley (2012) discusses this by saying that such students have a “back story” in that “they live and work in the real world” (p. 22). In fact, the data suggested in this article proposed by Steven Johnson, President of Sinclair Community College in Ohio, indicate that only 20% of students in
the United States fit the traditional model; the other 80%, says Johnson, “has other commitments. They need to feed their families” (Pulley, 2012, p. 22). With such critical commitments competing for the students’ attention, community colleges need to be purposeful and intentional in communicating the value of reaching educational goals, as well as developing the CS, or comprehensive support, portion of Casazza and Silverman’s (2013) equation. In this manner, students become collaborators in the effort to earn their credentials, and have a clearer understanding that their efforts apply not only to gaining suitable employment in the immediate context, but create a foundation for a successful career far into their future.

Learning Comes Before Completion

The last of Shugart’s (2013) principles for improving measurement serves as a reminder that the push for college completion is an empty gesture if it is not backed by rigorous learning. Credentials are easily packaged and measured and can serve as indicators for employers, educators, and policy makers to measure success. Shugart conceives of the degree as a means, and of relevant, deep learning as the end state. He further suggests that framing the issue in this context engages faculty in a way that the topic of completion does not. O’Banion (1997) refers to this emphasis as the Learning Revolution and proposes that recognizing learning as the core of the community college mission is requisite to both reform and transform education.

Milliron (2012a) suggests “radical, immediate feedback” to students regarding their learning progress, and in a keynote address earlier that year, discusses the tendency of data-based initiatives to target administrative efforts rather than the endeavors of students, faculty, or advisors (Milliron, 2012b). Milliron, too, subjugates credentials to
the actual learning (2012b) but also sees a connection: Deep learning and immediate feedback lead to stronger motivation for students and empowerment for faculty (Milliron, 2012a). Such motivation toward learning and engagement in teaching are the foundation of the commitment to obtaining a degree.

Shugart, Puyana, Romano, Phelps, and Walter (2011) also perceive this need for learning assessment and identify the key receiver as the student, with the next important participant being the professor. All other roles, such as the department, the institution, the State, or the Department of Education, are secondary considerations in this process according to these authors (p. 125). Such assessment of learning and timely feedback allows the student (and perhaps the professor) to make adjustments, and to react in order to improve their capacity for learning. O’Banion (2011) believes that such a learning-centered repertoire brings powerful processes into play, which promote substantive change, and which encourage learners to “explore and experiment with new and expanded versions of what they can become” (p. 6). Learning, then, becomes the impetus for continuing to completion, and centering assessment of learning as well as measurement of completion for the individual student provides a clearer picture of how well the community college progresses toward achieving the mission.

**Emergent Themes**

It was mentioned at the beginning of this review of contemporary literature that there are three emergent themes found in the writing about community colleges and completion rates: opportunity and accessibility, institutional practices, and student attributes such as social, economic, and academic preparedness (Goldrick-Rab, 2010;
McClenney & Oriano, 2012; Tinto, 2012). These themes are depicted graphically in Figure 1.

**Figure 1.** Emergent themes.

The shift toward examining the factors that influence completion have prompted community colleges to invoke a realism that has led to clarity about organizational weaknesses and visioning for stronger institutions. Fain (2012) reports on a National Institute for Staff and Organizational Development (NISOD) panel, relaying their observation that “the biggest benefit of sometimes painful discussion about completion is their impact on campus culture” (para. 14). The panel thought that increasingly accurate collection of data has been a strong impetus to make improvements and to seek answers regarding the enhancement of completion rates. That data collection is more easily available when identifying the emergent themes from the literature, each of which may lend itself to measurement.

Examination of each of the three areas—opportunity and accessibility, institutional practices, and student attributes—provides insight into the current theoretical
paradigm; O’Banion (2010) frames this effort as “the completion agenda” and traces its roots in postsecondary education’s history, stating,

In the last two decades, and with incredible intensity in the last 18 months, a second major agenda has been emerging: the “student success agenda,” which has become the single most important goal for community colleges. As that agenda has evolved, it has morphed into the “completion agenda” as the more sharply focused goal of student success and the goal that has become an imperative for the nation. (O’Banion, 2010)

**Opportunity and Accessibility**

The American Association of Community Colleges (AACC, 2012) describes “the fundamental mission of the community college” as “ensuring that millions of diverse and often underserved students attain a high quality education” (p. v) and asserts that “American community colleges have served as the people’s colleges and [as] the Ellis Island of American higher education” (p. 1). The idea of equal justice and protection under the law can be traced to the Fourteenth Amendment of the United States Constitution; this governance has spawned landmark legislation such as the Morrill Act of 1862, the Civil Rights Act of 1866, *Brown v. Board of Education* (1954), and *Bolling v. Sharpe* (1954), cases in education that sought to assure opportunity and accessibility for all Americans. The social justice view of the community college mission to provide opportunity and access is well documented throughout the literature (Bell, 2007; Cohen & Brawer, 2008; Debard & Rice, 2009; McClenny, 2004).

**The Open Door**

Myran (2009) wrote and edited additional contributions to a volume that explores college accessibility, *Reinventing the Open Door: Transformational Strategies for Community Colleges*. Rao (2013) proposes that barriers to college faced by adult learners can be more easily navigated through beginning an education at a community college.
Bragg and Durham (2012) discuss the fact that community colleges enroll a larger number of racial and ethnic minorities and low-income, immigrant, and first-generation students who would otherwise not have access to higher education. According to Nora’s (2013) report for the American Association of Community Colleges (AACC), more than half the Hispanic and African-American students who enter college do so at a community college. The AACC further reports that students from an ethnic minority group comprise only 6–8% of those enrolled in postsecondary education, but account for nearly 60% of the total enrollment in community colleges (Nora, 2013).

Opportunity and accessibility are the sine qua non of college completion. It is inarguable that prospective students must be able to access education in order to pursue it, but the open-door concept of community colleges is expanding to include the completion of education rather than the mere opportunity for it. This has the effect of shifting the mission of the community college from mere access to persistence and completion. Dowd (2008) describes community colleges as gateways, offering access to those who might not otherwise be able to attend college, and as gatekeepers, in that such provision of opportunity reduces the demand for expansion of universities, who are then free to focus on increasing selectivity and using other indicators as markers of quality for student enrollment (p. 2). Dowd further notes that

It is open access enrollment (not outcomes) that defines the community college mission and identity. Yet with access to college more assured today than student success in achieving educational goals or earning a degree, there have been many calls for higher education to shift its focus to when, where, and how successfully students of different academic and socioeconomic characteristics navigate educational opportunities. (p. 4)
This foreshadowing of the mission shift of community colleges is underscored by Myran’s (2009) “reinventing” of the open door to include not merely opportunity but a measured look at the pathway to success that lies beyond that door.

**The Equity Agenda**

An “equity agenda” was proposed by Bailey and Morest (2006) that consists of a three-pronged approach to educational opportunity: access, readiness, and success, which are all mission parameters becoming more frequently espoused by community colleges (Collins 2010; Pusser & Levin, 2009; Tinto, 2006; Whissemore, 2010). Bragg and Durham (2012) and Bailey and Morest (2006) discuss the equity agenda as inherent in the community college mission, and believe that, if not for this characteristic of community colleges, far fewer racial and ethnic minority students and students from a low income socioeconomic status would be able to attend postsecondary education. Bailey and Morest find three components to the equity agenda: access, readiness, and success.

Kay McClenney, Director of the Center for Community College Student Engagement, advised that community college educators should ask “hard questions” regarding student attainment to examine whether they are creating the conditions to ensure student success (McClenney, 2004, p. 11). McClenney continues: “The urgent priority . . . is to be involved in shaping accountability systems so that they are appropriate to community college missions and students, and so that they serve rather than thwart the access and attainment promises” (p. 13).

**Refocusing the Work: From Access to Completion**

Bragg and Durham (2012) cite President Obama’s American Graduation Initiative as the catalyst for refocusing higher education from access to completion and find that it
has the effect of emphasizing completion as the more definitive measure of success for community colleges (p. 107). Still, few researchers or practitioners heed the fact that open access has an impact on the likelihood of completion; while these two concepts are not at odds with one another, they are inextricably linked. Goldrick-Rab (2010) discusses “efforts . . . to describe the substantial barriers community college students face and therefore the challenges that institutions must overcome to help students succeed in earning degrees” (p. 450). Bragg and Durham echo this sentiment, perhaps a bit more forcefully:

[Community colleges] are likely to be caught in a regrettable catch 22: By offering the primary pathway to higher education for historically underserved students, including learners who are underprepared for college-level coursework and who struggle to finish, community colleges diminish their chances of demonstrating success. (p. 107)

Following this paradox emergent in the community college mission to its conclusion, Bragg and Durham (2012) caution that the shift from access must take into consideration that the two are linked and that, if community colleges fail to acknowledge such a connection, they may be open to criticism and reduced public support (p. 107). These researchers provide the further caveat that, if community colleges choose instead to limit admissions, it will result in greater social and economic inequity between student groups (p. 107).

Another consideration is that decreasing support from the state and federal governments have resulted in increasing tuition costs; several authors note that these increasing costs of higher education are pricing individuals from lower income ranges out of the market, further closing the doors of opportunity. Selingo (2013) finds that tuition at public 4-year colleges has increased 68% in the last decade. He further notes that, as
recently as 2003, only two colleges charged more than $40,000 per year for tuition, fees, room and board, but that a mere 6 years later in 2009, 282 colleges had increased tuition to that level, with 58 of them passing the $50,000 range.

McSwain and Davis (2007) note that both the impoverished and the working poor are unable to meet basic needs in terms of finances, which presents severe hurdles when considering postsecondary education. Even when considering federal financial aid and attending the more affordable community college, the heavy burden of work and family obligations often usurp both time and financial resources needed for college attendance. McSwain and Davis cite a difference of nearly $4,000 after all aid was awarded for working poor adults in 2003–2004. And, should a student fall outside the community college district, which is far more limited than the residency required for public universities, the tuition is likely to double; examples in Michigan are Lansing Community College, Grand Rapids Community College, Macomb Community College, and Muskegon Community College. Clearly, the poor are disproportionately affected by rising tuition levels, which impede their progress and pose a serious obstacle to the access implied by the open-door of the community college. With the steeply rising costs of a college education mentioned by Selingo, the inability to afford college may extend further up to those hailing from middle class backgrounds, as well.

Does the idea of supporting completion extend naturally from the open access policy of community colleges? Is this a natural philosophical progression so that, on our campuses, educators search to answer McClenney’s “hard questions” to illuminate the journey to success for our students, even though the path is more cumbersome for many
of them? Or is the question market-driven, as colleges seek to sustain their existence through competition for scarce resources?

One answer lies within evidence found at this large urban community college located within the state of Michigan. During the enrollment spike in 2010 and 2011, counselors were presented with a discussion by the college’s leadership that centered on a proposal to create specific scores required for admissions; those who fell below those scores would be referred to appropriate agencies within the community to work toward literacy or language skills. With enrollments falling, this idea was heard no more, while the reading faculty were tasked with creating an intensive, six credit-hour course that bundles with a three credit-hour fundamentals of computing course and a three credit-hour course in college and life skills. This cohort model that has students enroll full-time for 12 credit hours is designed to create the conditions for success. The reading class is aimed at those who score below 30 on the Accuplacer test, a subgroup that is suspected to be reading at the level of sixth grade or below. The answer to the question of what drives community colleges to work toward student success and completion within a paradigm that provides opportunity to those who need additional time and skill development is a complex one; still, it would be sheer folly not to recognize that Democracy’s Colleges are not immune to reacting to the vulnerability and potential lack of support mentioned by Bragg and Durham (2012).

The importance of opportunity and access is notable in literature, as well. Wes Moore (2010) writes of the paths of two young men, both named Wes Moore, living in the inner city of Baltimore; one’s path leads to becoming an Oxford Scholar, while the other’s journey is shortened by an armed robbery conviction leading to life
imprisonment. A pivotal point of the latter Wes Moore’s circumstances comes when, as a child, his mother is accepted into Johns Hopkins University while attending the Community College of Baltimore (Moore, 2010). As a first-generation student, her aspirations were clear: she wanted financial security and a good job that comes with education (Moore, 2010). Federal cuts in 1982 to the Pell Grant resulted in her being unable to attend the university, with long-term effects for her and her young son (Moore, 2010). While one cannot accurately predict the result of a path not taken, it seems likely that opportunity and accessibility to education denied to his mother completely changed the environment in which Wes Moore, then a child, would take later in his life.

Opportunity and accessibility is one of the three emergent themes in the research on community college completion. Extending access equates to serving the populace that exists in all strata of the social system. As Dowd (2008) puts it,

The use of the community college as a point of access . . . appeals to ideological principles across the political spectrum . . . by offering the prospect, even for poor and immigrant students, of movement from the lowest rung of the educational ladder to the highest, it also appeals to the principles of meritocracy, equal opportunity, and social mobility. (p. 2)

Such movement, however, can only come with the expansion of access to include success and completion; otherwise, students have incurred educational debt measureable in time and money without increasing their societal mobility.

**Institutional Practices**

The second emergent theme is that of institutional practices. While wide agreement exists that institutions must create policy and practice that enhance completion, there is less universal agreement on specifically what those should be. In fact, the answers may be different for each college. Thomas Bailey, the Director of the
Community College Research Center, notes in his preface to *Progress in the First Five Years: An Evaluation of Achieving the Dream Colleges in Washington State* (Jenkins, Kerrigan, Wachen, & Mayer, 2012) that a clear finding of this and similar research is that no single intervention that a college undertakes is likely to engender a large increase in college completion rates (p. iv). Rather, the redesign of major programs and functions throughout a college must be considered in order to achieve substantial gains in student success.

The researchers find that the institutions realizing the most progress are those who connect institutional policy and practices throughout the institution, linking measures intended to increase completion with formal institutional goals, connecting institutional research with the completion effort, and creating data teams throughout the college (Jenkins, Kerrigan, et al., 2012). Realizing that there may be as many paths to this goal as there are institutions, with outcomes measures tailored to the individuality of the college, the importance of the intentional pursuit of increasing completion is recognized as an important mission of the college. In the words of Jenkins, Kerrigan, et al. (2012), “To achieve substantial improvements in student outcomes, colleges need to make systemic changes in programs and services—no single innovation or even set of interventions will be sufficient to ‘move the needle’ on student completion” (p. 12).

**Diversity**

Diversity is a key indicator when considering the population of the community college; enrollment is increasing for students from first-generation backgrounds, adult learners, recent immigrants, and increasing numbers of students hailing from racial or ethnic minority backgrounds (Hagedorn, 2010; National Center for Educational Statistics,
Malcom (2013) cites “facilitating postsecondary access with open admission policies, higher institutional capacities, and lower tuition levels” as influential in working toward an equity agenda to serve these students; he further proposes that “in spite of the access that community colleges provide to these students, data regarding student success suggest that realizing equity in educational outcomes remains a significant challenge” (p. 29).

So what types of institutional characteristics might influence the attraction of a diverse population to community college campuses, then once there, contribute positively to the success of those students? Research has focused on admissions, advising, enrollment processes, curriculum, extra-curricular engagement, and developmental education (American Association of Community Colleges, 2012; Flores & Park, 2013; Stephan & Rosenbaum, 2012). While these are clearly contributory factors in moving students toward their goals and will be covered in more depth in this chapter, they comprise the customary answers to this question.

**Institutional Culture**

One intriguing idea about gauging organizational effectiveness and an institution’s response to challenges is suggested by Smart, Kuh, and Tierney (1997) as being that of institutional culture, which they define as “the patterns of interpretations people form about the manifestations of their institutions’ values, formal rules and procedures, informal codes of behavior, rituals, tasks, jargon and so on” (p. 258). An additional consideration proposed by these authors is that “Culture is formed over decades, as institutions ‘learn’ how to respond to challenges associated with their establishment, survival and growth” (pp. 257-258).
Applying the idea of the influence of organizational culture and how it may impact those from diverse populations, particularly given that culture is formed over decades and may be based on less than ideal suppositions regarding contemporary views of equity, one begins to wonder. Do students from diverse populations feel comfortable on the campus? Are there recognizable artifacts from their subculture that lend an air of welcome? Or does the campus feel steadfastly oriented to the majority culture, and therefore somewhat alien and beyond one’s experience? As leaders answer these questions for their campuses, they will also determine the answer to whether student success is attributable to institutional efforts or whether it happens in spite of the institution’s culture.

Framework of Institutional Response

In a report published by The American Association of Community Colleges (2012) titled Reclaiming the American Dream: Community Colleges and the Nation’s Future, a framework for institutional responses to the challenges of increasing completion was suggested. Essentially, the major changes suggested in that report that are needed to embrace the new framework are found in Table 1.
Table 1

Framework of Institutional Responses Needed for Community College Progress

<table>
<thead>
<tr>
<th>Move from Existing Framework</th>
<th>To New Framework</th>
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<tbody>
<tr>
<td>A focus on student access</td>
<td>A focus on student success</td>
</tr>
<tr>
<td>Fragmented course selection</td>
<td>Clear, coherent educational pathways</td>
</tr>
<tr>
<td>Low rates of student success</td>
<td>High rates of student success</td>
</tr>
<tr>
<td>Tolerance of achievement gaps</td>
<td>Commitment to eradicating achievement gaps</td>
</tr>
<tr>
<td>A culture of anecdote</td>
<td>A culture of evidence</td>
</tr>
<tr>
<td>A focus on teaching</td>
<td>A focus on learning</td>
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</tbody>
</table>

Source: American Association of Community Colleges (2012)

Such a new framework could be considered teleological when construed alongside student success and goal completion. Moving from access to success is a paradigm shift for community colleges that, as discussed in the previous section, redefines the community college mission.

Clear, Coherent Academic Pathways

The development of clear, coherent educational pathways is a strong institutional goal, but one that depends on career decidedness of the student, as well. While attributes of the student’s decision-making process come into play, the institution decides whether to prioritize career counseling and guidance. Diemer, Wang, and Smith (2010) discuss “support for the use of interest inventories [commonly used in college career counseling] to inform college counseling and guidance with marginalized youth” (p. 106). This author would suggest that career exploration and decision making, with the use of interest or personality inventories, are necessary for the success of both marginalized students as well as students that have more advantages. It seems only logical that, when clear goals
are set, it becomes much easier to achieve them. Still, institutional practices and priorities will determine the accessibility of such counseling services. Coll and Rice (1993) attest to the “convincing need that community college students are still very much in need of counseling” and assert that “community college counselors are crucial for helping students develop choices and competencies essential for success and lifelong learning” (p. 59). Unfortunately, the role of counseling in the community college may not be prioritized sufficiently to allow for the provision of “career guidance, personal counseling, and attention to student programming” (p. 59) that Coll and Rice mention. An example is that of the college being researched, when considering counseling staffing. In media releases, the college announces that it serves more than 30,000 students annually in degree courses, certification and training programs, workshops and personal enrichment classes. With a staff of 10 full-time and two part-time counselors, the ratio of counselors to students, even if 40% of the enrollment is attributed to workshops and personal enrichment classes, is 1:1500. As any counseling faculty member can attest, providing individualized guidance and services to 1,500 students in a semester is impossible to accomplish effectively. A review of the institution’s reporting on the National Community College Benchmarking Project (NCCBP) provides a ratio of 756:1. The researcher speculates that other counselors dealing with special populations (disability support, or grant-funded counselors dedicated to their grant activities) were included in the calculation. The national benchmark for counselor to student ratios, as determined by the NCCBP, is 700:1. In considering a 15-week semester, a counselor working 40 hours weekly would be unlikely to manage accommodating 700 students within the 600 hours of scheduled work.
Eradication of Achievement Gaps

Prioritizing the eradication of achievement gaps is another institutional commitment that can impact completion. Boykin and Noguera (2011) and Milner (2010) suggest that reframing the race-conscious concept of achievement gaps into opportunity gaps is more accurate. Such reframing can also account for teaching gaps, funding gaps, income gaps, and other inequities that play into the fact that differences exist on measures such as standardized test scores, grade point average, and graduation rates (Hall Mark, 2013). Some (Reardon, 2011; Silva, 2008; Steele, 2003) contend that the institution plays a role when considering how resources are allocated, how well instructors develop relationships with students, and whether teachers develop their repertoire sufficiently to connect with students from different walks of life. Gates and Mark (2006) emphasize the importance of such growth, saying,

No matter what our ethnic or cultural backgrounds are, we are each limited by the experience of our own culture. As teachers, it is essential that we grow beyond our own cultural background and learn about the social, political, and human experiences of others. (pp. v–vi)

As Parker Palmer (1980) suggested, we do not think our way into a new kind of living; rather, we live our way into a new kind of thinking (p. ix). Engaging students in culturally responsive ways will require that teachers absorb knowledge, stimulate cultural imagination, and examine their own cultural identity as well as those of others (Tisdell & Tolliver, 2009). Once such personal growth and professional development is undertaken, outreach and connection with students will be far more successful.

Victor Rios (2012) conducted an interview with Pedro Noguera, the co-founder of Broader, Bolder Approach to Education, a national campaign that focuses on addressing social and economic challenges. Noguera discusses the underrepresentation of black and
Latino males in higher education. He believes that, since these segments of the population are among the fastest-growing, that the societal implications are far-reaching, and result from complex and interrelated factors (Rios, 2012). Among those factors related to the institution are identity construction within the school, stereotyping, teacher expectations, and differential treatment of those groups (Rios, 2012). Noguera calls for very intentional work in building supportive learning environments, by focusing on not only academic needs, but expanding the support systems to include social, emotional, and psychological needs (Rios, 2012). He clearly believes that eradicating the opportunity gap requires more than raising test scores; it involves strong school leadership, working closely with students, and a focus on learning. Test scores will still increase when students are provided with a stronger learning environment tailored to their needs, but as a result of treating the problem (lack of engagement with learning) rather than addressing a symptom (lower test scores). Institutional concern about how to address opportunity gaps, and the social inequality they represent, will be a strong impetus toward raising completion rates for students.

**Cultural Shift from Anecdote to Evidence**

The Achieving the Dream (ATD) initiative is one that underscores the need for a culture of evidence. ATD has created a longitudinal database, useful for research and tracking of data, as well as providing the capacity for benchmarking. It has an advantage over the Department of Education’s Integrated Postsecondary Education Data System (IPEDS) in that it tracks both full-time and part-time students who evince a goal of earning a credential. IPEDS tracks only full-time students, who do not always comprise a significant majority of community college students. Institutions interested in examining
institutional data of ATD schools that includes academic preparation, student performance, financial aid, or degree/certificate attainment can access the ATD database for their research (Achieving the Dream, 2013).

ATD brings an emphasis to “gatekeeper courses” in the effort to improve the rate at which students earn postsecondary credentials. The indicators for Achieving the Dream consist of measurable factors such as the successful completion of developmental coursework, enrollment in the gatekeeper courses such as math and English, completion of courses with a passing grade of C or better, and persistence from one term to the next. Such an emphasis on gatekeeper courses ensures the student has the writing and mathematical skills to be successful in subsequent courses which demand these skills, and are a clear indicator of initial success. Researchers evaluating the efforts of Achieving the Dream are beginning to extend the systemic institutional changes needed to ensure course completion of developmental coursework then gatekeeper courses to college academic programs (Jenkins, Kerrigan, et al., 2012).

Jenkins and Cho (2012) find that ATD’s emphasis on a culture of evidence has created positive results, but has not increased overall completion rates at participating colleges. These researchers suggest that one reason may be that ATD’s focus on developmental education may need to be extended to an emphasis on taking and completing college level courses, including entry into and completion of a specific academic program of study (Jenkins & Cho, 2012). To collect sound data, Jenkins and Cho suggest that colleges measure rates of program entry and completion using data that are based on the course-taking behaviors of students rather than their declared majors; they believe this to be a more reliable indicator (p. 3).
This shift from a culture of anecdote to a culture of evidence allows institutions to scrutinize those areas where improvement is needed to enhance completion, based on data. In addition, institutions now have the ability to objectively evaluate developmental programming, the completion rates of subgroups within the college, and contextualize their college’s performance, using benchmarking data. Such an exercise allows an institution to be a better judge of how well the institution moves students toward completion and make any needed adjustments along the way.

The Shift from Teaching to Learning

A focus on learning seems intuitive, yet many institutions of higher education concentrate their efforts on teaching, research, and service (O’Banion, 2011). While it seems intuitive that learning would be the predominant mission of an institution, O’Banion discusses learning as an implied mission, rather than a visible mission, since it is the aim of research (to expand learning by building on current knowledge) and the desirable result of teaching. O’Banion refers to this shift as a “learning revolution” and suggests it has the power to transform education; that by putting learning first, there should follow a redesign of the “traditional architecture” of education, which involves the alignment of every policy, practice, and program in higher education to learning (p. 4). O’Banion’s work is rooted in Barr and Tagg’s (1995) differentiation of the Instruction Paradigm and the Learning Paradigm. These researchers proposed that the current model in use, the Instruction Paradigm, required additional costs to improve and maintain, focused on a means rather than an end, and combined both method and product. In contrast, the Learning Paradigm could grow by leaps and bounds without commitment of financial resources, and was the end state, or the desired outcome, of education as well as
being the product apart from the method used to develop it. Assessment, both in the classroom and within the institution, should focus on learning and is a powerful agent for change. Barr and Tagg relate that the Instruction Paradigm relies on the metaphor of student as vessel, passively waiting for knowledge to be imparted. The Learning Paradigm, however, requires a more holistic view of the student as navigator and as being responsible for the construction and shaping of knowledge within the framework of the individual self (Barr & Tagg, 1995). Boggs (1996) built upon this work, suggesting that the efforts of a community college should be chiefly concerned with services that further the learning needs of students, and should evaluate both the programs and staff in accordance with the contributions to student learning (p. 25).

O’Banion’s call for change regarding formulation of a Learning College is echoed by the AACC (2012) report, Reclaiming the American Dream: Community Colleges and the Nation’s Future. This report discusses recommendations for reimagining the community college and proposes three r’s: redesign of students’ educational experiences, reinvention of institutional roles, and resetting the system to create incentives for student and institutional success (p. 25). The key element of this shift from teaching or research to learning is that it moves the focus from the institution and its staff (teachers, researchers) to the students, their engagement in learning, and the outcomes based on that learning. When the focus is on teaching, the variable is likely to be pedagogy; when it is research, the variable is publications and additions to the base of educational knowledge; but when it is learning, the outcome variable is likely to be student success and completion.
Student Attributes

As mentioned at the beginning of this chapter, much of the literature regarding college completion focuses on three areas: opportunity/accessibility, institutional practices, and attributes of the student. The psychosocial context of the student is important in considering college completion. How a student perceives education and the meaning garnered from that perspective are motivating influences on behavior.

The Student Perspective and Meaning

Frankl (2006) purports that the most powerful motivation in the lives of humans is the search for meaning. How meaning is construed, or the perceived reality of a college education to an individual, will be a powerful element in the equation of completion. Frankl proposes logos, Greek for meaning, as the primary motivation for human behavior. The three important tenets of Frankl’s theory, logotherapy, are:

- Life has meaning under all circumstances, even those characterized by being difficult;
- The primary motivation for living is the will to find meaning in life;
- We have freedom to find meaning in what we do and what we experience; humans choose what stand to take when faced with a situation of unchangeable suffering. (pp. 84–85)

This theoretical framework provides a basis to understanding the perspective of the college student when considering college completion. Such a basis involves determining what meaning students attribute to their education. Considering the logos of a student regarding the completion of college permits a view of both psychodynamics and behavior, providing a more in-depth examination of their perceptions than simply looking
at behavior (Frankl, 1979). Categorized as an existential school of thought, viewing the logos of psychodynamics and behavior brings to the table the idea of responsibility inherent in existential thinking. Existentialism is an ontological conception of the human condition, holistic in that it pairs emotional experiencing with rational thought. Human existence is the key theme of existentialism, along with the idea that nature itself lacks a raison d’être, but can be described—in contrast to being explained (International Encyclopedia of Philosophy, 2013). One final characteristic of existentialism is that of a social dimension, providing context, or extending the human condition (International Encyclopedia of Philosophy, 2013). As Frankl (2000) describes the existentially based logos,

I contended that man is not he who poses the question, ‘What is the meaning of life’ but he who is asked this question, for it is life itself that poses it to him. And man has to answer by answering for life; he has to respond by being responsible; in other words, the responsibility is a response-in-action. (p. 29)

Frankl’s intense and investigative work regarding human behavior was rooted in his experiences in concentration camps in Germany during World War II; his work delineated three sources for meaning in life:

- Work (doing something significant);
- Love (caring for others);
- Courage (persisting in times of adversity). (Frankl, 2006, Foreword)

The use of logotherapy as a framework to consider student perceptions of completion, then, allows a closer look at the psychodynamics experienced by the individual rather than the mere scrutiny of the consequent behavior. Whichever source of meaning is attributed to students as they perceive college completion can help understand how they view responsibility for their goals, as well as how they construe the actual
experience itself. In working with an at-risk population, the idea of courage, of persistence through times of adversity, seems particularly relevant. Pattakos and Covey (2010) discuss Frankl’s work in terms of seven guiding principles:

1. We are free to choose our attitude toward everything that happens to us;
2. We can realize our will to meaning by making a conscious commitment to meaningful values and goals;
3. We can find meaning in all of life’s moments;
4. We can learn to see how we work against ourselves;
5. We can look at ourselves from a distance and gain insight and perspective, as well as laugh at ourselves;
6. We can shift our focus of attention when coping with difficult situations;
7. We can reach out beyond ourselves and make a difference in the world. (p. 5)

Pattakos and Covey (2010) believe that these principles lead to meaning, to a sense of freedom, and a deep connection with ourselves and with others in a more global sense. Applying Frankl’s work to the challenges of contemporary society, Pattakos and Covey liken technological advances as factors that accommodate the human element, but that understanding the logos, or meaning, can help elevate the human spirit within the world of work (p. 6).

A review of the literature finds few research studies addressing the personal meaning attributed to college completion by students. Schaefer (2009) conducted a phenomenological study of degree-seeking adult students that examines the psychosocial, cognitive, and spiritual dimensions of adult development relevant to their future vocational aspirations. Her research found persistent patterns of adult learner
characteristics and reasons for enrollment; higher education support needs; self-identified
cognitive, psychosocial, and spiritual development; and vocational concerns of meaning,
purpose, and service. Schaefer discusses her findings saying that these learners identified
a transformative process resulting in improved learner self-efficacy, and acquired new
skills through participation in a supportive, adult-friendly higher education environment
that enabled students to successfully transition not only toward degree completion and
ensuing career enhancement, but toward meaningful vocational aspirations grounded in
personal spiritual beliefs (p. 8).

Forman (1977) makes a case for extending outcomes measures to include
personal development with understanding an individual’s meaning and community
impact, as he seeks to understand the adult learner in the context of returning for
postsecondary education. Chickering and Reisser (1993) present construction of meaning
as part of college student development, in advancing to the stage of integrity. These
authors focus on the development of meaningful beliefs and propose that the basis for
such beliefs is reason, faith or intuition; an added measure for successful development,
however, is that the beliefs must contribute to the good of all, as well as sustain the
individual during times of crisis (p. 264.) Corey (1991) suggests that engagement is
required before meaning can be integrated, and that such engagement is a “commitment
to creating, loving, working and building” (p. 183). Thus, many of those engrossed in the
psychological aspects of personal development or student success have examined
meaning; extending the concept beyond personal development to goal attainment in a
more psycho-social context has yet to be studied with the same intensity.
Academic Preparedness

The issue of academic preparedness and developmental education is one that community colleges have attended to with great intensity (Bremer et al., 2013; Boylan, 2009; Kozeracki & Brooks, 2006). Goldrick-Rab and Pfeffer (2009) trace the relationship between income level and graduation, citing factors that begin with family income, but in a complex interrelationship, also include teacher experience and effectiveness in elementary and secondary education, lower levels of parental knowledge and support regarding academics, and single parenthood. Each of these factors is more likely to be encountered by a student from a lower socio-economic background, from contending with teachers characterized by less preparation since they tend to work at less prominent school districts, to attributes of their parents’ level of knowledge and support (Goldrick-Rab & Pfeffer, 2009).

Each deficit in academic preparation takes a toll on how well students are able to achieve in college. The large urban college in this study has created a First Year Experience (FYE) course that is mandatory for students who test into two or more developmental courses; this class is targeted toward that specific audience and the reading level for the textbook and the class assignments reflect this difference. The course is housed in the psychology department. The rationale for the class and drawing its expertise from the psychology department is that in many cases, students who are underprepared have experienced some conflict with learning. Whether it is a lack of encouragement and motivation to read, or a student who experiences an intense discomfort with math, many of these experiences have commonalities. Psychology professors are uniquely suited to point to the common underlying issues that have
impeded students who are high in perseverance but have not kept pace cognitively with their own ambitions. Saenz et al. (2011) find that engagement levels differ for students who need developmental coursework. Harper and Quaye (2009) believe that academic preparation impacts the ability to persevere and complete college and view the problem from a first-generation perspective, noting that the trajectories begin to differ for first-generation, low-income students as early as middle or high school; students fail to use their experiences in the pre-college environment for successful preparation for college (p. 248). Services that support these students through intentional engagement can make a difference in overcoming their lack of experience and knowledge about college success strategies. Helping these students find the appropriate resources can make a tremendous difference in their rates of completion and success.

**Career Decidedness**

Jenkins and Cho (2012) propose that “An intermediate milestone [toward program completion] that has not received enough attention is entering a coherent program of study” and further believe that “one reason for low community college completion rates that has not received enough attention is that many students fail to enter a program of study in the first place” (p. 4). Further support for Jenkins’ and Cho’s position is found within interviews conducted with executives from the Lumina Foundation (2013); Elizabeth Gutiérrez, Director of State Policy, discusses developmental education in a video interview, saying that “[Students] can be very focused from the moment they arrive so that their expectations are properly met and supports are there” while her colleague, Dewayne Matthews, Vice President of Policy and Strategy, continues those thoughts on student success by saying that it involves “things like getting into a clear program of...
study early on, don’t spend two years exploring the course catalog then decide, OK, I’m ready to do this” (Gutiérrez, 2013; Matthews, 2013).

While the measure of career decidedness is a student attribute, directly determined by the student, it is suggested that institutional practices can also affect the success with which students reach this goal of a clear program of study (Jenkins & Cho, 2012; Nitecki, 2011). Nitecki (2011) suggests that a three-tiered systems model, consisting of the micro, mezzo, and macro levels, is useful in understanding institutional attributes that influence a student’s career decision making. She continues on to discuss the “semi-permeability” of these levels, noting that “The macro level includes the community college as an organization, with all of the institutional limitations, contradictions, and ambiguities that often diminish student aspirations” and suggests that the academic program of a student can become a bridge between the macro and the micro level of the student’s experience (p. 101). While it is difficult to determine whether embarking upon a clear program of study falls categorically within student attributes or institutional practices, it is clearly a factor in engendering higher rates of completion.

**Summary**

The literature regarding college completion has a depth and breadth of notable proportion in education. Most of the literature focuses on three areas of concern: access and opportunity, institutional practices, and attributes of the student. The focus of the current literature is on how to make changes, typically to the institutional practices, to encourage completion. The predominant perspective is on “fixing” or “solving” the current dilemma. Habley et al. (2012) suggest a different approach: mobilizing the campus community to reframe this problem into an opportunity to “bring the campus
together in a shared community-building cause that allows everyone on campus to celebrate its strengths and successes in enhancing student success, and to create a new, ideal vision of what student success will look like” (p. 366). Habley et al. cite Cooperrider’s organizational development theory of Appreciative Inquiry as both method and as a proven approach to creating positive change. In a similar manner, this research examines what works in college completion, through scrutiny of the college’s Job Training course that has a 77.9% completion rate for 2012–2013, to determine whether there are characteristics that may further inform research. Flipping the concept around to determine what’s right, rather than the current approach of what’s wrong, may allow for identification of practices, student attributes, or factors in access, retention, or completion that could be helpful to the field of education.
CHAPTER 3

METHODOLOGY

Overview of Research Design

This research project examined three questions to better understand college completion, and elicited the students’ perspective on completion in a video format. The questions addressed in this research are:

1. How were the completion rates in Job Training impacted by the requirement of specific scores on WorkKeys® and mandatory orientation?

2. What were the students’ perspective on college completion? Specifically, what did students report leads to successful completion of their programs, and conversely, what barriers did they find were most detrimental to achieving their goals?

3. An additional product resulting from the dissertation was an educational video. This video examined the students’ perspective on completion in greater depth, hoping to answer from a psychosocial framework, what meaning did the student attribute to completing college? How did this impact the perspective of college completion?

There were multiple methods used in this research to investigate these questions. The examination of student records provided an in-depth examination of whether Job
Training completion rates have changed over the past three academic years, and if so, what the nature of those changes were. The interventions of mandatory testing and orientation may have impacted the completion rates in other ways. For example, characteristics of enrolled students may have shifted as potential students did not meet the score requirements for WorkKeys®.

A second method, conducting a survey, allowed examination of the perspective of students enrolled in Job Training regarding college completion. This method permitted a comparison of how well that student perspective aligned with the three themes found in the literature review of Chapter 2: opportunity and accessibility, institutional practices, and student attributes. Inquiry into the report of what leads students to successfully complete their program was answered, at least in part, by directing questions to students who were engaged in the process of attending college.

The third method was that of interviews, conducted with Job Training students at the urban college under study. The interviews were videotaped, and segments of the results provided as a video in this dissertation. This video research was undertaken to examine first-hand the meanings attributed by students to their college endeavors. Such research may be helpful in the education and training of future researchers and practitioners as an insight into the student perspective on completion.

**Population and Demographics for Completion Rates**

The population of the study regarding completion rates included all students enrolled in Job Training at this large urban community college during three academic years: 2010–2011, 2011–2012, and 2012–2013. This population was estimated to comprise 600 academic records, accessed through the institution’s research department.
Demographics for this population included a high number of minority students, a high percentage of male students, and a number of ex-offenders who were seeking a better quality of living and support for themselves and sometimes for their families. The students who enrolled in Job Training did so with an expectation of learning new skills for immediate employment. Job Training is structured to mimic an employment setting, with full-day attendance for 18 weeks (34 hours per week.) A new cohort begins each month; these students engage with other students on different timelines to completion. At the time a new cohort begins, there will be students who have been in training for 4 weeks, 8 weeks, 12 weeks, and 16 weeks. This builds opportunities for students to work with others with more developed and with less advanced skills than their own. Collaborative learning mimics the workplace, in that students help others who need it, and turn to others for suggestions when they need help. Students are immersed in tactile learning and classroom training, often spending the morning reading and learning in a traditional classroom setting with the afternoons spent engaging in the hands-on learning. This model allows learning and experience with both the tools and processes under study, such as wiring an electrical assembly, laying out a computer-generated machine program, or repairing the brakes on an automobile.

**Time Period and Setting – Completion Data**

For the purpose of analysis, the data collected for the completion portion of this study tracked completion rates in the Job Training program at an urban Michigan college from July 1, 2010 through June 30, 2013. The time of July 1 through June 30 represents the academic year for Job Training. The data for the three academic years originated from students’ institutional records. Included were: whether or not the program of study
was completed, the program of study chosen, WorkKeys® test scores, ethnicity, gender, first-generation status (defined by whether either parent had attended college long enough to earn a bachelor’s degree), city of residence, and whether the student later pursued additional studies at the college after completing the Job Training program. Tracking the completion rates at this urban college allowed the researcher to evaluate the effectiveness of recent processes designed to enhance student success, such as the impact of ensuring preparedness via WorkKeys® testing and the recently implemented mandatory student orientation.

Data culled from institutional records of student enrollments provided the analysis for completion and allowed examination of several variables, with scrutiny and discussion of potential correlations among these variables. The data were statistically analyzed to determine the completion rate for each year of a 3-year time period. The first year, 2010–2011, reflected the completion rates prior to implementing WorkKeys® testing and mandatory orientation. The second year, 2011–2012, included WorkKeys® testing for the entire year and mandatory orientation beginning in January (approximately half the year). The third year, 2012–2013, included both treatments: WorkKeys® testing and mandatory orientation for the full year. If the treatments positively impacted completion rates, those rates should begin to rise in 2011–2012 and be higher still in 2012–2013. The WorkKeys® cut scores for program entry are highlighted in Table 2.
Table 2

*WorkKeys® Level Scores*

<table>
<thead>
<tr>
<th>Job Training Program</th>
<th>Applied Math</th>
<th>Locating Information</th>
<th>Reading for Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Technician</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Computer Support Technician</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Construction Electrician</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Green Construction Remodeling</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to Construction</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Machinist/CNC Technician</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Residential Construction</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Welding/Fabrication Technician</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

There were students who did not enroll; requiring specific cut scores on the *WorkKeys®* test influenced who actually enrolled and could lead to higher completion rates through eliminating those with lower scores in math, reading, and locating information necessary for employment (the scales of measurement for this assessment tool). To help understand this occurrence, *WorkKeys®* test scores were gathered from the institution and were examined to determine the number of students who did not meet the required test scores for Job Training. The number of students who did not meet the cut scores was compared to the number of students who retested to see how many of them earned passing scores on a later attempt. A *KeyTrain®* lab was set up in January 2012 to provide instructor-based tutoring for those who were not successful in achieving the *WorkKeys®* cut scores for their program of study. This lab is taught by a tutoring professional using ACT materials that work to increase the knowledge base and therefore the scores of those seeking to improve their skills and scores. ACT describes *KeyTrain®*
as a “comprehensive learning system for common skills required by all jobs, based on
ACT’s WorkKeys® assessment system” (ACT, 2014). The interactive training is offered
online, so that students may access it from any location where they have an Internet
connection. Institutional data about how many students took part in KeyTrain® to
increase their WorkKeys® scores were sought to determine how many of those students
retested successfully during the time period that WorkKeys® testing was required for
enrollment. This provided a basis to consider the impact of those students who did not
initially enroll because of not meeting the testing scores required, which, in turn, had an
impact on completion rates.

Time Period and Setting – Survey

The survey was designed to elicit the student perspective regarding completion of
their program and was conducted using current students enrolled in Job Training.
Students were invited by the researcher to participate in this study. The students who
agreed to participate completed the survey, designed to elicit student perspectives on
program completion. Consisting of 20 questions, the survey covered demographic
information, asked about challenges to completing college, and delved into the
motivation for attending college.

The Survey

The first four questions of the survey (found in Appendix D) related to
demographics: age, gender, ethnic background, and first-generation status were requested
of the student. Such data allowed for definition of the response population to ensure the
demographic nature of the sample population aligned with the entire population. Data for
the entire year regarding demographics were available from document analysis of the
completion rates, and provided a basis for comparison. In addition, demographic data allowed for an analysis of each of these groups to determine whether there were any significant differences between the different demographic variables.

Question 5 asked what perceived factor led to enrollment. This question invited students to select from responses that included having been laid off, unable to find work, unable to find work that supports the entire family (underemployment), seeking a better job, or needing skills to advance in one’s current job. The question also provided the capacity to write in an answer if the factor that led to enrollment was not one of those listed. This question looked at the motivation that led students to attend the Job Training program. Motivating factors may strongly influence a student’s grit, or fortitude, in overcoming obstacles encountered when working toward completion.

Questions 6, 8, and 9 were designed to elicit the challenges and obstacles faced by students who enrolled in Job Training. Question 6 asked participants to reflect on what they found most challenging about college and provided responses that included getting to class, work responsibilities, transportation issues, conflict with other obligations that interfere with studies, comprehension of the material, and collaboration, or relating to others. Next, question 8 attempted to define the level of challenge though ascertaining whether obstacles had been severe enough impact completion; the query was whether or not participants had encountered obstacles that made them consider dropping out of college. Question 9 explored some of those obstacles and provided for an open-ended response in case the suggested items (death or major illness in the family, transportation problems, child care issues, finances, conflicts with work, or a lack of family support) did not cover the obstacles encountered by the participant. Question 7, couched amidst these
items that focus on obstacles, asked the students about their level of confidence in completing their training program, and allowed different levels of certainty (ranging from very positive about completing the program of study to very positive about not completing the work.) Question 10 asked for a ranking of what contributes most to finishing college. The participants could choose answers that ranged from motivation, to college supports such as tutoring, advising and financial aid, instructors, one’s intelligence, the distance of college from the student’s home, or whether a student feels comfortable or welcomed in the college setting. Questions 5 through 11 also examined the attributes of the students, from their confidence level to potential obstacles, and their perception of the support offered by friends and family. Each of these different areas could be attributed by the student to have either a strong or a weak effect on finishing college. In compiling those rankings, a notable circumstance of students sometimes ranking an item more than once (for example, multiple occurrences of ranking an item first or second) occurred. While this circumstance was not manifested during test piloting of the survey, a better method of wording the instructions would include elimination of the words “and so on” and provide complete instructions for ranking. Clearly, some of the students wanted to rank more than two variables, but the wording, “Rank these with 1 being the strongest, 2 being second strongest and so on” were interpreted, in some cases, as that all variables should only be ranked 1 or 2.

The survey looked at support by asking, on question 11, whether participants had encountered significant others who encouraged them to miss school, and whether participants had experienced influences from their circle of family and friends to leave their homework to pursue other activities. On the survey, the 12th question asked
participants whether their program of study articulated into credit hours after completion. This question sought to determine the student’s level of knowledge about academic planning; each of the Job Training programs articulated into credit-based certificate and degree programs at the college or a nearby university at the time the survey was written. The next question, 13, asked participants if they would be more likely to continue with college after finishing their program if they did earn credit hours for completing it. This provided some idea of whether students perceived the training as a head start on skills and employment, or were simply seeking the means to enter the workforce.

Question 14 required the participants to list their Job Training program; this question allowed comparison among and between those who embarked on a specific course of study, and constituted a variable that allowed for examination of relationships among the other variables sought out for explanation by different survey questions. Question 15 asked how many attempts it took the participant to earn the required assessment scores on WorkKeys® in order to gain entry into their program of study. Following that, question 16 asked whether the individuals changed programs based on their cut scores; most frequently, students hoping to study residential, green, or construction electrical will instead opt for introduction to construction if their scores were lower than those required. Still, students might change from automotive, welding, or CNC machining to introduction to construction, which requires lower test scores, rather than opting for the tutoring and study in the KeyTrain® lab required to raise test scores. Each of those questions, 12 through 16, were designed to address opportunity and accessibility.
The last set of questions addressed institutional variables in completing college.

Question 17 asked participants about their strategy when they encountered information in training that they had difficulty learning, or integrating. Response choices ranged from seeking assistance from the instructor or a tutor to asking other students, or not taking action at all. In addition, the opportunity to provide an alternate answer was provided in case the choices had not covered the resources that students typically use in such a dilemma. Question 18 asked whether participants were already knowledgeable in the skill-set taught in the classroom, and choices ranged from already knowing all the material to not having any previous knowledge of the content taught in the training. While the information gleaned from this question was self-reported and may or may not be accurate, it allowed a glimpse into the students’ reaction to the challenge of the material, and also offered a baseline for discerning whether the students perceived their strongest need for training to be skill attainment or the need for credentials for the workforce. While both of these may factor into the students’ goals, those who have a rudimentary or even a more advanced skill level within a training subject are more likely to be seeking specific credentials, as their skills likely have not yet led to the employment opportunity they desire. Question 19 explored those sources of support found most helpful in completing college. The final question asked whether students had additional information they would like to add. This open-ended item allowed the student to bring forth or return to any topic or explanation, particularly if there was a feeling of incomplete response for one of the areas or if the participant felt too constrained by the answers provided for selection.
The time period for conducting this portion (the survey) of the research was late fall, 2013. The survey was completed by staffing an information table in the atrium of the M-TEC Center and in the Applied Technology Center by the researcher. The researcher used a script to engage students, which may be found in Appendix C. All students who entered the lobby were invited to participate after ensuring that they were Job Training students. It was hoped that approximately 5–20 students would complete the survey over the 3-day period; a total of 44 students participated. Students completed a consent form prior to engaging in the survey. It was estimated that it would take approximately 15–20 minutes for participants to complete the survey. After completing the survey, students were provided with a counseling brochure in case the survey questions brought about feelings of discomfort about college completion. This brochure is included as Appendix F.

Upon completion of the survey and after students were provided with the counseling brochure, they were asked to participate in the videotaped interviews. A sign-up sheet was provided, along with contact information so that a reminder message could be delivered 1 or 2 days prior to conducting the interviews.

**Time Period and Setting – Videotaped Interviews**

Seeking out active student narrative about the aspects of completion created a descriptive measure to ensure that the student voice—powerful in its knowledge of the student experience and what students actually need—reflected the work of the institution, which is steadily engaged in increasing the rate of student success through measures it determines will constitute the pathway to goal attainment. Frankl (2006) proposed three sources for meaning: in the significance of work, in caring for others, and in courage
during difficult times. Understanding the meaning the students attribute to their studies was an aim of the interviews.

The data focused on the Job Training programs at this large urban community college; while broadening the scope of research to include other colleges would have provided a broader base for generalization, the non-credit programs at each community college tend to differ so widely in process that comparisons are difficult. Recruitment for the video was accomplished from the pool of participants completing the survey. A sign-up sheet that asked for the student’s name, program, and phone number was offered at the conclusion of the survey. Students who expressed an interest in the videotaped interview were then provided with the date, time, and location of the interviews. Students received reminder calls or emails 1 to 2 days ahead of the interview sessions. The videotaped interviews lasted approximately 15 minutes per student and consisted of 1 to 4 students per recording session.

Segments of the videotaped recordings were edited and appear as footage in the production of a video to be later used in the education and training of future researchers and practitioners, at conference presentations, and which may also be used in classrooms when examining the student perspective on college completion. Participants were apprised of this fact and were required to provide consent prior to the interview sessions. The video exists in published format as part of this dissertation; this was made known to the subjects during the consent process. Informed consent was obtained from those participating in the interviews, and a release was procured since there was no assurance of confidentiality or anonymity when producing a subject’s likeness and verbiage in the video format of this research design.
The researcher conducted the interviews. A videographer operated the video equipment. Students were made aware of counseling services at the college in case exploration of their academic goals raised issues of concern or left them feeling vulnerable. At the close of the session, the researcher asked participants if they wished to withdraw any of the information shared. The researcher then provided a counseling services brochure to the subjects (see Appendix F for a copy of this material). Student subjects signed a video/photo release prior to engaging in these interviews. This release is attached as Appendix H.

Process for Product Portion (Video, Student Perspectives on Completion)

Approach

The interviews were intended to answer questions about how students perceived completion and the meaning they attached to their college endeavors. The questions examined what the students considered to be most important when considering what it takes to attain their goals. Understanding how a student reacts to challenges, such as a lack of comprehension of a task or concept, was also explored. The timeline was described earlier in this chapter; in winter semester 2014, students were invited to participate in this study and data were collected.

The questions were designed as open-ended, to elicit responses with depth and meaning to the student. Participants were interviewed individually so that they were comfortable in answering questions and to prevent rushing through the questions. The first question for the interview asked participants about their main reason for enrolling in Job Training. Participants shared some of the rationale, motivation, and thought process about why they embarked on earning a college credential. The second question searched
for information about how important it was to them to complete their program of study. It was hoped this question would discern the level of commitment and how attached they were to their goal of completion of their program of study. The third question asked participants how they arrived at the decision to attend this particular college.

Question 4 asked how a person knows he or she is ready for college. Solicited in a third-person manner, it was hoped that students would discuss their own personal experiences, although they might feel more comfortable speaking in the third person. This also allowed them to make observations about the process of readying themselves for college that included concerns or fears that did not come to pass, but that were significant to them. An example might be a concern that one was not good enough at testing to complete the program successfully, although perhaps success at WorkKeys® testing has since put this fear to rest. Question 5 asked students how they proceeded when they encountered difficulty in learning material in their training. An assumption of completion is that students can successfully navigate any struggle they may encounter with learning the content required. Determining how students perceive and react to such situations also provides insights into the meaning they make of such circumstances.

Question 6 investigated the circumstances that participants expected could lead to dropping out of their program. This perspective allowed the researcher to determine the meaning of completing college to the participants through evaluation of what could interrupt their studies. There is the potential for some cultural differences to emerge as the students answered this question. Question 7 allowed participants to identify those circumstances they perceived might foster staying in school and whether or not they had encountered them. Question 8 asked students directly about the meaning they attributed
to finishing school and achieving their goals. Question 9 continued in this vein, asking participants to consider the completion of their program then attribute meaning in one of three areas: meaningful employment, helping others, or survival.

Question 10 explored the students’ perceptions of what more the college itself might do to support students. This design was hoped to provide rich data for comparison to education professionals who were also videotaped; these include executive leaders from the Lumina Foundation and Dr. Terry O’Banion, a leading speaker in the progressive movement of the community college and in proposing a learner-centered paradigm for education. Question 11 surveyed similar ground, but asked what more students could do to ensure they finish their education. These questions allowed insights into the attributed locus of control, whether internal or external, of the participants. This was likely to be influenced by culture, and may have some impact on completion rates as well. Certainly, understanding the expectations for college completion from the individual and from the college will provide some understanding of the meaning that students attribute to the experience, as well as to the achievement of completion, itself. Finally, question 12, an open-ended question of whether there was anything else the participants wanted to add, allowed the student to offer and discuss ideas and opinions that did not fall into the more narrowly constructed questions asked by the researcher. In this manner, it was possible to glean additional important knowledge about the students’ perspectives on college completion.

**Design**

Video was compiled after the conclusion of the interviews. The design of the video reflected observations by students about completion that fell into three categories:
opportunity and accessibility, institutional practices, and attributes of the student.

Opportunity and accessibility were examined through questions such as, “What is your main reason for enrolling in Job Training?” “How important is it to you to complete your program of study?” “How did you decide on this college?” and “How does a person know whether they’re ready for college?” Findings on institutional practices resulted from questions such as “What do you do when you have trouble learning something in your training?” “What circumstances might make you drop out of school?” “What helps students stay in school?” and “What could the college do to help students finish school?” Attributes of the student emerged in response to questions about the circumstances that might make a student drop out of school, what might help students stay in school, what personal meaning the student attaches to completing college, and how individuals know if they’re ready to attend college.

Once the video segments of student perspectives on completing college were obtained, they were interspersed with leaders from the field of education who provided opinions regarding completion as it aligned with student reporting in the video (such leaders were also required to sign a release). Observations from both populations held implications for understanding college completion. The two populations provided some means of comparison of what students and educational leaders consider to be the factors involved in completing college.

The video footage also provided some clues regarding the theoretical framework: Victor Frankl’s paradigm of making meaning out of life experiences. Since this research relies on psychosocial theory grounded in Frankl’s work, responses were examined for the meanings students attributed to the college experience. Frankl’s proposal that the
human species finds reward, sustenance, and success in a search for meaning, which is self-deterministic and reliable even under extreme duress, had parallels in the reports students made, regarding their education (Frankl, 2006). Viewing student success and completion through scrutiny of their psychological characteristics and the social context surrounding them helped decipher many clues about how students perceived their pathway to success. How the students reported their experiences and observations about completing college assisted in determining the meaning that it had for them; this information is a feature of the finished video product.

**Data Analysis Methods**

Quantitative analysis of the completion rate for the different cohorts is a sound method of analyzing results for this portion of the research. Cross-tabulations provided the information for contingency tables for completion rates of each cohort, in each of three academic years (July 1 through June 30) for the college’s Job Training program. To further examine the data, WorkKeys® test scores, first-generation status of students, their residency, gender, vocational area of study, and ethnicity were tabulated with completion rates. Conducting chi-square analyses on some of the data further aided in understanding the association or lack thereof between these variables and rates of completion.

There were qualitative aspects to the study as well, evidenced through use of eliciting student perspectives on completion through the use of a survey. Students currently enrolled in Job Training were surveyed during the time frame of November 2013 through February 2014. Those students were from cohorts beginning in the 2013–2014 academic year. After taking the survey, the students had the option of attending an interview session to discuss their perspectives on the factors involved in completion,
which led to the third aspect of this research, a project. The project is a videotape that seeks to understand the meaning that Job Training students place on college completion. Such narrative data inform research through understanding the meaning of human experience (Merriam, 2009) and the production of segments of the student’s narrative on video is proposed as a tool for researchers and practitioners who want to understand the student perspective on completion. It is of particular importance that colleges listen to student voices. While institutions diligently pursue the best practices related to retention and program completion, the perspective of the student has been too sparsely analyzed; yet, according to McClenney and Arnsperger (2012), “Alongside each community college’s own quantitative data about student engagement, learning, persistence, and completion, student voices can help point the way toward far better outcomes for many more community college students” (p. 5). The provision of vignettes of student reports in these narratives in video assists the academic community in a more thorough recognition of students’ emphasis, intonation, body language, and other visual clues that facilitate a deeper understanding of their meaning.

Limitations/Delimitations of Study

The research population is located at a large urban community college in Michigan, which poses a limit to generalizing across a broad spectrum of community colleges; there may be characteristics specific to this college that factor into results and prevent sweeping generalizations. While internal validity is much higher when conducting studies with a population defined by one unit of a single community college, external validity correspondingly is reduced. Still, the research results procured from more localized studies tend to realize a higher depth when sacrificing this breadth (Vogt,
This richness in detail provides an opportunity for researchers to closely examine aspects of one community college in order to determine whether like characteristics of other institutions may profit from such an in-depth examination. The robust data from the video provide researchers with an opportunity to observe, with a modicum of context, student perspectives about completion of their programs. Visual and auditory data from the video portray the experiences of the students and allow researchers to observe their narrative first-hand, effectively eliminating some of the bias inherent in interpreting such data.

Sample sizes are an important consideration when examining the limitations and delimitations of a research study. The completion data was compiled for three academic years, 2010–2011, 2011–2012, and 2012–2013. The records used were the institution’s data, in its entirety, for those three academic years. Sampling error is minimized when using all data within a given data set; the confidence level for the completion data is ± 1. There are, however, two drawbacks to exhaustive document analysis using a single subset. First, the study is more limited in scope; in this study, the population of Job Training students at this urban college may be used to confidently generalize only in terms of students who enroll in Job Training courses at this college. Secondly, subjects from a more tightly focused group permitting such inclusive sampling are likely to be a more homogenous group, again limiting the ability to generalize the research results. For example, students who matriculate at the same college for credit courses and are degree-seeking may have very different characteristics and attitudes toward completion; this is clearly evidenced in the demographic population characteristics between job training students, a high percentage of whom are likely to come from at-risk populations, to be
adult learners, and who have a much higher completion rate than students pursuing a certificate or degree. As previously mentioned, the completion rate for Job Training students is 77.9% for the 2012–2013 academic year; for certificate and degree-seeking students at this urban college, the graduation rate is 15%, while the graduation/transfer out rate is 33% for 150% of the typical time to earn the credential in 2008 (NCES, 2013). The value in such research with such a narrow point of convergence (a single population at one institution) lies in both evaluative purposes for the population at hand, and to act as a point of origin for further research. Certainly, the high completion rates and attraction of a high percentage of at-risk students (minority, adult, and ex-offenders) provide some variables that could be researched across different populations as the United States increasingly prioritizes college completion in search of a world-class workforce.

Sampling for the survey and for the interviews featured in the video production is by student self-selection; students were asked to volunteer for participation. The sample for the interviews extended from the survey about student perspectives on completion, as it was accomplished by requesting volunteers from those completing the survey. This process was limited by a higher likelihood of selection effects; the behavioral effects in the research reported by students may have influence the research results. Students who chose to participate may have had higher motivation to complete college or may have had other characteristics that were not representative of their classmates. In addition, the population itself, Job Training students, was unlikely to be representative of a general college population. While at-risk students had fewer supports and multiple barriers, there may have been more at stake in completing college.
Motivation may be influenced if a student construed this educational opportunity to be a second chance, as in the case of ex-offenders, or as the only chance, in the case of those living in dire impoverishment. Finally, there may be some selection effects in terms of the characteristics of a student who seeks immersion training for a fast track to employment through job training. Because of these facts, caution is advised when generalizing this study beyond the non-credit population at a community college, specifically, at this large urban community college located in the state of Michigan.

Summary

To summarize, the research questions are as follows: How were the completion rates in Job Training impacted by the requirement of specific scores on WorkKeys® and mandatory orientation? What is the students’ perspective on college completion? Specifically, what do students report leads to successful completion of their programs, and conversely, what barriers do they find are most detrimental to achieving their goals? What meanings do the students attribute to completing college? How does this construction of meaning impact their perspective of college completion?

To examine the answers to these questions, a quantitative analysis of the completion rates for the last three years of Job Training was analyzed. The 2010–2011 data are characterized by no treatment; 2011–2012 data reflect partial implementation of the ancillary supports of mandatory orientation and the requirement of testing cut-scores using WorkKeys®. The 2012–2013 data consist of subjects who have received both treatments. If these enrollment requirements lead to higher levels of completion, the rates will begin to rise in 2011–2012 and continue to rise in 2012–2013.
An additional component is that of a qualitative survey, to determine the students’ perspective on college completion. The emphasis was on what students report is helpful, and conversely, what impedes completing their academic goals. Finally, a video was produced to examine in-depth the meaning that students attribute to college completion. Such an examination informs the research regarding the impact of such meaning-making, on both academic progress and success.
CHAPTER 4

FINDINGS AND RESULTS

The research question that fostered examination of methods designed to support and improve student success consisted of mandatory new student orientation and testing for academic readiness; the research question was as follows: How were the completion rates of Job Training students impacted by the requirement of specific scores on WorkKeys® and mandatory orientation? Specifically, it was theorized that the collection of data from 2010–2011 through 2011–2012 would show a slight rise in completion rates, since the former year was characterized by no testing or new student orientation activities, while the latter year realized their implementation for a portion of the year. The rate was expected to continue to climb in 2012–2013, as both supports were, by then, fully in place.

Completion Rates

To determine the answer to the research question, the entire data set of all enrolled students was collected from three academic years: 2010–2011, 2011–2012, and 2012–2013. The academic year for Job Training runs from July 1 through June 30. Table 3 outlines the completion rate for those three years.
Table 3

*Three Year Completion Rates*

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<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>Did not complete</td>
<td>56</td>
<td>22.1</td>
<td>102</td>
<td>35.5</td>
<td>107</td>
<td>29.7</td>
</tr>
<tr>
<td>Completed program</td>
<td>197</td>
<td>77.9</td>
<td>185</td>
<td>64.5</td>
<td>253</td>
<td>70.3</td>
</tr>
<tr>
<td>Total</td>
<td>253</td>
<td>100.0</td>
<td>287</td>
<td>100.0</td>
<td>360</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In 2010–2011, the rate was 70.3%; the following year, in 2011–2012, the year that orientation and WorkKeys® testing was initiated mid-year, the completion rate dropped to 64.5%. It was theorized that the rates would begin to increase, as mandatory orientation and testing was hoped to better prepare students for program entry; surprisingly, the rate dropped substantially. It was hypothesized that completion rates would increase even more in 2012–2013, as the supports of orientation and testing were fully in place that academic year. Completion rates did increase significantly, to 77.9%. To assess the impact of the new requirements on completion, a chi-square analysis was conducted. The contingency coefficient of .113 (sig. = .003) provides the measure of association between variables. Cramer’s V evaluates the predictive relationship (Merriam, 2009) with a significance of .003. Thus, there appears to be some association between the different academic years when assessing the impact of the new measures on the rate of completion, although it is a weak relationship. These statistical data are found in Table 4.
Table 4

*Academic Year × Completion Cross-Tabulation*

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Did not complete</td>
<td>56</td>
<td>102</td>
<td>107</td>
</tr>
<tr>
<td>Completed program</td>
<td>197</td>
<td>185</td>
<td>253</td>
</tr>
<tr>
<td>Total</td>
<td>253</td>
<td>287</td>
<td>360</td>
</tr>
</tbody>
</table>

Symmetric Measures

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
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<tbody>
<tr>
<td>Phi</td>
<td>.114</td>
<td>.003</td>
</tr>
<tr>
<td>Cramer’s V</td>
<td>.114</td>
<td>.003</td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>.113</td>
<td>.003</td>
</tr>
</tbody>
</table>

*N of Valid Cases* 900

So why does completion drop 5.8% in 2011–2012, with the new design partially in place, then increase 12.8% the following year, under the full design? One possibility is that lowered completion rates are an artifact of an institution undergoing change. According to Community College Completion Corps (C4, a completion initiative designed by Phi Theta Kappa) the reasons that students typically fail to complete are that they are “overwhelmed, overextended, underfunded and underprepared” (C4, 2014, para. 1). With college staff heavily engaged in the processes of the two new initiatives, perhaps outreach and availability to students were impacted. This would account for the success rate blossoming the following year, as the supports of mandatory orientation and WorkKeys® testing became familiar procedure. The C4 survey also indicates that 54% of the students who failed to complete needed to work to support themselves or families and could not balance work and classes, and that 31%
could not afford college (C4, 2014, para. 2). Certainly, the Job Training population is vulnerable to such affordability measures, as 74% of Job Training students received the Pell financial aid award in 2012–2013, indicating some measure of low-income status. This rate of Pell eligibility was, for the earlier years of the study, 85% in 2011–2012 and 73% in 2010–2011. Clearly, a significant number of Job Training students hail from an economically disadvantaged background, and disproportionately so for 2011–2012, the year that lower completion rates were found for Job Training; thus, this may be an indication of what C4 suggested, that finances were implicated in the drop in the number of students achieving their goal of finishing college, at least to some extent (C4, 2014).

During the 2011–2012 academic year, the Job Training program was also involved in a realignment, intended to make these programs credit-bearing. This shift required additional time spent in the program, taking place over the course of a year rather than the 18 weeks it currently requires. This design had less of the similarity to the workplace than does Job Training, which is intended to emulate the work day in terms of time, attendance, critical thinking, and hands-on training. The result of completing Job Training in this new design would be a credit-bearing certificate, which would have paralleled the current welding certificate, but would have utilized the cohort system and monthly start dates in an open-entry, open-exit format to maximize student success and take advantage of the higher completion rates that characterize job training in comparison to the college’s credit-bearing certificates and degrees.

The initiative of moving from 18 weeks to a 1-year certificate was to begin with one area, welding, then convert each of the nine programs into the same format. While enrollment for welding is exactly the same in 2010–2011 and 2011–2012 (41 students),
potential students were not being enrolled in June, July, and August of 2011, but instead were placed on a waiting list to begin classes on August 29, 2011. The number who expressed interest in this longer term training was so low that the welding program reverted back to 18 weeks, with the 8-hour days that characterize Job Training. While the period of uncertainty for welding enrollment encompassed two academic years, the bulk of it fell within 2011–2012, and enrollments likely would have been higher without this occurrence. A graphic depiction of the completion rates is found in Figure 2.

![Job Training Completion, 2010-2013](image)

**Figure 2.** Job Training completion.

Another possibility for lowered completion rates during the implementation of mandatory orientation and test score requirements may relate to enrollment levels in general. There was a significant change in enrollment in Job Training; in 2010–2011, enrollment was 360 students. This dropped the following year to 287 students, followed by 253 students in 2012–2013, nearly a 30% drop in enrollment. If a significant portion of those who decided not to attend based their decision on the additional tasks found in
pre-enrollment, such as the mandatory orientation and requirements for WorkKeys® scores, then those who did not enroll may have been less academically prepared to meet the challenges of rigor in an academic environment. The same argument could be made for perseverance, or grit (Duckworth, 2013), in that students who did not have the fortitude to complete the more arduous admissions process may have been more likely to be non-completers, thus impacting the completion rate.

An interesting comparison is of the Job Training enrollment patterns to those of college-wide enrollment. Because economic factors heavily impact college enrollments, looking at the college-wide enrollment provides a blueprint of the community’s tendency to seek further education or training during that time period. Table 5 presents a visual representation of these enrollment comparisons.

Table 5

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>College-wide</td>
<td>17,426</td>
<td>–1.0</td>
<td>17,601</td>
<td>–1.8</td>
<td>17,920</td>
<td>Baseline</td>
</tr>
<tr>
<td>Job Training</td>
<td>253</td>
<td>–11.85</td>
<td>287</td>
<td>–20.28</td>
<td>360</td>
<td>Baseline</td>
</tr>
</tbody>
</table>

Using 2010 as a baseline year, the college had enrollments of 17,920; the following year, 2011, brought enrollments of 17,601, a decrease of 1.8%; 2012 brought a further decline, to 17,426, resulting in a decrease of 1.0% (2013 Enrollment Report). Contrasting those with Job Training, and continuing to use 2010 as a baseline year, enrollment was at 360; in 2011, enrollment dropped to 287, a decrease of 20.28%; in
2012, enrollment dropped to 253, a decrease of 11.85%. Thus, both populations saw a decrease in total enrollment, but with a much higher percentage in Job Training. A thorough understanding of these complexities would require further scrutiny of enrollment intake and patterns in Job Training; for the purposes of this research, it is clear that enrollment numbers have fallen, as expected, with increased enrollment requirements and activities.

**Ethnicity**

The Job Training program enjoys a high rate of enrollees who are students of color, in addition to adult learners. In the most recent year of data collection, 2012–2013, the total of non-White enrollees in Job training comprised 47.4% of the population; in 2011–2012, the minority enrollment was 62.7%; in 2010–2011, 63.3% of all enrollees. These numbers are determined by summing the percentages for the White majority culture and those for the “Unspecified” category, then finding the difference between that sum and the total, although the unspecified category may include biracial or multi-racial students. These percentages indicate that the number of enrollees who are students of color is falling, by 15.9% from 2012–2013 as compared to 2011–2012. Even so, the number remains significantly higher than the population of those residing in the college’s service delivery area, Kent County, where the percentage of ethnic minorities was 25.84% of the total population in 2012 (U.S. Census Quickfacts, 2012). For baseline comparisons, the ethnic minority enrollment rate in the general college population was 23.48% in 2012, nearly matching that of the surrounding population. These rates for ethnicity within Job Training are shown in Table 6, beginning with the rates for 2012–2013, the most recent year, then providing data for the years 2011–2012, and 2010–2011.
Table 6

*Enrollment by Ethnicity*

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Unspecified</td>
<td>30</td>
<td>11.9</td>
<td>15</td>
<td>5.2</td>
<td>20</td>
<td>5.6</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>2</td>
<td>0.8</td>
<td>3</td>
<td>1.0</td>
<td>7</td>
<td>1.9</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>1.6</td>
<td>2</td>
<td>0.7</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>African American</td>
<td>91</td>
<td>36.0</td>
<td>159</td>
<td>55.4</td>
<td>196</td>
<td>54.4</td>
</tr>
<tr>
<td>White</td>
<td>103</td>
<td>40.7</td>
<td>92</td>
<td>32.1</td>
<td>112</td>
<td>31.1</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>23</td>
<td>9.1</td>
<td>16</td>
<td>5.6</td>
<td>22</td>
<td>6.1</td>
</tr>
<tr>
<td>Total</td>
<td>253</td>
<td>100.0</td>
<td>287</td>
<td>100.0</td>
<td>360</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Gender**

With the exception of Computer Support Technician and Computer Applications Technology (no longer offered in 2012–2013), these programs are non-traditional areas for females. There is a low rate of enrollment for females. According to Catalyst.org, a research-oriented nonprofit organization with the stated mission of increasing opportunity for women (Catalyst Research, 2014), 1.2% of the automotive service technicians and mechanics in the United States were women. The other areas, welding, CNC machining, and the construction trades also have low representation of female workers. The largest decrease in female enrollments results from ending the program, Computer Applications Technology. The only program taught by a female, this program taught the software applications of Microsoft Office; in contrast, the Computer Support Technician touches on computer repair and PC support, teaching the skills needed to obtain CompTia’s A+ industry certification. Decreasing enrollment for females seems to be directly related to
the ending of Computer Applications Technology, as 58.8% of female enrollment was in this single program in 2010–2011, 62.5% in 2011–2012, and in the final year, 12.5% as the last students finished in the beginning of the academic year and no new enrollments were permitted during the last 4 to 5 months.

Specific numbers for female enrollment are as follows: In 2010–2011, the rate was 9.4%; the following year, in 2011–2012, the rate dropped to 8.4%. Most recently, in 2012–2013, the rate is 6.3%. In terms of numbers, the enrollments dropped from 34 women in 2010–2011, to just 16 in 2012–2013. These data are portrayed in Table 7.

Table 7

<table>
<thead>
<tr>
<th>Enrollment by Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

This decrease of over half, or 50%, is the largest drop in enrollment of any specific subgroup found within the data. An interesting question becomes, why do more women not enroll in Job Training, particularly in the area of Computer Support Technician? Are there institutional artifacts or changes in the culture that might make enrollment more attractive to this subset? And, once enrolled, how do women fare, in terms of completion? The last question will be examined in greater depth in the next section.
Having reviewed enrollment by ethnicity and gender, the next logical question is, do completion levels differ by these characteristics? A college must gauge its success not only by the numbers enrolled, but the number of those that succeed, as well. The data on completion indicate that the success or failure of completing a program of study is not evenly dispersed across all groups. As shown in Table 3, the completion rate for 2010–2011 was 70.3%. All of the groups exceeded this rate with the exceptions of two groups: Asians and African Americans. With the Asian and Native American populations, the enrollment numbers are so low (2 to 6 people) that one person’s success or failure can create significant differences. An example is that, in a population of 2, the completion rate can move from 50% to 100% with one individual success. This creates the likelihood of sampling error, because of the low sampling numbers. Sampling error results when the sample may not be representative of the population (Merriam, 2009).

Referring to Table 8, which captures the data for completion by race and ethnicity, it is revealed that African American students have the lowest completion rates: 58.7% in 2010–2011, 59.1% in 2011–2012, and 64.8% in 2012–2013. The ethnic groups of Asian and Native American have been combined in this table. To further evaluate the cross-tabulation, a chi-square test is provided. The chi-square value is 62.506 with 5 degrees of freedom. With a significance of $p \leq .0005$, there is a significant relationship between ethnicity and completion. Scrutinizing the measure of association, based on Cramer’s V, the value is .264. While there is a relationship, then, it is likely to be moderate to weak, since the further the number from zero, the stronger the relationship, with 1 being a perfect relationship (Merriam, 2009). These data are shown in Table 9.
Table 8

*Ethnicity Group x Completion Cross-Tabulation*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Did Not Complete (%)</th>
<th>Completed Program (%)</th>
<th>Did Not Complete (%)</th>
<th>Completed Program (%)</th>
<th>Did Not Complete (%)</th>
<th>Completed Program (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not specified</td>
<td>11 (36.7)</td>
<td>9 (60.0)</td>
<td>5 (25.0)</td>
<td>15 (75.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian, American Indian</td>
<td>0 (0.0)</td>
<td>3 (60.0)</td>
<td>3 (30.0)</td>
<td>7 (70.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>32 (35.2)</td>
<td>65 (40.9)</td>
<td>81 (41.3)</td>
<td>115 (58.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>10 (9.7)</td>
<td>21 (22.8)</td>
<td>14 (12.5)</td>
<td>98 (87.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>3 (13.0)</td>
<td>4 (25.0)</td>
<td>4 (18.2)</td>
<td>18 (81.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>56 (22.1)</td>
<td>102 (35.5)</td>
<td>107 (29.7)</td>
<td>253 (70.3)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 9

**Chi-Square Test, Ethnicity and Completion**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson chi-square</td>
<td>62.506a</td>
<td>5</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood ratio</td>
<td>66.079</td>
<td>5</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-linear</td>
<td>39.181</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of valid cases</td>
<td>900</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*2 cells (16.7%) have expected count less than 5. The minimum expected count is 2.65.*

### Symmetric Measures

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phi</td>
<td>.264</td>
<td>.000</td>
</tr>
<tr>
<td>Cramer’s V</td>
<td>.264</td>
<td>.000</td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>.255</td>
<td>.000</td>
</tr>
</tbody>
</table>

| N of Valid Cases       | 900     |              |

The data on ethnicity and completion demonstrate that the success rate for the African American students, who are primarily male, is increasing. Still, as is observed nationwide (CCCSE, 2014; Ruffins, 2013), colleges struggle to create an environment in which African American males persist and succeed; it would appear that there are similar challenges in Job Training. While it appears that success rates are increasing, it is important to realize that, as McClennery (CCCSE, 2014) notes,

Race and ethnicity intersect in complicated ways with gender, socioeconomic status, college readiness, and other factors. For example, regardless of SAT and ACT scores, White students earn certificates as well as associate, bachelor’s, and graduate degrees at higher rates than equally qualified African Americans and Hispanics. (p. 4)
It would appear that, even in programs where ethnic minority enrollment is higher than the rest of the college, disaggregating the data to ensure that each population is experiencing success is a necessity. Otherwise, hidden in the data (as in the successful 77.9% completion rate of Job Training last year) there may lurk unmet needs of students, who have met the criteria (testing cut scores) but for whom some institutional support is needed to provide a stronger foothold on the pathway to success.

Another group that has a lower completion rate is that of females. Table 10 illustrates completion rates for this population as being the lowest consistent group, with the 2010–2011 rate at 52.9%, the 2011–2012 completion rate at 45.8%, and that of last year, 2012–2013 being at 52.9%. This is a consistent three-year rate and is lower than other groups. This result was surprising, and not evident with the first calculation of completion rates. Speculation about these reduced rates of completion brings forth several potential explanations: A lower comfort level within a male-dominated setting, a response to the perspective of a less welcoming environment, or under-confidence in the learning or work tasks required based on gender roles according to societal norms.

Table 10

<table>
<thead>
<tr>
<th>Gender</th>
<th>Did Not Complete</th>
<th>Completed Program</th>
<th>Did Not Complete</th>
<th>Completed Program</th>
<th>Did Not Complete</th>
<th>Completed Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(%)</td>
<td>(%)</td>
<td>(%)</td>
<td>(%)</td>
<td>(%)</td>
<td>(%)</td>
</tr>
<tr>
<td>Male</td>
<td>53 (22.4)</td>
<td>184 (77.6)</td>
<td>89 (33.8)</td>
<td>174 (66.2)</td>
<td>91 (27.9)</td>
<td>235 (72.1)</td>
</tr>
<tr>
<td>Female</td>
<td>3 (18.8)</td>
<td>13 (81.3)</td>
<td>13 (54.2)</td>
<td>11 (45.8)</td>
<td>16 (47.1)</td>
<td>18 (52.9)</td>
</tr>
<tr>
<td>Total</td>
<td>56 (22.1)</td>
<td>197 (77.9)</td>
<td>102 (35.5)</td>
<td>185 (64.5)</td>
<td>107 (29.7)</td>
<td>253 (70.3)</td>
</tr>
</tbody>
</table>
To further illuminate the meaning of the data, Pearson’s chi-square was calculated, with a value of 7.390 and 1 degree of freedom; zero cells realizing an expected count of less than 5 (minimum expected count was 21.79). As shown in Table 11, Cramer’s V has a value of .091, with a significance of \( p \leq 0.007 \). There appears to be a relationship, albeit a weak one, between gender and completion.

Table 11

*Chi-Square, Gender and Completion*

<table>
<thead>
<tr>
<th>Symmetric Measures</th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal</td>
<td>Phi</td>
<td>-.091</td>
</tr>
<tr>
<td></td>
<td>Cramer's V</td>
<td>.091</td>
</tr>
<tr>
<td></td>
<td>Contingency Coefficient</td>
<td>.090</td>
</tr>
<tr>
<td>( N ) of Valid Cases</td>
<td></td>
<td>900</td>
</tr>
</tbody>
</table>

Earlier discussion about females in automotive technician careers sought to contextualize the percentage of females in this career in the greater society; it is interesting to note that the same discussion characterized the work as becoming less and less physical, with the advent of computer-controlled systems. Sophisticated electronics and an increasing need for skillful diagnostics are combining to create a balance of mental and physical challenge in this career (Erjavec, 2010). Thus, it seems that the work itself is well within the capacity of females, so there may be nuances about the institutional culture that create higher levels of failure to achieve their goals.

Another measure of the impact of the student success measures, mandatory orientation and WorkKeys® testing, is analyzing the data regarding how many students
failed to achieve the cut scores, then comparing that number with how many retested successfully, and, finally, determining how many of those students enrolled in Job Training. Data from the institution could not completely answer these questions; data for the number of students who did not pass WorkKeys® are somewhat confounded by the fact that students may change programs for which their scores do allow admissions. Other students may not return at all. Retesting data from 2012–2013 were made available by the institution and are presented graphically in Figure 3.

![Number of Students Retesting, 2012-2013](image)

**Figure 3. Retesting.**

Of the 22 students who retested, 21 of them earned a Silver Certificate, which indicates that they would have met the enrollment requirements for most the Job Training programs (Computer Support Technician requires a Gold Certificate). It is impossible to tell, however, how many students did not return, believing that the testing was a hurdle they could not overcome. In April 2013, the institution began offering a Fast Track Lab,
which utilizes ACT’s KeyTrain®, a computer-based, interactive module to improve test performance on WorkKeys®. Without more specific data, it can be speculated that students who were very close to achieving the required cut scores comprised a significant portion of those who retested. Certainly, the retest success rate is high, with 95% of those retaking the test realizing scores that qualified them for the majority of the Job Training programs. A look at the survey data regarding retesting will determine whether the sampled population mirrors this success rate, and whether the students responding to the survey changed programs, based on their retest scores.

Survey Data: The Student Perspective

The research questions posed for this portion of the study are as follows:

- What are the students’ perspectives on college completion?
- What do students report leads to successful completion of their programs?
- Conversely, what barriers do students find are most detrimental to achieving their goals?

The survey questions are presented in Appendix D. The results and outcomes of the survey are presented in this chapter, beginning with a description of the population and the sample size, then moving to the survey responses for each of the content questions.

Characteristics of the Surveyed Job Training Population

Forty-four surveys were completed and returned by Job Training students. At the time of the survey, there was a total of 87 enrollees in Job Training, so that 50.57% of the total enrolled population responded to the survey. With this sample size, the confidence level is 95% and the confidence interval is ± 10. Of the students in attendance the day
the survey was conducted, nearly all participated; however, the time period during which the survey was conducted was characterized by winter snowstorms and lowered rates of attendance (the college had been closed earlier in the week because of inclement weather.) Sampling effects may have resulted from individual traits based on such absences. Prior to reviewing these data in specific terms, it is important to differentiate them from the data in the first section of this chapter. The preceding data related to the entire population of Job Training students; what follows is specific information on survey participants.

From the respondents, the following characteristics were descriptive of the data. The mean age of participants in job training was 34.86 years, while the median was 30. The ages of the participants ranged from 18 to 60. Job Training students tend to be older than the college’s mean age for the entire institution. There appears to be an inverse relationship between student ages of Job Training students in comparison with the typical ages of the student population of the college. In Job Training, 34.1% of the population was 24 years or under; that number for overall college population was 64%. In Job Training, 65.9% of the population was aged 25 and over; in the overall college population, the percentage for this age range was 36%. This inverse relationship is represented in Figure 4.
Source: National Center for Education Statistics (NCES), 2013

Figure 4. Comparison to general population.

Ethnic minorities comprise 52.3% of the total population in Job Training. This is higher than the college as a whole, which enrolls 24% of students of color, according to 2012 data from the Integrated Postsecondary Education Data System (IPEDS.)

According to IPEDs, the general enrollment to the college in Fall 2012 was defined by the following population attributes: 68% White, 8% Hispanic, 12% African American, 3% Asian, and 1% Native American. These data do include 8% of students who did not respond by providing ethnic information, so that 8% of the data for the college-wide population is unknown. The 24% total of students from ethnic minorities from the college-wide population contrasts with Job Training, which appears to be more attractive to a greater number of disadvantaged students. While those who are Hispanic or Latino, or Asian fall slightly below the percentages engaged in pursuing other types of training at the college, the overall percentage of ethnic minorities who enroll in job training is more than double the percentage of minorities in the college-wide population. When
population levels fall to the range of 1 to 3 individuals, such as the case with Native Americans/Alaskan Natives or Asians, the data are more susceptible to large variations caused by changes in the circumstances of one or two individuals. For this reason, few inferences can be drawn from the data of these groups, other than it matches the population level of the county in which the college resides.

It was surmised, prior to data collection, that the Job Training population had a higher level of students who were adult learners, ethnic minorities, and first-generation college students, each of whom may have additional obstacles to hurdle in order to complete college. Table 12 illustrates the number and frequency of the ethnic backgrounds of the Job Training students who participated in the survey, in comparison with the enrollment levels for the different ethnicities college-wide.

Table 12

*Ethnicity of Survey Participants in Comparison to College Population*

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Job Training</th>
<th>Percent</th>
<th>College-wide</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaskan Native</td>
<td>1</td>
<td>2.3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>2.3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>18</td>
<td>40.9</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>21</td>
<td>47.7</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>3</td>
<td>6.8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Not Given</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source for College-wide data: IPEDS, 2012
Further describing our population, the number of first-generation students is examined. First generation students are defined by evaluating the education levels of their parents; those that are first-generation students are characterized by the fact that neither parent graduated from college with a baccalaureate degree. Byrd and Macdonald (2005) researched college readiness and success of first-generation students, finding that, while they often had family support, their preparation for college was (in their own perspective) lacking a strong foundation. The genesis of this shortcoming was thought to be the inexperience of their parents; students thought that, while their parents might provide support and encouragement, they were unable to guide them in matters regarding postsecondary education.

The number of first-generation students within the survey population is 32, while the number reporting one or more parent having earned a baccalaureate degree is 10. Two students were not certain. Thus, 72.7% of the Job Training students surveyed fell into the first-generation category, while 22.7% did not; 4.5% were uncertain about their parents’ education levels. This compares to the 2012–2013 Job Training total enrollment population of 62.1% being first-generation. In that calculation, 6.3% of the students did not specify whether or not they were first-generation. Thus, the sampled population is slightly more than 10% higher than the total population, in terms of the rate of reported first-generation status. Table 13 depicts the first generation-status of the students who were surveyed.
Table 13

*First-Generation Participants*

<table>
<thead>
<tr>
<th>Participants</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Generation</td>
<td>32</td>
<td>72.7</td>
</tr>
<tr>
<td>Not First Generation</td>
<td>10</td>
<td>22.7</td>
</tr>
<tr>
<td>Not Sure</td>
<td>2</td>
<td>4.6</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Job Training students, then, are from a more highly at-risk population than the typical enrollment of the college. A higher percentage of students are adult learners, from an ethnic minority background, and are first-generation. A surprise from the data is that such a high percentage of Job Training enrollees are males. While most of these programs are non-traditional areas for females, less than 10% enrollment of females in these vocational programs was unexpectedly low. As mentioned with the ethnic categories of Native American/Alaskan Native and Asian, making generalizations about a population with low levels of representation is problematic. As Table 14 illustrates, the percentage of male students who participated in the survey was 90.9, while females fell at 9.1%. The 9.1% (nearly 10%) of participants who are female does provide some level of confidence about discussing this population, but with the caveat that confounding factors may result from such low representation and sampling. Gender will be more closely scrutinized in the upcoming section regarding completion.
Table 14

*Gender of Participants*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>40</td>
<td>90.9</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

To complete the demographics section of the survey, students were asked about their primary reason for enrolling in Job Training. Responses included under “Other” were as follows: to jumpstart my career; obtain skills for employment; referred by high school counselor because of the good training; it gives me the skills, training and certification I need to proceed in a promising manner; disabled—need new career, looking for a new career—can’t stand the one I have now, I lost the passion for it, also, the hours are not good, I want to have a life and not work all the time for bad pay and no benefits.

Over half of the participants, 52.3% \((n = 23)\), reported that “looking for a better job” most closely described their reason for enrollment. As previously mentioned, Job Training requires a 34-hour-per-week commitment. The short-term nature of the training, 18 weeks in length, makes it an attractive option for those who want to immerse themselves in a trade, and then obtain entry-level employment. In working with the survey and interview participants, it became clear that several of these students work full-time positions as well as manage their 34 hours per week commitment to Job Training education. Those students who complete these programs, then, appear to have high levels of perseverance and dedication; the fact that the majority of them are looking for a better
job may be indicative of a desired pathway to higher levels of job security, remuneration, skill level, and responsibility. In some cases, they have rudimentary skills in a technical area and are seeking credentials to move toward employment in their given skill area.

The second and third highest categories indicated by participants were those of being unable to find work, along with “other” and the responses provided there; each comprised 13.6%, \( n = 6 \). The fourth most prevalent response was “can’t find a job that supports me or my family,” which was selected by five participants, a response rate of 11.4%. Three participants, 6.8%, selected that they needed skills to advance in their work. One respondent (2.3%) indicated that he was laid off. These data are presented in Table 15.

Table 15

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laid off</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Unable to find work</td>
<td>6</td>
<td>13.6</td>
</tr>
<tr>
<td>Can’t find job supporting me/family</td>
<td>5</td>
<td>11.4</td>
</tr>
<tr>
<td>Looking for a better job</td>
<td>23</td>
<td>52.3</td>
</tr>
<tr>
<td>Need skills to advance in job</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>13.6</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

This group of students may differ somewhat from a population more highly characterized by being laid off, as may have been the case earlier in the decade when the economic downturn stimulated many laid-off workers to pursue training. Instead, this population exhibits a larger number of workers who are seeking a better job. Re-careering is suggested by some of the comments included under “other” in that one
individual has suffered a disability. An assumption is that, unable to meet the demands
of the previous work, this individual is retraining for work that meets his or her
requirements. Another individual states, “Looking for a new career. Can’t stand the one
I have now; I lost the passion for it. Also, the hours are not good, I want to have a life
and not work all the time for bad pay and no benefits.” In summary, an awareness of the
reason for pursuing Job Training helps shape the context to understand the results of the
survey. Population characteristics comprise a large part of that context.

Another of the survey questions asks participants to rate their confidence level in
completing their program of study. A cross-tabulation, found in Table 16, facilitates a
look at the data to determine if any gender differences exist in the level of confidence in
completing college studies. The majority of participants for both males (approximately
80%) and females (approximately 75%) fell in the “very positive” category. Far fewer
fell into the somewhat positive category regarding college completion. For males, that
number was 4; for females, it was 1. Only one person was not sure how confident he was
of completing his studies. None of the participants chose that they were either doubtful
about completing or that they were certain they would not complete their job training
program.

**Ranking of Barriers by Students**

Students ranked the most challenging aspects of college. The survey participants
were instructed to leave blank any response that did not apply to their circumstances.
The remaining responses were ranked, with 1 being the most challenging aspect of
college, 2 indicating it was the second most challenging, 3 indicating that it was the third
most challenging, and so on. The responses indicated that 56.8% of the students thought
that transportation was an obstacle, and 42.1% of those students ranked it within the top three challenges of college attendance. These data are found in Table 17.

Table 16

Gender × Confidence of Completing Studies Cross-Tabulation

<table>
<thead>
<tr>
<th>Gender</th>
<th>Very Positive</th>
<th>Somewhat Positive</th>
<th>Not Sure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>35</td>
<td>4</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>Female</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>5</td>
<td>1</td>
<td>44</td>
</tr>
</tbody>
</table>

Table 17

Ranked Challenge for Transportation

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not ranked</td>
<td>19</td>
<td>43.2</td>
</tr>
<tr>
<td>First</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>Second</td>
<td>9</td>
<td>20.5</td>
</tr>
<tr>
<td>Third</td>
<td>6</td>
<td>13.6</td>
</tr>
<tr>
<td>Fourth</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Fifth</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Sixth</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Seventh</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Eighth</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The ability to get to class is requisite for successful completion. While urban transportation permits local students to depend on community resources to travel, those
outside the immediate college area have fewer alternatives. The beginning start time of class, 7:30 a.m. in most cases, may preclude multi-transfers with public transportation, but may also present opportunities for commuting with others who are currently working. Clearly, transportation has an impact on many students, to be ranked at 42.1% of the first three rankings of student responses.

Regarding motivation related to attendance, 43.2% of students ranked this variable as a potential impediment to completing college; of this group, 18.2% of the students designated struggling with attendance as one of the top three challenges in attending college. Crede, Roch, and Kieszczynka (2010) find that attendance is a better predictor of course grades than any other known predictor; they include such common predictors as high school grade point average, college entrance examination scores such as the Scholastic Aptitude Test (SAT), and even such broadly defined concepts as study habits (p. 286). These authors believe that attendance in college classes is critical to academic success and decreases the rate of failure experienced by college students. In this question, students are asked what is most challenging about college; based on their responses, “Being motivated to go to class” does not appear to be a challenge for them. It would appear that Job Training students find many obstacles in their path, but few (18.2% ranked it as first, second, or third of their challenges) find motivation to be at issue. In fact, 56.8% did not rank it at all. Table 18 depicts the responses for the ranked challenge of motivation.
Table 18

*Top Three Rankings, Challenge Is Motivation*

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not ranked</td>
<td>25</td>
<td>56.8</td>
</tr>
<tr>
<td>First</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Second</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Third</td>
<td>5</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Still fewer students ranked relating to others as a challenge. A total of 34.1% of students indicated this as a challenge, with the bulk of the respondents ranking the item fourth through eighth, which comprises 8 of the 15 participants who chose this as a variable that they find challenging in attending college. Riggs (2014) cites directly from student observations to describe both alienation and a sense of estrangement on the part of first-generation college students in her article about first-generation college students, “What It’s Like to Be the First Person in Your Family to Go to College.” The Technical Center is several miles from the main campus of this large urban Midwestern college and has a small campus atmosphere. Apparently, the organizational culture and the camaraderie with other students is welcoming enough so that 65.9% of these survey participants do not ascribe any difficulties to experiencing difficulty in relating to others, or the alienation or estrangement described by Riggs that might result from such a condition. A speculation is that the 34.1% who did indicate relating to others as a challenge might well experience those feelings of alienation or estrangement from the remainder of the college population they come into contact with mentioned by Riggs.

An incident that may have influenced the response to this question occurred just prior to the administration of the survey. A student made racially charged comments in
the classroom, and several African American students indicated that he had earlier pulled a knife out at the bus stop in front of the building in a threatening manner to them. Police were called and the doors to the building were locked. The remaining students in the classroom participated in this survey within half an hour of this incident. Such an occurrence could have influenced perceptions about relating to others, particularly after confronting such discriminatory behavior. Still, even with such unusual circumstances, the results of relating to others being a challenge in college were ranked low in terms of challenges, as presented visually in Table 19.

Table 19

Top Rankings, Challenge Is Relating to Others

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not ranked</td>
<td>29</td>
<td>65.9</td>
</tr>
<tr>
<td>First</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Second</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Third</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Fourth</td>
<td>4</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Another challenge ranked by students regarding meeting their college goals is that of working and attending college simultaneously. Riggert, Boyle, Petrosko, Ash, and Rude-Parkins (2006) reviewed the literature regarding the interaction of employment and education, noting that as college costs rise, so do the number of students who work, as well as the amount of hours they work. Their research finds varying degrees of support in the literature for and against employment, including full-time employment, of college students pursuing a credential. These researchers conclude, “Behavior makes sense only
if it can be viewed in its cultural context. Analogously, student employment makes sense only if it is viewed in the context that gives it meaning for the specific circumstances of the individual” (p. 89). In their treatise, these researchers find that a commitment to full-time work increases the time to degree. Since the length of Job Training is held constant, regardless of the employment circumstances of the student, this factor does not come into play but does require the student to meet two full-time obligations, that of work and that of school, simultaneously. Perhaps the short-term nature of the training makes this more possible. Clearly, Job Training students are more talented at persisting through completion, even when the end of a third shift job finds them heading to school for 8 hours of training rather than to their homes, to leisure, or to rest.

The challenge of working and going to school at the same time was considered to impact the studies of 45.5% of students, according to their rankings of the challenges inherent in attending college. Of those 24 students who comprise the 45.5%, 16 of them indicated that working while attending school was in the top three challenges for them. As mentioned previously, the time commitment for Job Training is 34 hours per week, since it is an immersive program. Such a time commitment, in combination with work, can create significant challenges for students. Table 20 provides results for the ranking of attending school and work simultaneously as a challenge for students in the Job Training program.
Table 20

*Top Three Rankings, Challenge Is School Plus Work*

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not ranked</td>
<td>24</td>
<td>54.5</td>
</tr>
<tr>
<td>First</td>
<td>7</td>
<td>15.9</td>
</tr>
<tr>
<td>Second</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>Third</td>
<td>6</td>
<td>13.6</td>
</tr>
</tbody>
</table>

Tovar and Simon (2010) researched the sense of belonging experienced by college students and believe that it has “a direct and positive effect on commitment to college, an indirect effect on both intention to persist, and on actual persistence designing interventions aimed at impacting student persistence” (p. 201). Hausmann, Ye, Schofield, and Woods (2009) believe that creating the conditions to methodically foster and strengthen a sense of belonging can positively impact college retention and completion because of the manner in which it impacts student behavior (p. 667). Reviewing the responses for “Wondering if I belong here” shows evidence that students also perceive some importance in this variable. While 59.1% of the students did not rank it as a challenge, 25.1% found the challenge important enough to rank it in the top six of the challenges they meet in working toward college success and completion. This information is found in Table 21. Because a sense of belonging might be more attainable when students come from a majority culture (Hausmann et al., 2009; Maestas, Vaquera, & Muñoz Zehr, 2007; Tovar & Simon, 2010), it is of interest to see whether there are more significant numbers (and stronger ranking) of responses indicating a sense of belonging as a challenge emanating from individuals from ethnic minority categories.
That information is provided in Table 22 as a chi-square test; using an alpha of .05, significance would be found when the asymptotic significance is less than .05. The significance reflects .608, so that it appears that ethnicity does not play a significant role in a developed sense of belonging, at least in regard to Job Training students at this particular college, where the majority of students are from low-income, first-generation populations (62.1% in 2012–2013.) In terms of persistence, support from family members, a perceived commitment to success from the faculty or others from the institution, or a sense of perseverance and academic development may, to some extent, counter the negative impact of a lessened sense of belonging for college students.

Table 21

*Ranked Challenge Is Belonging in College*

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not ranked</td>
<td>26</td>
<td>59.1</td>
</tr>
<tr>
<td>First</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Second</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Third</td>
<td>5</td>
<td>11.4</td>
</tr>
</tbody>
</table>
### Table 22

**Chi-Square Test, Belonging × Ethnicity**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson chi-square</td>
<td>33.074a</td>
<td>36</td>
<td>.608</td>
</tr>
<tr>
<td>Likelihood ratio</td>
<td>21.375</td>
<td>36</td>
<td>.975</td>
</tr>
<tr>
<td>Linear-by-linear association</td>
<td>1.244</td>
<td>1</td>
<td>.265</td>
</tr>
<tr>
<td>N of valid cases</td>
<td>44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a* 48 cells (96.0%) have expected count less than 5. The minimum expected count is .02.

Understanding the material was not ranked as a challenge by 43.2% of the students surveyed (n = 19) but had significance for 56.9% of students. Of those who indicated that the complexity of the classroom and laboratory studies did constitute a challenge, 29.5% of them ranked it as first through third, while 6.9% of the students (n = 3) ranked this variable as seventh through ninth in relation to the challenges they face in college. The remainder of the group fell into the median rankings of fourth through sixth, which accounted for 20.5% of the responses. While further research would be required to provide a definitive conclusion, there is at least an implication that the challenge of not understanding the material might be encountered less frequently, but when it is, it becomes a formidable challenge. Understanding this variable in the larger context of program completion, failure to comprehend the tasks and assignments of Job Training has substantial potential to influence the trajectory of the student on the path to successful goal completion. The importance of how students perceive such a challenge, and their actions to rectify the situation, become critical. A later question on the survey
asks students to specify their actions when they encounter material they do not understand. That question may further inform this research regarding the experiences of these students, when contending with such a challenge.

Finances were indicated by the largest number of students as being a challenge. As illustrated in Table 23, only 15.9% ($n = 7$) of students did not rank finances as posing a challenge. To further underscore the placement of finances as the single most challenging factor about completing college, in the students’ perspective, 72.8% of those who ranked it as a challenge selected it in the highest three of their rankings. More than 11% (11.3%) of the students weighted it third through fifth in their rankings. No one selected finances as ranking lower than fifth, among those 72.8% who selected it as a challenge. Clearly, one of the most difficult hurdles is managing finances, balancing them along with the commitment of college, in order to complete the program of study.

Table 23

*Ranked Challenge Is Financial*

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not ranked</td>
<td>7</td>
<td>15.9</td>
</tr>
<tr>
<td>First</td>
<td>20</td>
<td>45.5</td>
</tr>
<tr>
<td>Second</td>
<td>11</td>
<td>25.0</td>
</tr>
<tr>
<td>Third</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Fourth</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Fifth</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Child care was not experienced as a significant challenge for the students surveyed. Seventy-five percent of students did not rank it as a challenge; of the 25% who
did indicate some measure of challenge with managing the care of their children while in school, almost half of them ranked it ninth (11.4%). This survey item had the lowest ranking for posing an impediment to completing college. No one ranked it first or second. In many research studies of college completion, this ranking might indicate traditional students who have yet to begin their families. With the population of Job Training, establishing as we have that the mean age of the participants is 34.6 years of age, it may mean something entirely different. One might surmise that for the majority of these students, managing the care of young children may be a developmental challenge they have already completed; another possibility is that this concern ranked lower because of family support or other conditions that gave more weight to the other rankings. Another speculation is that the low number of females enrolled in Job Training has an impact on this variable. Within American culture, the majority of families rely on the female in the family to manage child care. Within the perspective of these students, then, managing for care of their children was not an overriding concern or significant obstacle to completing their program of study, at least not within the context of the other variables presented.

Finding time to study was less of a concern to a significant number of the Job Training students. Less than half of the students ranked this as a challenge, constituting 45.5% \((n = 20)\) of the respondents. Weighting it first through third in their rankings was reflected in the responses of 18.1% of the surveyed participants. It may be that the combination of classroom material and presentation, followed by hands-on training, leads to stronger comprehension of the learning content. Such comprehension would simplify the time and effort spent on additional work outside the classroom. In addition, there
may be less emphasis placed on external assignments, because of the length of the training day (8 hours). While Job Training students do receive assignments and reading that need attention outside of class, it may not be characterized by the extent of such requirements found in credit courses. One exception to this is math. For most of the Job Training areas, math skills are some part of the foundation of the skill being taught. Many students take advantage of tutoring when it is available at the technical center, and the one type of tutor that regularly visits this off-campus site is one who is well-versed in the subject of math. Thus, this barrier is recognized and addressed by the institution.

Certainty About Completion

The participants were asked about their level of certainty regarding program completion and could choose that they were very positive, somewhat positive, not sure, doubtful about completion, or that they were certain they would not complete. Responses fell significantly in the very positive range, with 86.4% (n = 38) selecting this response. Five participants, 11.4%, indicated that they were somewhat positive that they would complete their program of study. One student, comprising 2.3% of the total population, was not sure about completing. There were not any students who were doubtful, or who were certain that they would not complete their studies. These students appeared to have a clear perception of what the training requires of them and to have confidence that they can meet those requirements.

Obstacles to Completion

Question 8 asks whether the participants have encountered any obstacles that made them consider dropping out of college. A clear majority of students, 70.5%, did not foresee any complications that could lead to their leaving college. Digging deeper,
question 9 attempts to determine the nature of such obstacles that might have such a heavy impact as to potentially cause leaving school. Of those who foresaw the possibility of such complications, 29.5%, the obstacle that was most likely to impede their studies was that of finances. Of the 29.5% of students who indicated that obstacles might negatively impact their goal of successful completion, half of them chose finances as the obstacle most likely to interfere. The other half were split between responses of probation or parole requirements, transportation problems, child care problems, conflict with work, family support, or lack of motivation (this last was a write-in response.) A provision was made in the question allowing the student to list “other” variables; additional write-in responses included, “the birth of my son” and “personal” as write-in responses.

Factors that Contribute to Completion

Table 24 compares the data received in response to students’ perception of what are the strongest contributing factors to completing college. When asked what those factors are, the largest number of students (16) said that the quality of instruction was the most significant factor, and the second largest number of students (10) found that the motivation of the student was the most significant factor. This interplay between student and faculty is a principal component in Rhoades’ (2012) work, in which he finds that faculty are central to quality and completion; he further claims that the focus has shifted to include the student and learning-centered strategies. It would seem that the perspectives of the Job Training students at this large Midwestern college support Rhoades’ conclusions, lending credence to his idea that the interaction and connection
between faculty and students is a central factor in enhancing quality and in promoting student attainment of goals.

Table 24

Contributors to Completion

<table>
<thead>
<tr>
<th>Contributing Factor</th>
<th>What contributes most to finishing college?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ranked First</td>
</tr>
<tr>
<td>Motivation</td>
<td>10</td>
</tr>
<tr>
<td>Institutional support (financial aid, advising, tutoring)</td>
<td>6</td>
</tr>
<tr>
<td>Quality of instructor</td>
<td>16</td>
</tr>
<tr>
<td>Intelligence</td>
<td>9</td>
</tr>
<tr>
<td>Accessibility (distance from home)</td>
<td>2</td>
</tr>
<tr>
<td>Feeling welcome at the college</td>
<td>6</td>
</tr>
</tbody>
</table>

*Note.* $n = 44.$

While only 6 students ranked institutional support as being the strongest factor of finishing college, 13 rated it as the second most influential consideration, which lends a bit more weight to how significant students believe financial aid, tutoring, and appropriate advising are to their college success. Arum and Roksa (2011), in their book *Academically Adrift: Limited Learning on College Campuses*, discuss that institutional policies can promote organizational climate that is conducive to academic growth and leads to completion. These authors expressively note that colleges must take responsibility for shaping the psychologically developmental trajectories of students and must prioritize such organizational goals in their decision-making (p. 127).
Surprisingly, 19 students (43%) thought that intelligence is a strong contributor in whether or not a student finishes college. This is contradictory to recent research that shows that motivation and commitment are more influential factors than intelligence levels when considering college completion. Duckworth (2013) proposes that some of the strongest performers in the classroom may not have “stratospheric” intelligence levels, while some of the smartest students may not be earning good grades; she attributes grit, or perseverance, to be far more predictive in determining the success of students.

Sometimes success may have an external value-laden locus. An intriguing example of this is found in examining a gifted individual who had both fortitude and a high level of intelligence: Albert Einstein. Although he completed his doctorate in 1905, by 1909 Einstein began to despair of becoming a university professor; it was not until 1911 that, after making attempts to improve his teaching skills, Einstein eventually landed a full professorship in Prague. Evaluation of his intellect and his teaching skills are summarized in Kleiner’s words (Kleiner was then a professor of physics at the University of Zurich), which were that “Einstein will prove his worth as a teacher, because he is too intelligent and too conscientious not to be open to advice when necessary” (Isaacson, 2008). Time bore out Kleiner’s speculation, and indeed, Einstein became a talented teacher and lecturer, evincing both intellect and fortitude. Kleiner is also the one who points to the external perspective of anti-Semitic bias, vouching for Einstein by saying that he did not exhibit the “unpleasant peculiarities” then associated with Jews (Isaacson, 2008). So, while the factor of intelligence in academic success appears simple to our students, there are many related components, including
perseverance and external loci such as societal bias, which may also factor into the completion of one’s goals.

Two areas of the survey did not merit substantial student support as being significant factors that contribute to success in college: the ease in accessibility, or distance of the college (15% of the students ranked this first or second), and whether a student feels welcome at the college (20.5% of the students ranked this first or second.) It may be that students who are enrolled and attending, as were all the survey participants, have overcome many of the obstructions implicated by distance to and ease within the college’s environment. Such an observation cannot assume that such factors did not impact these students, simply that they have been overcome or are not perceived as influential, by students. Or, in the case of the former, it may be an indicator that access is simply a portion of the equation of that which constitutes academic success, and that students possess the recognition that more than access is involved when considering what contributes to academic success and completing college.

Asking the question, “Has anyone in your circle of close friends or family encouraged you to miss a day of school” followed up by a request to know “If so, why” was an attempt to determine whether external forces subvert the efforts of students engaged in immersion training to learn new skills. Only 15.9% of students (n = 7) responded in the affirmative. At the time the question was written, it was thought to have the potential to determine whether such influence on students might result from sabotage or selfish needs of significant others that could potentially undermine students’ efforts. However, the days leading up to the survey were characterized by blizzard conditions, and the researcher realized that false positives might result, if family members
encouraged a loved one to use caution, due to the weather. One student did respond that this was the case, writing “poor weather” as the reason for the encouragement to miss school. The complete list of responses is as follows:

- Have fun with them
- Getting too stressed
- More time for obligations
- Injured
- Sex
- Poor weather
- No response

Of these responses, three (have fun with them, more time for obligations, and sex) relate more to the needs of the significant other than to those of the student. The other three (getting too stressed, injured, and poor weather) are distinguished by concern more for the student than for the other. At least on the surface, it would seem that this population largely has support from significant others, who (except in three cases) are not characterized by the need to disrupt the goals of the student.

**Program of Study**

The next set of questions delves into the program of study. Students are asked whether their program of study articulates for further study, and whether they are more likely to continue with college after earning their certificate of completion if it does, and they are asked to provide their program of study. Table 25 illustrates the programs of study for the survey participants.
CNC Machining has the highest level of enrollment, 29.5% or $n = 13$, among the survey participants. This trend among survey participants follows the enrollment pattern for the Job Training program at the college since, for CNC Machining, a waiting list is in place. Students may have to wait a month to get into the program; its popularity is found within the ready employment opportunities at higher-than-entry levels of pay to those that complete the training. This program is followed in size by automotive, with 22.7% of the surveyed students enrolled in this training ($n = 10$). Lower numbers are found for Introduction to Construction (9.1%, $n = 4$), Construction Electrician (11.4%, $n = 5$) and Welding Fabrication Technician (11.4%, $n = 5$) and reflect lower enrollments in these areas.

Only 4.5% ($n = 2$) of Construction Remodeling students participated in the survey, but this is likely because most of their training occurs offsite. This program rehabilitates or assists with the building of homes in the community, in conjunction with
Habitat for Humanity. While Computer Support Technician trainees comprised only 11.4% of the respondents ($n = 5$), all but one of the current students chose to participate. This program tends toward lower enrollments, but has high impact in the labor force. The local newspaper interviewed a December 2013 graduate who completed the training and attributed his new job as a computer technician to the training, which taught him “to fix computers infected by viruses, set up a businesses’ computer network and maximize Internet security” (McVicar, 2013).

To investigate the students’ perspectives on their programs, questions about articulation and continuing training were also asked. Results show that 65.9% of the respondents believed that their program of study would articulate (earn college credits toward a certificate or degree) if they continued their education. A number of students, 15.9%, thought that their program would not articulate. The remainder, 18.2%, did not know whether or not articulation was feasible in their program of study. At the time the survey was conducted, each of the programs articulated with an Associate degree program at the community college or with a university partner, with the exception of the introductory construction course. The remaining construction courses articulated with the Construction Technology program offered by this university partner located on the community college’s campus. The partnering university did not have a current formal articulation agreement with the college, but had marketed and honored the articulation for the Associate degree in Construction Technology in the past. As of this writing, the university has pulled the information regarding articulation from their website and is reviewing course objectives to determine whether it will continue to articulate the
construction training. For the purposes of this research, the question of whether students had a clear perspective on articulation has become clouded.

Of interest are the 18.2% of students who were not certain whether their courses would articulate. How the program of study might fit into a larger context of academic preparation for the workforce is likely to have an impact on completion. The student perspective, then, may not always be one that is fully cognizant of the opportunity of building on current skills and training to build a stronger presence in the workforce. This is particularly potent when reviewing the responses for the next question, regarding whether the likelihood of continuing increases when the program of study is articulated into college credits. The majority of survey respondents, 75% or \( n = 33 \), indicated that they would, while 25% (\( n = 11 \)) said that they would not. The importance of creating a recognizable academic pathway and communicating it clearly to students has implications for how they manage academic goals, and for their perspective on college completion.

Question 17 asks survey participants to designate their first course of action when they encounter learning that falls beyond their comprehension. Most students look to their instructor, as shown by an 81.8% rate of response. As previously mentioned, there is also a cohort model existing in Job Training, in which some students have been involved in training for 1, 2, 3, or 4 months when a new student enters the program. This may be partially responsible for the fact that 15.9% of students seek information from other students. Only one student chose seeking a tutor as the first course of action when encountering complex content. There weren’t any students who chose the responses, “Nothing; hope that you will pick it up later” or “Other.” It would seem, from what
students have signified on this survey, they are all proactive when they encounter learning that does not come easy to them. While most turn to the instructor, a few of students turn to one another or to tutoring to unlock the knowledge presented in their programs.

**Completion and Test Scores**

Questions 15 and 16 ask about WorkKeys® scores, to elicit the number of times a student had to attempt the test to meet entrance requirements, and to determine whether students changed his or her program of study, based on required scores (required cut scores are listed in Table 2, located in Chapter 3). In investigating the number of students who recorded the number of attempts to achieve the WorkKeys® cut scores required for Job Training, it was found that 81.8% \( (n = 36) \) of the participants reported that they passed this requirement on their first attempt. To obtain the necessary scores, 18.2% \( (n = 8) \) took the test a second time. Because the test scores differ from one program to another, understanding the student perspective requires an idea of whether the students were willing to change their goals, based on their scores. The data indicate that 90.9% of the students did not; 9.1% of the students entered a different program, based on their WorkKeys® scores. Since only 18.2% of the students were required to retake WorkKeys®, this 9.1% would indicate that around half of them chose a different program of study, rather than attempting to again increase their scores.

Students may perceive, then, that “getting on with it” and getting into a program outweighs further study to obtain the required scores for their career interests. Of course, in the case of the construction programs, stepping back to the introductory course (which requires lower scores) could be construed as remaining on the same career pathway. In
this case, the student’s choice would be to enter training at the introductory level, rather than one of the specialty areas such as Construction Remodeling or Residential Construction. Based on the responses to questions about the testing, the majority of students (81.8%) pass the test on their first attempt; of those that did not, only half (9.1%) were willing to change programs, based on test scores. The student perception of those surveyed, then, might well be that (in most cases) the testing requirement is within reach to meet their college goals.

An intriguing insight into the student perspective is whether they believe that training is necessary for knowledge, or whether they believe that their goals simply require a credential to formalize skills they have already acquired. To elicit data in this regard, the question was asked, “Did you already have the skills you are training for?” Table 26 outlines the responses to this survey question.

<table>
<thead>
<tr>
<th>Skills</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than half the learning is new</td>
<td>30</td>
<td>68.2</td>
</tr>
<tr>
<td>About half the learning is new</td>
<td>7</td>
<td>15.9</td>
</tr>
<tr>
<td>About a quarter or less is new</td>
<td>6</td>
<td>13.6</td>
</tr>
<tr>
<td>Already knew all of the skills</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The widely held response was that more than half the learning was new, with 68.2% of students indicating this to be the case. An additional 15.9% thought that about
half the learning was new. Six students, 13.6%, felt that a quarter or less of the learning consisted of skills they did not already possess. Only one respondent felt that he or she already had all the skills offered in the Job Training program of study. From the perspective of the students, then, the purpose of attending their college training programs was more aligned with new skills and opportunities, than with formalizing a credential to enter the workplace with existing skills.

Finally, the last forced response question asks the students about what is most helpful in terms of completing college successfully. The area with the highest percentage of responses was motivation, which accounted for 63.6% of what students believe contributes most to their college success. The instructor was second, with a 27.3% response rate. Two people, 4.5%, attributed success to family support. One person, 2.3%, indicated that classmates contributed strongly to student success. Finally, one person indicated “other” and wrote in, “Does not apply.” The responses on this question are presented in Table 27.

Table 27

Completing College

<table>
<thead>
<tr>
<th>What is most helpful in completing college?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Instructor</td>
<td>12</td>
<td>27.3</td>
</tr>
<tr>
<td>Classmates</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Self-motivation</td>
<td>28</td>
<td>63.6</td>
</tr>
<tr>
<td>Family support</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>
By choosing self-motivation, the majority of students seem to perceive an internal locus of control, in terms of what may contribute most to their success. This attitude, that the keys to success lie within their own power and position, may contribute to the high rate of completion found in the Job Training program at this urban Midwestern college.

The last question of the survey provided students with the opportunity to add a comment, a written encouragement to further add their thoughts about what students need to finish their college studies. Twenty-seven participants chose to do so, although five of those responses read, “no,” “N/A,” or “none.” The responses provided by students are reproduced below.

1. A tutor. Money to get to and from school. Rent money.
2. Affordable housing.
3. Come to school.
4. Don’t party!
5. Have _____ as a teacher.
6. I believe most all of the student [sic] must have the drive and commitment if they want to complete training and be successful in their field of study.
7. I feel it all come [sic] down to self motivation. A self motivated person can achieve any goals they wish.
8. I think we should have different ways to teach each student. Each student learns differently. I, personally learn better doing the work then [sic] learning about what I just learned. Some learn from seeing, some learn from doing, and some learn from reading. Class should be tailored to each individual needs [sic].
9. Job finding skills. Life coping skills.

10. Just be in class every day and pay attention to instructor.

11. Mind set.

12. Just motivation to get to class.

13. Look for something that is most applicable, feasible and direct to your goals.

   With high costs and collateral [sic] required classes, discouragement is high.

   Combat this by making choices that will get you to your goal the best and quickest, spending as little money as possible. A degree is just paper, skills and experience will set up a life of success.

14. More support with transportation, with [sic] those less fortunate to have their own transportation. It needs to be more available also with financial supports.

15. Positive support around them, good decision making.

16. Staff and instructors not being negative and talking about students. And start motivating students. Or just quit working at ____ because its [sic] already hard on students.

17. Students also need faith. If a student doesn’t believe in himself/herself, then nothing will be accomplished.

18. They need to help one another.


20. Weekly or monthly gas vouchers we could qualify for.

21. To me, an instructor is the most integral part to not only learning, but also to completing college. So many instructors seem to get lost in their power that
they forget what the entire point of their class or of college in general is about. An instructor should be the unequivical [sic] source for a student’s questions and should help the student and answer their questions no matter the circumstance.

22. Motivation, studying after school.

23. Work hard and smart.

24. We must all be dedicated as individuals, this is my first college course, I’m glad I’m in college, especially where I come from and came from. Thank you _____, _____, and _____ and all the staff that made this possible for me. Thank you.

25. No (3)

26. N/A

27. None

In reviewing these comments, 12 of them may be loosely interpreted as relating to attributes of the student. These comments include come to school, don’t party, most all students must have the drive and commitment if they want to complete training, self-motivation, mind-set, motivation to get to class, students need faith, need to help one another, work hard, motivation and studying, and being dedicated. Of the total responses, 10 related more closely to institutional practices; these included tutoring, affordable housing, faculty, learning styles, job finding skills, support for transportation costs, and positive support. Two of the responses, feasible goals and high costs, and be in class every day and pay attention to your instructor, contained both student attributes and
institutional practices. Thus, to varying degrees, students seem to perceive both the institution and themselves as responsible for the pursuit of completion.

**Video**

A professional videographer was used to videotape interview responses. Five students participated in the videotaping. Four students who had indicated interest by signing up for the video on a previous date chose to not participate in the interviews, saying that it was too stressful to be videotaped. Students were led to a room where the video equipment was set up, with professional lighting. While the set looked intimidating, the videographer attempted to put students at ease by asking them to ignore the equipment and to speak directly to the interviewer. He conducted a sound test, asking the students to count in their typical speaking voice, and the students were instructed to try and work the question in so that their statements sounded complete, rather than appearing to be an answer. With that one exception, students were not coached on what to say or how to say it. The videotaped sessions were individual rather than group, to minimize ambient, extraneous sound. A shotgun microphone mounted on the tripod was used to maximize sound clarity while minimizing the invasiveness of a lavalier microphone; the shotgun type of microphone tends to pick up primarily the sound in front of it.

Several students asked about the use of the video and were told that the video would be used for educators to help them understand the student’s ideas of what is needed to complete college. Information was shared that the Job Training program has the highest completion rate within the college, and that the project under construction, this dissertation, attempts to understand what leads students to succeed in accomplishing
their goals. Students were given the list of questions when signing up for the video interviews 4 weeks prior to filming, and were provided with an opportunity to review and chat about the questions before taping. In many cases, students visibly relaxed after one or two questions, based on video review. All of the students interviewed were very serious about communicating information to educators via this video and provided very thoughtful perceptions. Portions of these narratives are recorded in the video that accompanies this dissertation.

**Video Content**

The video is titled “The Meaning of Completion: The Students’ Perspective.” The following are the sections of the video:

- Why Enroll?
- Opportunity
- Institutional Practices
- Student Attributes
- What Meaning Do Students Attribute to Their Education?
- What Might Keep You from Completing College?
- Why Is Completion Important to You?
- Final Thoughts

The video is interspliced with commentary from Terry O’Banion, a prominent leader in the field of community college education, and Lumina Foundation executive leaders including Elizabeth Gutiérrez, Director of State Policy; James Applegate, Vice President of Strategic Impact; Dewayne Matthews, Vice President of Strategy and Development; and Sam Cargile, Vice President and Senior Advisor to the CEO. Both the
students and these well-known leaders discuss factors that impact students and voice their opinions and ideas about the meaning of completing one’s educational goals. These Job Training students have provided a wealth of information about their experiences and outlook, and the simplicity and genuine feedback they provide is an honest and welcome approach to the puzzle of college completion. They are finishing a program that enjoyed a 77.9% completion rate last year, and are likely to be successful completers, themselves, adding to the completion rates for 2013–2014. As experts-in-practice on the student perspective of completion, the students who participated in the video provide a first-hand narrative of their thoughts, values, and beliefs regarding their college experience. The video is included as part of this dissertation; the meaning suggested by Frankl is clearly a part of the students’ perspective. This meaning, whether relating to work, to helping others, or to survival, unifies the findings on completion as well as the data provided by students in the survey.

**Summary**

The first research question, “How were the completion rates of Job Training impacted by the requirement of specific scores on WorkKeys® and mandatory orientation?” stems from the idea that student success would increase, based on these interventions (McClenney & Arnsparger, 2012). These completion rates were examined in a quantitative format, for three academic years, 2010–2011, 2011–2012, and 2012–2013. The findings did not show a rise in the year of implementation (2011–2012) when compared with the previous year (2010–2011), in which no interventions were used. Rather, the research instead found a substantial decrease in completion rates. The next year, 2012–2013, did reflect the expected increase in completion rates.
Speculation on the reason for the decline in completion in 2011–2012 included lower levels of student support stemming from institutional change, not only of implementing these two initiatives, but of changing the structure of Job Training to a credit-based, 1-year certificate. Significant resistance by students was experienced based on this proposed change, and the Job Training programs reverted back to non-credit, short-term training in 2012–2013. Another factor found in the demographics that may have influenced completion levels was a higher level of economically disadvantaged students attending during 2011–2012. Evidence for this is found in the rate of Pell eligibility, which was 85% in 2011–2012, the year of the decreased completion rates, and 73% for the year prior (the baseline year) and 74% for the year after. Thus, economic factors within the community may have had an impact on the rates of completion.

The high rate of completion (77.9% in 2012–2013) masks some disturbing trends in enrollment and completion. Women are enrolling in fewer numbers and both African American males and females have a much lower completion rate than the Job Training participants as a whole. In addition, while Job Training enjoys higher than average enrollment of ethnic minority students, the trend for enrollment patterns of African American males is decreasing. Questions about these occurrences are beyond the purview of this research, but realizing that they exist is the first step in addressing such challenges. This can assist the institution in providing institutional support and outreach to create stronger conditions for student success.

The next research questions, “What do students report leads to successful completion of their programs?” and “What barriers do students find are most detrimental to achieving their goals?” were investigated through use of a survey. The survey was
administered to students currently engaged in Job Training (2013–2014.) This inquiry was evaluated in a qualitative format. Students reported that the quality of instruction was the most significant factor in completing college, with 33 of the 44 students ranking this within their first three choices. The second choice was that of motivation of the student, which received rankings by 26 students; more students ranked it second or third than first. The support of the college, in terms of financial aid, advising, and tutoring was another area that students thought made a difference in finishing school, as it was also ranked by 26 students as important, but with fewer awarding it a higher ranking than motivation. Twenty-four of the survey respondents indicated that intelligence was a strong contributor to finishing college.

Finances were the strongest impediment to Job Training students at 72.8%, indicating it was a challenge in some form. Transportation was the second most common obstacle, with 56.8% of survey respondents indicating this as a challenge. Understanding classroom material was reported by 56.9% of the participants to be an obstacle in completing college. Finally, working and attending school created struggles for 45.5% of the students surveyed. Other questions elicited conditions that could complicate the students completing their educational goals; those conditions consisted of probation or parole requirements, family support, or lack of motivation.

The final questions of this research study were, “What meaning does the student attribute to completing college? How does this impact their perspective of college completion?” These questions were answered in the format of a video, in engaging and honest first-person narratives. All the students voiced a strong commitment to completing their program of study and offered their thoughts and ideas about the nuances
of college completion. Interwoven with video vignettes of leaders in education, the words of the students may be slightly less sophisticated, but the thoughts and ideas of each follow alongside those of distinguished leaders. It is clear that completion is a matter of concern to all, and that all are strongly committed to solving the puzzle of the completion problem.
CHAPTER 5

ANALYSIS AND IMPLICATIONS

The research questions are:

1. How were the completion rates in Job Training impacted by the requirement of specific scores on WorkKeys® and mandatory orientation?

2. What is the students’ perspective on college completion? Specifically, what do students report leads to successful completion of their programs, and conversely, what barriers do they find are most detrimental to achieving their goals?

3. An additional product resulting from the dissertation is an educational video. This video examines the student’s perspective on completion in greater depth, with a goal of answering from a psychosocial framework, what meanings do the students attribute to completing college? How does this impact their perspective of college completion?

Analysis of the Research: Completion Rates

The first question, how the completion rates were impacted by two new initiatives—that of specific WorkKeys® scores indicating readiness in applied mathematics, reading for information, and locating information, along with mandatory orientation for new students—was theorized to bolster completion rates. This was not
found to be the case during the year these treatments were implemented (2011–2012). In the baseline year, 2010–2011, the completion rate was 70.3%. Rather than rising the following year of implementation, in 2011–2012, the completion rate fell to 64.5%. So, did the new initiatives instead have a negative impact on completion? The third year, 2012–2013, does not support that theory, either. Instead, the completion rates rose significantly, to 77.9%. It is difficult to parse the effect of the treatments on completion, based on these results. Perhaps an initial resistance to the measures by students was implicated in the research, with the following year characterized by forbearance.

Because Job Training is 18 weeks in length, such forbearance comes more quickly since students who were not obliged to meet the new requirements are no longer at the M-TEC to point out the differences to new students. Job Training is characterized by a cohort model, with new students entering each month and joining a class that has students engaged in their second, third, or fourth month of training. So, for incoming students just falling under the newly implemented system, engaging with their cohort (who were not required to engage in these activities) could have brought resistance to the fore.

Enrollment patterns also changed over the 3 years. Enrollment fell from 360 in 2010–2011 to 287 in 2011–2012, and declined further in 2012–2013 to 253. If such declines resulted from reticence to enroll by less academically prepared students, the completion rates should have risen in both years following the conception and implementation of these initiatives. It would seem that other variables are in play, which might be identified through further research of the population and of scrutinizing longitudinal data more thoroughly, for a longer period of time. Certainly, 2013–2014
data may provide additional information about the direction of the completion trend, as well as the enrollment pattern, for Job Training.

Decreasing enrollments were a factor for the college as a whole, but in a much more conservative number than that of Job Training. The decline for the college in 2011–2012 was 1.8%, while for Job Training, it was 20.3%. The next year, 2012–2013, saw a 1.0% drop in enrollment college-wide, with a corresponding drop in Job Training of 12%. If these more dramatic declines in enrollment for Job Training represent a more highly prepared population, in terms of academics, completion rates should, again, have risen for both years—or at least remained constant in 2011–2012, with an increase in 2012–2013. The decrease in completion in 2011–2012, a drop of 5.8%, is difficult to explain.

Differences in demographics for the academic years researched are also noted and may relate to the findings for both enrollment and completion. Students who are low-income attended in higher numbers during 2011–2012; evidence for this is found in the rate of Pell eligibility, which was 85% in 2011–2012, and 73% for the year prior (the baseline year) and 74% for the year after, 2012–2013. In those years that the percentage of low-income students matched more closely, at 73% and 74%, the completion rates were higher, at, respectively, 70.3% and 77.9%. Further research might more accurately pinpoint this interaction between lack of financial resources of the student and completion; for the purposes of this study, it seems clear that economic factors had some impact on the rates of completion.

A key benefit of conducting longitudinal studies of completion is the ability to unpack graduation rates for specific populations. When there are high rates of
completion, coupled with high rates of minority enrollment, the tendency can be to assume success for those populations. Looking more closely at these numbers, in the 2012–2013 Job Training year, which realized a 77.9% graduation rate, 47.9% of that total were non-White enrollees, and 36% of that total was African American. With only 16 female enrollees during this year, the majority of these students were African American males. Looking at completion rates for that year, 58.7% of these students completed, significantly fewer than the overall rate of 77.9%. In reviewing the research on completion for this project, eradication of achievement gaps was a primary consideration (Boykin & Noguera, 2011; CCCSE, 2014; Milner 2010). Bumphus (2014) underscores that addressing this “intractable” problem may require reimagining the entire community college experience, and emphasizes that it clearly falls within the purview of the community college, which he envisions as being grounded in equity (p. 2). Attending closely to which populations struggle with completion is the first step in reimagining the college experience to provide a culture of success for all students.

A surprise in the data was the low number of female enrollees (6.3% in 2012–2013, the latest year of the study) of which 52.9% completed the program, significantly below the general population completion rate of 77.9%. This is another case in which overall success can mask the fact that a specific population is struggling with the academics, the institutional culture, or perhaps with financial considerations; whatever the challenges are for this specific population, they clearly impact completion. Since such a low percentage of females enroll, and because those that do enroll have a lower level of completion than the entirety of enrollees, questions about an achievement gap exist here, as well. With the introduction of such information when data are
disaggregated, institutions are advised to review their processes and the institutional culture to ensure that nontraditional roles for women are supported, and that the population has the tools needed for success. Further research keying on these populations, African American males and females, would provide a better understanding of the variables that appear to influence completion of the program. Analysis of data from multiple perspectives should result in interventions that would enable all populations to enjoy the highest possible levels of success, resulting in a more equitable educational setting.

Looking further at ethnic minority groups, the Hispanic/Latino group consistently completes Job Training programs above the rate of the entire population. In 2012–2013, the completion rate for this group was 87%, while the total completion rate was 77.9%; in 2011–2012, the completion rate for Hispanic/Latinos was 75%, while the entire population completed at a 64.5% rate; and in 2010–2011, the completion rate for this ethnic minority was 81.8%, in comparison to the 70.3% completion rate of all Job Training students. This research focuses on the fact that, based on Appreciative Inquiry (Cooperrider & Whitney, 2005), there are lessons for institutions that endeavor to improve their completion rates through analysis of what is currently effective. Further research with a focus on the Hispanic/Latino population to identify those factors that led to higher rates of completion could be a future step in this direction. Collecting data on groups that are successful to understand the variables that lead to their accomplishment may help to ascertain what factors impact college completion.

Finally, some difficulty was encountered in interpreting completion rates for American Indian/Alaskan Native and Asian populations, since the number of enrollments
was so low in these populations. In the case of Asians, with enrollments that consisted of 3 in 2012–2013, 2 in 2011–2012, and 4 in 2010–2011, making statements from the data that completion rates improved dramatically from 33.3% in 2010–2011 to 100% in 2011–2012 and remained at this improved level of 100% in 2012–2013 fails to take into account that such an improvement rate rests on the success of two individuals. The same caution exists for assessing the completion rates of American Indian/Alaskan Native students. In 2010–2011, an 85.7% completion rate for the three students enrolled was recorded; the following year, a completion rate of zero was realized for the three enrollees; in the final year of the study, 2012–2013, the rate returns to 100% based on two students. While such differences are impressive, generalizations for such groups based on such low numbers is problematic. The number of participants is a key variable in the ability to interpret the results with any level of confidence. Thus, this research cannot speak to the success of either the Asian or Native American groups. It may be that, when making inferences from data about populations with such low representation, a better design would be a qualitative measure that evaluates completion from the perspective of the individual. This will help eliminate the problem of the available sampling size having insufficient power to reflect the characteristics of that specific population.

**Analysis of the Research: The Student Perspective on Completion**

The next research questions addressed in this study are the following two interrogatives: What is the students’ perspective on college completion? Specifically, what do students report leads to successful completion of their programs, and conversely, what barriers do they find are most detrimental to achieving their goals?
The answers to these research questions were sought in the form of a survey (Appendix D), administered to current Job Training students attending in winter semester of 2013-2014. The first four questions addressed demographics, used to describe tendencies within the responses based on individual characteristics. In terms of eliciting students’ reasons for enrollment, the majority of students (52.3%) responded that they were looking for a better job. Other students reported that they were unable to find work (13.6%). Still others indicated that they could not find a job that supports them, or their family (11.4%). Only 2.3% of the students reported being in school because they were laid off. In recent years, state funding such as No Worker Left Behind (NWLB) created a population with entirely different characteristics; both funding and the economy have had a large impact on enrollment trends of Job Training and, to some extent, to enrollment within the School of Workforce Development as a whole. State agencies tend to approve Job Training readily because of the shorter “training to paycheck” timeframe. Support for this is found in the State of Michigan’s (2010) Fact Sheet for NWLB, which states, “No Worker Left Behind is a paradigm shift for Michigan, and it is exactly what we need to accelerate worker transitions and contribute to the state’s economic transformation and global competitiveness” (para. 5). It is possible that this population shift in Job Training impacted completion rates to some extent. It seems likely that the perspective of the student is much different when underemployment or inability to find work is the driving motivation for attending school, rather than retraining for a different career. Mylonas and Furnham (2014) discuss motivation as a factor in unemployment, even when considering unemployment as a function of economic conditions. Ovink (2014), Easley, Bianco, and Leech (2012), and Spanard (1990) find strong connections to motivation and college
completion, believing that such success has an intrinsic component of motivation. While there may be differences between cultural groups (Easley et al., 2012) or as a function of economic conditions (Mylonas & Furnham, 2014), it would seem that motivation is associated with success and program completion.

An overview of the analysis and implications of the results may be facilitated by grouping questions to assist with a global perspective of the perceptions of the students regarding college completion, and that which they find supportive, as well as the impediments to success that they identify. Questions 10, 12, 13, and 19 attempt to examine the attributes of the student and the institution, to isolate what factors participants believe may lead to success. Those questions are listed here, in Figure 5, for easy reference.
10. What contributes the most to finishing college? Rank these with 1 being the strongest, 2 being second strongest, and so on.

___A student’s motivation
___The College’s support of students (such as financial aid, advising, tutoring)
___Having a good instructor
___Intelligence
___How distant the college is from home
___Whether a student feels welcome at the college

12. Does your program of study articulate (earn credit hours when you complete it) for further studies? (Check one)

___Yes    ___No    ___I Don’t Know

13. Are you more likely to continue with college after finishing your program if you earn credit hours for Job Training? (check one)

___Yes    ___No

19. When you think about completing college, which of the following is most helpful to your success? (Circle one)

a. My instructor
b. My classmates
c. Self-motivation or motivation to find work
d. Family support
e. Other______________________________

Figure 5. Survey – Attributes of student and institution.

Responses for question 10 can be analyzed in two ways: the frequency of indicating the factor as contributing to completion, and the weight of the ranking provided by the student. The following, as in Chapter 4, describes the top three rankings of students. The response that was most frequently indicated as the most critical element in completing college was that of the quality of the instructor, $n = 37$. The second most
frequently indicated factor in what is most helpful to completing college was motivation, with 26 of the respondents choosing this in the first three rankings. Tied with motivation was institutional support, such as financial aid, advising, and tutoring, which received 26 responses. So how do the rankings fall? It is important to note that these ranked values may not be as valid as the researcher hoped. Students sometimes used the first and second ranking more than once, marking more than one item as first, and more than one item as second. A better method of wording the instructions would include elimination of the words “and so on” and providing complete instructions for ranking, since some students thought that only the ranks of 1 or 2 could be used. Clearly, some of the students wanted to rank more than two variables, but the wording, “Rank these with 1 being the strongest, 2 being second strongest and so on” were interpreted, in some cases, as that all variables should be ranked only 1 or 2.

Regarding the rankings by weight, quality of the instructor ranked first by the most participants, 16. Motivation remains the second most weighted factor, with 10 respondents choosing it as their first ranking. Intelligence, at $n = 9$ now outranks institutional support, which was ranked as first by 6 of the participants. Whether viewed by frequency or rank, it seems that faculty and self-motivation are clearly the two strongest factors in completing college, in the students’ perception.

Articulation was thought to be a contributing factor in both completion and continuing college, if students conceptualize Job Training as the learning of a job-related skill to gain immediate employment, and also as the foundation for further education in the new career. Of interest are the 18.2% of students who were uncertain whether their courses would articulate. How the program of study might fit into the larger context of
academic preparation for the workforce is likely to have an impact on completion. The student perspective, then, may not always be aware of such opportunity, regarding building on current skills and training to effect a stronger presence in the workforce. The importance of such a realization is clear when reviewing the responses for question 13, regarding whether the likelihood of further pursuit of education increases when the program of study is articulated into college credits. The majority of survey respondents, 75% or \( n = 33 \), indicated that they would, while 25% (\( n = 11 \)) said that they would not.

The importance of creating a recognizable academic pathway, and communicating it clearly to students, has implications for how they manage academic goals and for their perspective on college completion. Further study linking the process of articulation with educational goals might provide additional insight into this connection.

Question 19 asks students what is most helpful to them in completing college. The highest percentage, 63.6%, of students chose self-motivation as the response to this question. The second most frequent response was the instructor, at 27.3%. Only one student chose “classmates” as a response, and two students chose “family support” as the most helpful aspect of finishing school. As such, these students appear to shoulder a large part of the responsibility for their education, believing that their own motivation is the criteria needed to succeed. These values loosely correspond with variables found in question 10; as mentioned previously, some of the rankings there may have been skewed by the instructions for the question. In both questions, the instructor and the student’s motivation are the key elements that students perceive to lead to success and completion. These data seem to support the findings (Dougherty, 1992; Nitecki, 2011) that faculty expectations have an impact on student goals. In addition, Domina, Conley, and Farkas
(2011) discuss a sociological model (the Wisconsin model) which has, at its core, the idea that students’ educational aspirations influence both their educational expectations and attainment (p. 95). Responses from the Job Training students substantiate the Wisconsin model tenets in this research.

In analyzing the results and reviewing their implications, questions 6, 8, 9, and 11 seek to determine the potential obstacles encountered by students. These questions are found in Appendix D, but are reproduced here in Figure 6 for ease of reference.

Question 6 asks students to rank the challenges they encounter. Interestingly, students did not rank multiple categories as 1, or multiple categories as 2, as frequently as in Question 10, although some students chose only one response. Perhaps an example, with unrelated response items ranked, would be helpful in creating such survey questions, as long as the actual variables were not ranked and presented. The longer list of options may have encouraged a more extensive use of numbers to rank with, rather than reusing 1 and 2. These rankings were discussed in Chapter 4. The area of finances was the most significant; some students chose only this response. In total, 72.8% of the students surveyed indicated that finances were a challenge. Transportation was the second most common obstacle, with 56.8% of survey respondents indicating this as a challenge. Understanding classroom material was reported by 56.9% of the participants to be an obstacle in completing college. Finally, working and attending school created struggles for 45.5% of the students surveyed.
6. What is most challenging about college? (Rank these with 1 being the most challenging, 2 being second most challenging, and so on. If a category does not apply to you, leave it blank.)

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<thead>
<tr>
<th>Rank</th>
<th>Challenge</th>
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<tbody>
<tr>
<td></td>
<td>Transportation to class</td>
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<td></td>
<td>Being motivated to go to class</td>
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<td></td>
<td>Relating to others</td>
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<td>Working and going to school at the same time</td>
</tr>
<tr>
<td></td>
<td>Wondering if I belong here</td>
</tr>
<tr>
<td></td>
<td>Understanding the material</td>
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<tr>
<td></td>
<td>Finances</td>
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<tr>
<td></td>
<td>Child Care</td>
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<td></td>
<td>Finding time to study</td>
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8. Have you encountered any obstacles that made you consider dropping out of college? (Check one)

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<td>Yes</td>
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<td></td>
<td>No</td>
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9. If so, what were those obstacles? (Circle all that apply)

- Death in the family
- Probation/Parole requirements
- Transportation problems
- Child care problems
- Finances
- Conflict with work
- Family support
- Conflict with parole officer
- Other ________________________________

11. Has anyone in your circle of close friends or family encouraged you to miss a day of school? (Check one)

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<tr>
<td></td>
<td>Yes</td>
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<td></td>
<td>No</td>
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If so, why? __________________________________________

*Figure 6. Survey – Potential obstacles to completion.*

These insights into the student perspective allow educators to understand that the financial impact on students is a substantial one. Anthony Carnevale, Director of Georgetown’s Center on Education and the Workforce, is one of the leading
contemporary authors studying economics with an occasional focus on community colleges. His guidance is that

when jobs disappear, college is the best safe harbor for waiting out the recession and improving your hiring prospects in anticipation of the recovery . . . irrespective of the current economic conditions, individuals need to consider college as a lifelong investment decision. (Carnevale, 2011, para. 37–38)

In some cases, the students in Job Training are the working poor (evidenced by 45.5% of the students indicating that working and going to school at the same time was challenging in their college attendance, coupled with Pell awards for Job Training being 74% in 2012–2013). Interpreting these results, there seems to be an understanding among these students, then, that runs alongside Carnevale’s advisement: These students are seeking better employment opportunities, and college is the investment they make in order to do so.

The responses for question 9 that relate to finances were equivalent to 18%. This response differs, in that it moves from being a challenge to being an obstacle that made the student consider dropping out of school. Finances was the most frequent choice, but one student considered dropping out of school because of probation/parole requirements, another because of conflict with work, a different student because of child care. Two students considered dropping out because of transportation issues, another student because of a conflict with work, and two students because of a lack of family support. The majority of students ($n = 28$ or 63.6%) have not encountered any obstacles that might make them consider dropping out of school. Of those that did encounter such severe obstacles, the majority of students, 18%, attributed such difficulties to finances. Understanding the sources and severity of obstacles encountered by students is informative, when evaluating completion from the students’ perspective.
The last question formulated to assess the potential disruption of student’s goals was that of inquiring whether family members had asked students to miss school. The intention was to determine whether students experience pressures that may contribute to nonattendance or non-completion. As mentioned in Chapter 4, 15.9% ($n = 7$) of students reported that friends or family had encouraged them to miss a day of school; of these responses, only three appeared to stem from the agenda of a significant other rather than relating to the health or safety of the student.

Overall, the analysis and implications of the perspective of the students is that they strongly believe that self-motivation and qualities of the instructor are contributors to their success. In large part (63.6%), students indicated there were no foreseeable barriers to their completing their program of study. Their goals are primarily (52.3%) that of finding a better job. Some of the most challenging barriers they face are finances (72.8%), understanding the content of their studies (56.9%), and balancing work and school (45.5%). Other challenges were cited by students, but may not be as commonly experienced, as a group. While child care or wondering whether one belongs in college may describe fewer students in the Job Training population, for those that do face this challenge, it is no less formidable simply because it is not widely shared. It is still a relevant concern, both to the student and to the college staff. Therefore, while the tendency is to focus tightly on those most significant areas, it is imperative to remember that these students are individuals, and while the group harmony may be louder, the individual melody has a significance in the work colleges do.
Analysis of the Research: What College Means to Students

An additional product resulting from the dissertation is an educational video. This video examines the student’s perspective on completion in greater depth, striving to answer from a psychosocial framework, what meanings do the students attribute to completing college? How does this impact their perspective of college completion?

The video contains several sections, including the three emergent themes in college completion: opportunity, institutional practices, and attributes of the students. Interspliced with the student commentary is dialogue from Dr. Terry O’Banion, President Emeritus of the League for Innovation and a leader in the community college arena. Other educational leaders from the Lumina Foundation appear in the video, including Elizabeth Gutiérrez, Director of State Policy; James Applegate, Vice President of Strategic Impact; Dewayne Matthews, Vice President of Strategy and Development; and Sam Cargile, Vice President and Senior Advisor to the CEO. Such leaders are challenged with looking at education and policy in the larger societal context. The words and presentation of these educational leaders are based on national perspectives and years of experience in the field of education, but the overlap in terms of the ideas and meaning of an education are prodigiously similar.

The intent of the video was to examine the student narrative from Victor Frankl’s theoretical framework, which is based on the meaning that individuals find in life. Frankl believed that how meaning is construed shapes the experiences of the individual. Within this framework, he proposes that the human species finds reward, sustenance, and success in a search for meaning, which is self-deterministic and reliable, across a multitude of situations (Frankl, 2006). The questions created for the video portion of the research
(found in Appendix J) attempt to elicit the meaning that students attribute to their education. It was thought that viewing student success and completion through scrutiny of their psychological characteristics and the social context surrounding them might help to decipher how students perceive success. The meaning that students attribute to their studies and to successful completion is a powerful element when considering what factors into the equation of completion.

Five students participated in the making of the video: David, Shemazz, Jake, Donald, and Nicolas. These students were asked a series of questions in videotaped interview sessions to elicit the meaning that their college education holds for them. In several cases, they speak in the third person, as if offering advice to another. The initial question, “Why did you enroll in Job Training?” was asked to find out why they were in college. Some of these students interpreted it more along the lines of why they chose Job Training over the more traditional credit-bearing courses, responding with comments regarding the hands-on nature of the training. Donald responded that he is looking for a stable position and marketable skills, and to stay employed. Nicholas, who is employed full-time, said,

The reason I do the job training is so that, once I’m finished, I can establish a higher role where there’s better pay and less physical work that could hurt me in the long run, say I could get into CNC [Computerized Numerical Control] or jobs that are more qualified toward what I’m looking for.

As early as the next question, “How important is it for you to complete your training?” Donald speaks of values. He says,

Really important, to complete this program, because first of all, I was raised that way, to finish what you start, but it’s important to me to get the certificate to let employers know that I can finish what I start, that I’m a reliable person, somebody they want to hire at their company.
David also speaks in direct terms about opportunity and employment. He says,

I feel it’s very important for me to complete my studies because of my lack of experience, hands-on experience when it comes to machining, this is probably the only opportunity I have to prove that I do have the skills, and I feel that I’m a fast learner when it comes to these skills, so given an opportunity to learn . . . these skills, then take that on to the job, I feel that will just enhance any employer with my abilities.

With the question, “How does a person know if they’re ready for college” the students continue discussing the meaning of a college education. David responds,

I guess as you mature, you gain a more valuable aspect as to what a college career . . . what it means, and the value of it. I think as a younger adult, you don’t fully appreciate the power of an education, but I think in time, if you don’t squander your opportunities, you realize how valuable it is.

Nicholas shares,

You know you’re ready for college . . . when you don’t know anything and you want to get better at something, and you have your idea of what this thing is, but your idea might be very vague . . . and you have all these ideas in your head and you don’t have any idea what to do . . . if you have the basics and know where to start, that’s when you’re ready for college.

From the perspective of these students, an education has power and value, requires some level of introspection regarding self-awareness and learning, and constitutes an opportunity of significant value—so much so that, if a person isn’t careful, it might be squandered.

Frankl (2006) proposes that there are three sources of meaning: work (doing something significant), love (caring for others), and courage (persisting in times of adversity) (Foreword). The students repeatedly relate their education to meaningful work, making statements such as Jake’s, in which he says, “Finishing school mostly has to do with finding meaningful work, in my situation.” Nicholas discusses work, too, saying,
“If I fail, there’s the whole financial part . . . if I’m working, which I am, I’d still be in lower tier jobs . . . I’d still be doing what I’m doing. I mean, I don’t hate the job, but like I’m saying, over time it does become a little burdening on the body, so the importance [of completion] is somewhat high, in my opinion.

Perhaps it is not surprising that these students, engaged in training to lead to immediate employment, articulate ideas about meaningful work. Their ability to see this work in a larger context, and move to Frankl’s sources of love and courage, are quickly evident, as well. Donald considers the meaning of completing college and tells the interviewer, “I will be able to help the people around me, and for myself, I will have accomplished something that is important to me.” Applying Frankl’s (2006) work to the challenges of contemporary society, Pattakos and Covey (2010) liken technological advances as factors that accommodate the human element, but propose that understanding the logos, or meaning, can help elevate the human spirit within the world of work (p. 6). Donald’s words are reminiscent of this concept, in that he proposes to use his new knowledge of technology to improve his own situation, and also to reach out to those around him. The sense of accomplishment that he describes is akin to the elevation of spirit mentioned by Pattakos and Covey, and parallels Frankl’s idea that the primary motivation for living is the will to find meaning in life (pp. 84-85).

Shamazz discusses becoming a licensed contractor, and shares some of his plans:

I want to be part of the upbringing of Detroit. You see Detroit all over the news all the time, something going wrong financially, people getting killed . . . well, I want to be the solution. I want to be part of that solution. So it’s important to me that I finish school, because the quicker I can finish this, the quicker I can get back to my home city and give back. Be part of the solution. Be part of bringing up the economy and bringing up everything else, as well. Along with being a licensed contractor, I also plan on being a mentor as a side job. Not just passing knowledge from here, but passing knowledge just everywhere. Finishing up these courses will open up a lot more doors.
Pattakos and Covey (2010) extended Frankl’s theoretical framework, and proposed principles such as, “We can reach out beyond ourselves and make a difference in the world” (p. 5). These authors believe that one’s work will lead to meaning, to a sense of freedom, and a deep connection, with ourselves and with others in a global sense. Shamazz’s plans to return to his hometown and to become instrumental in creating positive change through his work and through mentorship of others is a distinct example of Pattakos’ and Covey’s framework of meaning. Making a difference, Shamazz believes, comes through acquisition of knowledge. Shamazz plans to earn his education and learn his vocation; he is intent on procuring such knowledge. But Shamazz does not intend to use his new skills as merely a commodity for employment. Instead, he plans to mentor, to give back, to use his skills and talents to weave together a troubled city and society. The words of these students, so simply and honestly stated, are rich with intent and promise, as they discuss the meaning of an education.

Frankl defines courage as persisting in the face of adversity. Nicholas’ words are compelling, as he shares the meaning of college: “If I don’t stay in school, I’m losing everything. Financially, beneficially, experience, my life. You lose it all.” He continues,

There are a lot of views dealing with why people take college nowadays, but there are certain areas that don’t require college. The reason that I take college is mainly the fact that I see where I am now and I guess it would lean toward survival, and I know I can endure for a certain amount of time. And in that time, I’m taking this class so that by the time I get out, I’ll know how it’s gonna be, if I keep going that way. And I know that if I complete this course, that I will have it better.

For Nicholas, finishing school equates to survival; he sees the toll that physical demands of the work he does now will take on him, physically, in the sort of jobs he acknowledges
are available without a college education. But to not finish, he says, is to lose everything, including his life, the way that he prefers to live it; completion means survival. Clearly, these students are not describing a mere college program. They are viewing their education and their vocation in the larger context of work, caring for others, and persisting in the face of adversity to create a stronger society. It is inspiring to absorb this captivating dialogue and learn first-hand the powerful nature of the student perspective.

The intent of this research was to examine completion from a different aspect, similar to Cooperrider’s Appreciative Inquiry. The Job Training student population was chosen because these students have the highest completion rate within the college. Looking at what works, what is currently effective in college completion, was designed to provide insight into the factors that support student success. Flipping the concept on its head to determine what’s right, rather than the current approach of what’s wrong, allowed for identification of practices, student attributes, or factors in access, retention, or completion that could be helpful to the field of education. In terms of Job Training, it is analogous to Lumina’s Dewayne Matthews’ discussion in the video of the shift from time-based, credit-based training to a focus on competency and learning. It also addresses Lumina’s Elizabeth Gutiérrez’s suggestion in the video that community colleges should focus on alternatives to get students more quickly into the workforce. It is likely that there are critics who believe that an 18-week training course has higher completion rates simply because of its shorter length. The immersive nature of the training, though, means that students will have spent the equivalent of 13.6 credit hours, a full-time semester, when completing the 612 contact hours required. More than the length of the program, the dynamic force of the students, their clear-cut goals, and their
desire to create a better quality of life for themselves and for others seems to be a defining characteristic of the students examined in this research.

**Summary**

The analysis of the results included a review of the findings of the research, in relation to the implications of the data pertinent to each research question. The hypothesis that completion rates would rise when the treatments of required testing for college readiness and mandatory orientation were implemented was not supported in the first year of data analysis, but completion rates rose substantially the following year. Completion rates for African American males and for females were scrutinized, and reflection on those results ensued, raising questions about equity or disparity. A surprise was the low enrollment and completion rates for females, which suggest that additional efforts and study are needed to determine what factors interact to lead to such results.

The student survey was analyzed. This was accomplished by examination of the questions designed to elicit what students believe are the factors that lead to success, and conversely, those that students think may create potential obstacles to success. Shifts in the characteristics of the population were considered, based on economic conditions and changes in state funding for laid-off workers. The majority of students indicate that finances are the biggest challenge they face. Other challenges that were mutual concerns among these students included transportation issues, understanding classroom material, and working while attending school. Questions regarding articulation and continuing their education, along with the level of familial support were examined to determine the impact on completion.
Finally, content of the video was analyzed in concert with the theoretical framework of Frankl’s logos, to discuss and reflect on the meaning that students attribute to their education. Narrative from the video was cited to provide evidence of the student perspective, which included vocational goals as well as a desire to provide for others, to reach out to family and meet their needs, and to become a constructive and productive force in society. The goals of the students interviewed for the video demonstrate a clear desire to find meaning, and to pursue reward, sustenance, and success in the search for meaning (Frankl, 2006). The evidence from the student narratives, presented alongside current leaders in education, supports the contention that the meaning these students construe does shape their experiences. Such meaning-making influences the completion rates scrutinized in the quantitative portion of this research, as well as the survey feedback pursued in a qualitative fashion from current students. The video content examines the meaning found by current students, who engage in describing the meaning that college holds for them as they pursue reward, sustenance, and success (Frankl, 2006). This parallels Frankl’s idea that the primary motivation for living is the will to find meaning in life (pp. 84-85). The video is a moving and powerful insight into the student perspective on the meaning of completing college.
A conclusion of the research is that Job Training students do indeed complete at a high rate; calculating the results for this study determined that their completion rates were 70.3% in 2010–2011, 64.5% in 2011–2012, and 77.9% in 2012–2013. To create some context for this data, a recently released study by the Institute for Higher Education Leadership and Policy (Moore, Tan, & Shulock, 2014) reviews completion rates for California community colleges, reporting an overall completion rate of 22%; within those figures, these authors note that in 2012, the breakdown by ethnicity reflects a 20% completion rate for African Americans, a 16.7% completion rate for Latinos, and a 22.4% completion rate for White students (p. 24). These are students who were pursuing a certificate or degree; these numbers are not meant to be a comparison for Job Training, which is short-term in nature and requires more hours of commitment per day. Instead, the numbers provide a recent context to understand the existing data on community college completion. Moore, Tan and Shulock report that, while California has the highest rate of first-time college freshmen returning their second year among the 50 states, they also determined that the number of credentials and degrees earned (per 100 students) was the lowest of the 50 states (p. 21).
So, why the difference? These authors discuss that full-time enrollment is a strong predictor of academic success, and discuss affordability and financial need as two significant factors in student success (Moore et al., 2014). These factors were noted in this study of Job Training students, as well. It may be that the structure of Job Training minimizes the risk factor of lack of engagement with studies in an intensive manner, because it requires many more hours per day than what is typically required of full-time students. At the same time, the competencies are well-defined and the goal more quickly attainable. Thus, in many of the areas described that support degree attainment, Job Training students have an advantage. This includes those high levels of engagement, a strong idea of their exact goals through career decidedness, highly interactive time spent with faculty, and the more short-term nature of the training based on building competencies (which makes more navigable—or at least more short term—the obstacles of affordability and financial need). These are all areas identified in the literature as contributing factors in the question of variables that lead to completion (Moore et al., 2014; Offenstein, Moore, & Shulock, 2010; Pusser & Levin, 2009; Reardon, 2011).

**Recommendations for Future Work**

Researchers may look at factors such as ethnicity and identify achievement gaps, and they may cite full-time attendance as more positively impacting completion rates, but the main factor is this: Low-income students, no matter their other attributes of ethnicity, gender, or part-time status, have a more difficult time completing college. Support for this is found in the words of James Applegate, Vice President of Strategic Impact, who provides a contextual framework for how this variable of completion influences students in the video attached to this dissertation. Applegate says,
If you look at the Census from 2010, for the average 24 year-olds in the upper income quartile, four out of five have a four-year college degree. We do a great job educating wealthy people in this country, we really do. I mean, if you’re born to a wealthy family, to not get a college degree, you have to stop yourself. You have to jump off the boat, tie a rock around your ankle, and drown yourself. Whereas, if you look at the lowest income quartile, it’s one out of ten.

This distinction, that financial need and economic resources of the student play an enormous role in completion, may be the crux of the completion agenda. Further research that focuses on financial need will help reframe the achievement gap for what it is, a gap between advantage and resources, rather than of abilities of a particular ethnic group (Rios, 2012), leading to a clearer understanding of the implications of Applegate’s assertions. That this trend is national in nature is supported by looking more closely at the recently released study by the Institute for Higher Education Leadership and Policy (Moore et al., 2014). The researchers overlay a graph of per capita income with percentages of those aged 25–64 who have a bachelor’s degree or higher. At the high end of the scale, in the San Francisco Bay area, the per capita income is $40,000 with a rate of 44.9% of degree attainment; the graduation rates fall consistently with per capita income, with the mid-range being Monterey Bay, which has a per capita income of $30,000 and a completion rate of 27.9%, and the low end being the South San Joaquin Valley, with a $14,000 per capita income and a 14.9% completion rate (Moore et al., 2014, p. 22). The graph is very clear: as income decreases, so does college attainment in a highly correlated fashion. As the per capita income increases, so do graduation rates. The evidence from this recent report of higher education in California supports Applegate’s assertion that 4 out of 5 people from wealthy families earn a baccalaureate degree, but that the figure falls to 1 out of 10 in the lower income echelon—which may mean, as he states in speaking about the income divide in the United States, “If you
believe that’s a threat to the fabric of the democracy of our nation, which I do, a lot of
that income inequity is largely due to the lack of opportunity for a postsecondary
education” (Maxa, 2014, dissertation video). An increased emphasis on financial need,
the income divide, and the role both play in college completion is a key area for future
research.

The longitudinal look at the data for these students over the 3-year time period
could be followed up to determine how the testing requirement using WorkKeys® and
mandatory orientation will impact completion rates. This study found that the rates
initially dropped, then increased beyond the baseline year in which these treatments did
not exist. A further look at future years would allow a stronger determination of the
impact of the treatments on Job Training students. Completion data could be analyzed
annually; 10-year longitudinal studies for completion would provide richer data, and a
more informed look at the implications of WorkKeys® testing and mandatory orientation
on the completion rates. Certainly, these data are limited in application across multiple
institutions, but future research that isolates populations that have high completion rates
to understand how opportunity/access, institutional practices, and student attributes
interact to create the conditions for such success would inform educators as they work
toward higher levels of student success. General research on completion would have a
stronger impact when considering the previously mentioned income divide. The Pell
Institute finds that, based on OECD data, reducing the income-based attainment gap
would allow the United States to rise to first in education if the gap were addressed
(Nichols, 2011, p. 3). However, the same study finds that “federal education policy
discussions of the 2020 goal neglect the issue of reducing income-based disparities in
educational attainment through targeted intervention for students from low-income and working-class families” and that “Without such targeted action, it is likely that the 2020 goal will remain more of an improbable aspiration instead of a practical objective” (Nichols, 2011, p. 3).

Following the Job Training students over the course of 10 years would provide data about how well these students were prepared for their careers and answer questions about their intentions to continue their education, as well as how well they apply their skills in the workforce. Longitudinal data of populations with high rates of completion, such as Job Training or the TRIO program, Student Support Services, might create a new perspective regarding the issue of college completion within the community college. Flipping the question to determine what works, rather than framing it as what’s wrong, may bring to light additional considerations as educators work toward student success and goal attainment.

Shugart (2013) and Casazza and Silverman (2013) believe that educational ecosystems can improve the experiences and achievements of students and propose that such a design should permeate the thinking of educational leaders in formulating the institutional structure of education; these ecosystems then become complicit in the measurement of the results of colleges regarding completion. Such an ecosystem reorganizes education through providing transparency of expectations at multiple levels, strengthening the preparation for ascending through the different levels, and responding to individual needs of students as they occur, rather than waiting until difficulty is encountered and then addressing it at the next level with remediation. Reframing the entire educational experience in the United States as a multi-level ecosystem is a hefty
goal; yet, if each level becomes preparatory for the next, the transitions become more navigable by students.

Collaborative partnerships that function as educational ecosystems provide students with clearer options and allow educators to reach across those previously defined segments to work with students and enhance learning in a timely fashion. Measuring for completion in such an ecosystem, while challenging to accomplish, would provide a more informative, accurate picture of goal attainment by students, and could provide vital data to leadership, governing boards, and policy makers (Shugart, 2013). Shugart’s proposal of educational ecosystems that begin in elementary school and continue through high school and into college is an intriguing concept for shifting the educational paradigm. Such ecosystems would allow students to formulate both short- and long-term goals, and develop plans that extend across institutions and levels of learning. Research that targets the implementation, then efficacy, of such ecosystems is an area for future research. While ambitious, the plan brings together efforts and resources to capitalize on educational endeavors in a manner that has not yet been realized in most communities. The beginning of creating such an ecosystem, for Job Training, might be to more clearly emphasize articulation opportunities for these students. Since 75% of the students surveyed indicated a stronger willingness to continue their education with articulated credits, but 18% of them were unsure of whether their credits would articulate, it seems that such an action could impact both continuance and completion.

While these results are limited by the sample population obtained from one institution and therefore may not have sweeping generalizability, there is a need for further research about why more females are not enrolling in these programs at this
institution. In addition, further scrutiny of the completion rates of females would help to understand why only 52.9% completed the program in 2012–2013. This number is significantly below the general population completion rate of 77.9%. Further research may determine whether this population is struggling with the academics, the institutional culture, or perhaps with financial considerations; whatever the challenges are for this specific population, they clearly impact completion. A further consideration for research might be to investigate the question of why fewer women enroll (6.3% in 2012–2013, the latest year of the study) in these vocational trades programs, particularly since some of those programs are becoming less physically demanding with the increasing role that technology plays in defining the work tasks (Erjavec, 2010).

Researchers might also be curious as to what attracts minority students to this type of training in higher numbers than other programs at the college; are there institutional practices, organizational culture, or other factors implicated in these choices? Related to recent enrollment patterns discovered within this study, questions for further research for this institution include the pursuit of answers regarding dwindling enrollment of minorities, which fell 15.9% from 2011–2012 until 2012–2013. The students who participated in video interviews were asked why they enrolled in Job Training. The researcher expected answers to reflect their choices about attending college; some of the students opted to discuss their preference for Job Training and the hands-on lab work over more traditional college course work. It was clear, in such cases, that the structure of the training had significance to them. Arum and Roksa (2011) discuss that institutional policies can promote organizational climate that is conducive to academic growth and leads to completion. One element of their argument is that colleges must take
responsibility for shaping and developing the college student, and must prioritize such organizational goals in their decision making (p. 127). Integrating this element with Matthews’ discussion in the dissertation video of moving from time-based, credit-based programs to those that are learning and competency-based, as well as Gutiérrez’s (2013) presentation of new and adaptive structures for community colleges to offer courses to students, further research might look at these multiple elements for comparison.

Career decidedness was at maximum effectiveness for the Job Training students, who must choose a program upon enrollment. The reasoning found in the literature about college completion is that students with clear goals are more likely to be successful in reaching the finish line (Jenkins & Cho, 2012; Nitecki, 2011). While the measure of career decidedness is a student attribute, directly determined by the student, it is suggested that institutional practices can also affect the success with which students reach this goal of a clear program of study (Jenkins & Cho, 2012; Nitecki, 2011). Such institutional practices are clearly demonstrated in the structure of Job Training. Nitecki (2011) suggests that a three-tiered systems model, consisting of the micro, mezzo, and macro levels, is useful in understanding institutional attributes that influence a student’s career decision making. She continues on to discuss the “semi-permeability” of these levels, noting that “The macro level includes the community college as an organization, with all of the institutional limitations, contradictions, and ambiguities that often diminish student aspirations” and suggests that the academic program of a student can become a bridge between the macro and the micro level of the student’s experience (p. 101). While it is difficult to determine whether embarking upon a clear program of study falls categorically within student attributes or institutional practices, it is clearly a factor in
engendering higher rates of completion. The students who participated in the video discussed having a specific educational goal, as well as having clear expectations of the career that the academics would prepare one for. Thus, the findings in this research support the idea that a distinct educational path is likely to be one of the factors that guide students to completion.

Examining the literature, college student development encompasses the idea that individual beliefs must contribute to the good of all, as well as sustain the individual during times of crisis (Chickering & Reisser, 1993, p. 264). Corey (1991) suggests that engagement is required before meaning can be integrated, and that such engagement is a “commitment to creating, loving, working and building” (p. 183). Thus, many of those engrossed in the psychological aspects of personal development or student success have examined meaning; extending the concept beyond personal development to goal attainment in a more psycho-social context has yet to be studied with the same intensity. While this research attempted to connect college student development with the perceived meaning of students, future research could extend those connections and scrutinize them in more depth over a number of institutions.

**Final Reflection**

Early in the effort of conducting this research, the Chairwoman of the Committee guiding the project, Dr. Roberta Teahen, made the following observation regarding the students being studied: “Do the students believe in themselves, is the question . . . and it is likely at the root of their life’s experiences.” Considered alongside such landmark research as Jean Elliott’s applied social psychological experimentation with young children who were socially reinforced—negatively or positively, depending on eye
color—and the immediate, same-day impact on their respectively decreased or increased academic achievement (Peters, 1985), it would seem that this comment is highly accurate. Dr. Teahen’s statement is mirrored in the student perspective video when Shamazz says, “I think they [students] should be confident . . . just plan on having faith and confidence, that’s really it” and when Donald remarks, “For students personally, if they really want to succeed, they can. All they have to do, is believe they can” (Maxa, 2014, dissertation video).

The idea that psycho-social attributes frame human perceptions and shape self-value easily extends to being implicated in an individual’s successes and failures. Chaney et al. (2012) present a strong correlation that exists between academic self-concept—which they define as including the cognitive and affective beliefs about self—and achievement (p. 3). They propose reframing “at-risk” populations, which implies a deficit or at least a tenuous footing, to “at-promise” populations, using reconceptualization to encourage a change in mindset for both staff and students. This is an existential point of view, relying on cognitive and affective realms to make sense, or find meaning, within the human condition. That existential milieu is a framework of this research, voiced first-hand by students in the video who discussed both emotional experiencing and rational thought as part of their prescription for completion. Mezirow and Taylor (2009) add another parameter when discussing the holistic (cognitive and affective) aspects to transformational activity, that of the conative portion of the mind (p. 21). Conation is the natural tendency, impulse, or directed effort that resides along with the cognitive and affective portion of the mind, which influences learning (Mezirow & Taylor, 2009, p. 21). This is a significant contribution to existentialism, as it purports
both a need for, and a tendency toward learning. Essentially, learning is viewed as an active impulse within the mind, and as a requisite part of the meaning of life, itself. It is easy to imagine the connection with survival to this innate tendency to learn. From early times when humans concentrated efforts on the need for fire for warmth, along with water and food for sustenance, learning how to locate, obtain, or create the conditions for these necessities of life were basic for survival. Learning has a more formal role in modern society, but the ability and drive to learn does exist within humankind, both within informal and throughout formal settings. All of these aspects—cognitive, affective, and conative—seem to fit together, when puzzling out what contributes to completion, from the perspective of the existential theoretical foundation, the college staff, or the students who kindly volunteered to participate in this research.

Finally, it is impossible to conduct such research without being touched by the honesty and sincerity of the students, each possessing a unique and individual perspective on acquiring a college education. Their rich dialogue contributed vastly to understanding the abstract and theoretical concepts, as well as illustrating what leading educators are proposing in the contemporary educational arena specific to community colleges. A measured look at these ideas and at what is working to foster higher completion rates within their group brings hope that this is but a step in the right direction—that the completion rates of community college students, when calculated in ways that make sense, will begin to reflect what these students demonstrate each day—a commitment to accomplishing their goals and achieving their dreams. Reinforcing what is currently working well for successful students when considering college completion seems to be a logical step in the right direction to strengthen completion rates for all who enroll.
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APPENDIX A

IRB LETTER, FERRIS STATE UNIVERSITY
To: Viki Maxa, Roberta Teahen

From: Dr. Stephanie Thomson, IRB Chair

Re: IRB Application #130905 (Determining Best Practices of Encouraging College Completion: The efficacy of ancillary support on Student Preparedness in short-term training programs and student perspectives on program completion)

Date: December 6, 2013

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, “Determining Best Practices of Encouraging College Completion: The efficacy of ancillary support on Student Preparedness in short-term training programs and student perspectives on program completion” (#130905) and approved it as expedited –#2F from full committee review. This approval has an expiration date of one year from the date of this letter. As such, you may collect data according to procedures in your application until December 6, 2014. It is your obligation to inform the IRB of any changes in your research protocol that would substantially alter the methods and procedures reviewed and approved by the IRB in this application. Your application has been assigned a project number (#130905) which you should refer to in future communications involving the same research procedure.

We also wish to inform researchers that the IRB requires follow-up reports for all research protocols as mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) for using human subjects in research. We will send a one-year reminder to complete the final report or note the continuation of this study. The final-report form is available on the IRB homepage. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.
APPENDIX B

IRB LETTER, GRAND RAPIDS COMMUNITY COLLEGE
November 21, 2013

Vicki Maxa
5986 115th Ave,
Fennville, MI 49408

Dear Ms. Maxa:

TITLE OF PROPOSAL: Determining best practices for encouraging college completion: The efficacy of ancillary supports on student preparedness in short-term training programs and student perspectives on program completion

This letter is to officially notify you of the approval of your request by the Institutional Review Board (IRB) at Grand Rapids Community College. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study. Your proposal has been classified as "Exempt."

You are responsible for immediately informing the Institutional Review Board of any changes to your protocol, or of any previously unforeseen risks to the research participants.

This approval is good from November 19, 2013 to November 19, 2014. If you wish to continue your research after this date, you must complete and submit an updated protocol.

Please let me know if you have any questions.

Sincerely,

[Signature]

Donna Krage
Dean of Institutional Research & Planning
Chair of the IRB
APPENDIX C

RECRUITMENT SCRIPT
Recruitment Script

When Handing out the Survey:

Hi, I’m Vicki Maxa, and I’m a student working on my degree from Ferris State University. I’m asking you to participate in a survey about what helps students succeed and finish their college training. I’m hoping to figure out what would assist students to finish school here at GRCC. I’m asking you to participate because I consider you, as a student, to be the expert on what can help students succeed. You are not required to fill out this survey or take part in this work. You may drop out at any time. If you do, there is no penalty to you.

What this would involve is completing a short survey which will take about fifteen or twenty minutes. If you agree to it, I would ask you to do that right now. I have a consent form that you would need to fill out. Then, return the survey back to me.

Thanks!

When Student Returns the Survey:

I’d be interested in talking with you some more about your ideas about what helps students meet their college goals. If you are interested, I’ll be talking to students next week. When we talk about your ideas, the session will be videotaped. That’s because part of my project is to make a video about finishing college from the student’s viewpoint. A lot of people have studied this, but mostly by asking what college staff think. I want to study what students think. Some of the things that you say during the group session could end up in that video. The purpose of the video is to help educators understand what students say about what they need to help them be successful. It will be
published, and people who work at colleges will be interested in watching it. I’m asking you to participate because I consider you to be the expert on what can help students succeed. I think that you have valuable information to contribute to my study. These videotaped group sessions will be held here at M-TEC next week. You would only attend one of those sessions.

I have a sign-up sheet for the video. If you would like to be part of this research on what I believe to be a very important topic, please include your name, program of study, and your phone number and which day is best for you. I have a list of the questions we will talk about in the group session. I’ll give those to you now so you can make sure you are comfortable talking about it. If it’s OK, I will call you the day before we talk to remind you about it.

Thank you, and I’m looking forward to learning more about your thoughts of what it takes to succeed in college!
APPENDIX D

STUDENT SURVEY
Student Survey

Please note: Your responses will be confidential. Do not put your name on this survey.

1. What is your age?_______________
2. What is your gender?_____________
3. What is your race/ethnicity? (Check the category/categories which apply to you)
   _____American Indian or Alaska Native
   _____Asian
   _____Black or African American
   _____Native Hawaiian or other Asian Pacific Islander
   _____White
   _____Hispanic/Latino
4. Did either parent graduate from college with a 4 year (bachelor) degree? (Check one)
   _____Yes   _____No   _____Not certain
5. What led you to enroll in this Job Training program? (Circle one)
   Laid off
   Unable to find work
   Can’t find a job that supports me or my family
   Looking for a better job
   Need skills to advance in my current job
   Other_____________________________________________________________
6. What is most challenging about college? (Rank these with 1 being the most challenging, 2 being second most challenging, and so on. If a category does not apply to you, leave it blank.)

___ Transportation to class  
___ Being motivated to go to class  
___ Relating to others  
___ Working and going to school at the same time  
___ Wondering if I belong here  
___ Understanding the material  
___ Finances  
___ Child Care  
___ Finding time to study

7. How confident are you that you will complete your program? (Circle one)

Very positive
Somewhat positive
Not sure
Doubtful
Certain that I won’t complete

8. Have you encountered any obstacles that made you consider dropping out of college? (Check one)

_____ Yes  _____ No

9. If so, what were those obstacles? (Circle all that apply)

a. Death in the family  
b. Probation/Parole requirements  
c. Transportation problems  
d. Child care problems  
e. Finances  
f. Conflict with work  
g. Family support  
h. Conflict with parole officer  
i. Other ________________________________
10. What contributes the most to finishing college? Rank these with 1 being the strongest, 2 being second strongest, and so on.
   A student’s motivation
   The College’s support of students (such as financial aid, advising, tutoring)
   Having a good instructor
   Intelligence
   How distant the college is from home
   Whether a student feels welcome at the college

11. Has anyone in your circle of close friends or family encouraged you to miss a day of school? (Check one)
   Yes       No   If so, why?

12. Does your program of study articulate (earn credit hours when you complete it) for further studies? (Check one)
   Yes     No     I Don’t Know

13. Are you more likely to continue with college after finishing your program if you earn credit hours for Job Training? (check one)
   Yes     No

14. What is your program of study? (List your training program)

15. Did you pass WorkKeys® to get into your program of study on the: (circle one)
   a. first attempt
   b. second attempt
   c. third attempt or more

16. Did you change your program of study based on your WorkKeys® scores?
   Yes     No
17. What do you do first when you don’t understand something in your training? (Circle one)
   a. Ask your instructor
   b. Ask another student
   c. Seek out a tutor
   d. Nothing; hope that you will pick it up later
   e. Other__________________________________________________________

18. Did you already have the skills you are training for? (Circle one)
   a. More than half of the learning is new
   b. About half of what I’m learning is new
   c. About a quarter or less of the learning is new
   d. I already knew all of the skills I’m learning

19. When you think about completing college, which of the following is most helpful to your success? (Circle one)
   f. My instructor
   g. My classmates
   h. Self-motivation or motivation to find work
   i. Family support
   j. Other__________________________________________________________

20. Is there anything you would like to add about what students need to finish their college studies?
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
Consent Form - Survey

Basic Information
Project Title: Determining best practices for encouraging college completion: The efficacy of ancillary supports on student preparedness in short-term training programs and student perspectives on completion.
Principal Investigator: Vicki Maxa  Email: vmaxa@ggcc.edu  Phone: (616) 234-3996
Faculty Advisor: Roberta Teahen, PhD  Email: Teahenr@ferris.edu  Phone: (231) 591-2300

Purpose
This research is being conducted to learn more about finishing college programs. Three years of data about job training students at GRCC and how many of them completed their program of study will be reviewed. Job Training students who are attending college will be surveyed and asked about what can help or hinder finishing their studies. You have been selected for this study because, as a student in Job Training, your opinions and thoughts about finishing your studies will help answer some of the questions asked by this study. It is important to me to know what students think, so I have asked you to participate. I will be asking about what motivates you to stay in school and how you deal with problems that make it harder to attend college. I am interested in your ideas on why students stay in school as well as why some of them drop out.

Procedures
After signing this consent form, you will complete a survey with 21 questions about you and your school experience. That survey will be confidential; your responses will not be identified with you. The survey takes about 20 minutes.

Potential Risks/Discomforts
You will be answering questions about what might prevent you from completing school. Sometimes such discussions can lead to fear that you may not succeed. If you should experience anything of that nature, counseling services are available to you through GRCC. At no time should you disclose anything that makes you uncomfortable. Do not put your name on the survey. Your responses will be anonymous. There is a risk of breach of confidentiality if someone observes your answers as you complete the survey.

Anticipated Benefits
As you give thought to what it takes to finish college, you may find that your ideas are helpful to you if you encounter later obstacles. Also, you may come up with ideas that are helpful to other college students who attend GRCC. Your contribution may help GRCC and other colleges work with students who are at risk for dropping out of school.
Confidentiality
The surveys have no identifying information. All data will be entered in a database without identifying information and the paper copies will be shredded. The database will be on a computer that is password protected. The researcher certifies that the use of educational records in this study complies with the Family Educational Rights and Privacy Act (FERPA).

Participant Rights
As a participant in this research study, you have the right to be informed about:
- Why the research study is being done
- What will happen to you during the research study
- Whether any study procedures, drugs, or devices are different from standard medical care
- The risks, side effects, and discomforts from taking part in the study
- The possible benefits from taking part in the study
- Medical treatment in case of complications
- How your privacy and/or confidentiality will be protected

Research participants also have rights to:
- Decide not to take part in the study, or decide to drop out, at any time. Your decision will not affect your right to the usual care not related to the study
- Decide whether to take part without any pressure
- Ask questions at any time
- Receive a copy of the consent form

Right to Withdraw
If you are an employee or student, your employment status or academic standing at GRCC will not be affected by your participation or non-participation in this study.

Questions
The main researcher conducting this study is Vicki Maxa, a student at Ferris State University. Please ask any questions you have now. If you have questions later, you may contact Vicki Maxa at vmaxa@grcc.edu or at (616) 234-3996. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) for Human Participants at IRB@ferris.edu or access their website at http://ferris.edu/HTMLS/administration/academicaffairs/vpoffice/IRB/
Statement of Consent/Signature and Date
I have read the above information, and have received answers to any questions I asked. I consent to take part in the survey portion of this study.

Research Participants’ Signature _____________________ Date ________________

Participants’ Name (printed) ________________________________________________

Signature of person obtaining consent ______________________________ Date _________

Printed name of person obtaining consent ____________________________________
APPENDIX F

COUNSELOR BROCHURE
Counseling and Career Center

Mission
The mission of Grand Rapids Community College (GRCC) Counseling and Career Center is to provide personal, career and academic counseling to GRCC students. It is our goal to empower students to succeed at GRCC and in life.

The Counseling and Career Center is designed to assist students in achieving academic, personal and career success through informed decision making.

Our professionally trained and licensed counselors help students with clarifying values, commitments and emotional preferences. Services are confidential and free of charge to GRCC students.

Counselors inform and help students to understand college expectations and procedures and make referrals to college and community resources when needed.

Counseling Services
The counselors in the Counseling and Career Center are trained to assist students with:

- Academic Orientation
- Academic Advising
- Career Planning
- Personal Counseling
- Transfer Planning
- Occupational Exploration
- Crisis Management
- Goal Setting

Appointment and Walk-in Hours:
Appointments are available for academic, career and personal concerns. Academic appointments are 30 minutes in length and career and personal concerns appointments are 60 minutes in length. Appointments must be made in advance, call (616) 234-3900 to schedule.
Walk-ins services are only available at peak times, at the start and end of the semester. Walk-ins are designed to answer academic questions and generally last 10 minutes or less. Call in advance for walk-in hours, (616) 234-3900.

Career and Transfer Resource Area
The Career and Transfer Resource Area is located with the Counseling and Career Center. It is designed to help students relate their academic pursuits and personal interests to career goals, as well as to provide college transfer resources. Students are invited to explore the career library, college guidebooks, and multimedia resources. Resources include:
- Occupational information
- Career projections and job areas of the future
- Transfer college applications
- Transfer college catalogs
- What to do with specific majors
- Online career testing
APPENDIX G

CONSENT FORM – VIDEO
**Basic Information**

Project Title: Determining best practices for encouraging college completion: The efficacy of ancillary supports on student preparedness in short-term training programs and student perspectives on completion.

Principal Investigator: Vicki Maxa Email: vmaxa@grcc.edu Phone: (616) 234-3996

Faculty Advisor: Roberta Teahen, PhD Email: Teahenr@ferris.edu Phone: (231) 591-2300

**Purpose**

This research is being conducted to learn more about finishing college programs. Three years of data about job training students at GRCC and how many of them completed their program of study was reviewed. Job Training students who are attending college were surveyed and asked about what can help or hinder finishing their studies. You have been selected for this part of the study because, as a student in Job Training, your opinions and thoughts about finishing your training will help answer some of the questions asked by this study. It is important to me to know what students think, so I have asked you to participate. I will be asking about what motivates you to stay in school and how you deal with problems that make it harder to attend college. I am interested in your ideas on why students stay in school as well as why some of them drop out. The ideas you talk about will be edited and included in a video about student success in college. This video will be used by educators and researchers to better understand what helps students meet their goals. It may be used in classrooms or at conferences to learn about what helps students finish school.

**Procedures**

After signing this consent form, you will participate in a focus group with other students. The topic of conversation will be finishing college. Your answers to questions I ask will be videotaped. A video is part of my project. Some of what you say may be included in that video. The purpose of the video will be to help educators and researchers understand what students think about finishing college. This session will last for an hour.

**Potential Risks/Discomforts**

You will be answering questions about what might prevent you from completing school. Sometimes such discussions can lead to fear that you may not succeed. If you should experience anything of that nature, counseling services are available to you through GRCC. At no time should you disclose anything that makes you uncomfortable. After editing, the video will be neither confidential nor anonymous.
**Anticipated Benefits**

As you give thought to what it takes to finish college, you may find that your ideas are helpful to you if you encounter later obstacles. Also, you may come up with ideas that are helpful to other college students who attend GRCC. Your contribution may help GRCC and other colleges work with students who are at risk for dropping out of school.

**Confidentiality**

Because this part of the study involves producing a video that will later be used in training purposes, there is no confidentiality of data. Some segments of what you say may end up in the final video. The video footage will be stored on a computer that is password protected while being edited. Immediately following the session, you may identify anything you said to be withdrawn from use in the video. *The researcher certifies that the use of educational records in this study complies with the Family Educational Rights and Privacy Act (FERPA).*

**Participant Rights**

*As a participant in this research study, you have the right to be informed about:*

- Why the research study is being done
- What will happen to you during the research study
- Whether any study procedures, drugs, or devices are different from standard medical care
- The risks, side effects, and discomforts from taking part in the study
- The possible benefits from taking part in the study
- Medical treatment in case of complications
- How your privacy and/or confidentiality will be protected

*Research participants also have rights to:*

- Decide not to take part in the study, or decide to drop out, at any time. Your decision will not affect your right to the usual care not related to the study
- Decide whether to take part without any pressure
- Ask questions at any time
- Receive a copy of the consent form
**Right to Withdraw**

*If you are an employee or student, your employment status or academic standing at GRCC will not be affected by your participation or non-participation in this study.*

**Questions**

The main researcher conducting this study is Vicki Maxa, a student at Ferris State University. **Please ask any questions you have now.** If you have questions later, you may contact Vicki Maxa at vmaxa@grcc.edu or at (616) 234-3996. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) for Human Participants at IRB@ferris.edu or access their website at [http://ferris.edu/HTMLS/administration/academicaffairs/vpoffice/IRB/](http://ferris.edu/HTMLS/administration/academicaffairs/vpoffice/IRB/).

**Statement of Consent/Signature and Date**

*I have read the above information, and have received answers to any questions I asked. I consent to take part in the survey portion of this study.*

Research Participants’ Signature ____________________________ Date________________

Participants’ Name (printed) ____________________________________________________

Signature of person obtaining consent_________________________ Date______________

Printed name of person obtaining consent__________________________
APPENDIX H

VIDEO RELEASE
Video Release Form

Name: _______________________    Date: ______________________

I hereby grant to Ferris State University the right and permission, in respect to the quotation that it has produced of my words, of video and photographs taken by Vicki Maxa to use and distribute the same. I grant the right to publish, reproduce and display the same, in whole or in part in news releases and University publications that may be developed by Ferris State University.

I hereby release and discharge Ferris State University from any and all claims and demands arising out of or in connection with the use of the video and photographs, including without limitation any and all claims for libel or invasion of privacy.

I am of full age and have the right to contract in my own name. I have read the foregoing and fully understand the contents thereof.

Signed: _________________________________

Witnessed by: ____________________________

Address: ________________________________

City/State/Zip: ____________________________

Phone: _________________________________
APPENDIX I

SCRIPT FOR VIDEO
Script for Video

I am Vicki Maxa, and I’m a student working on my degree from Ferris State University. I’m asking you to participate in a session about what helps students succeed and complete their college training. I’m hoping to isolate what promotes students to finish school. What this would involve is completing a short survey which will take about ten to fifteen minutes. After that, I’d like for us to discuss your ideas about what can be helpful to students as they work toward completing their training.

When we discuss those ideas, the session will be recorded. As part of my project, I’m including a video that talks about finishing college from the student’s viewpoint. Some of the things that you say could end up in that video. The reason for that is that I consider you to be the experts on what can help students succeed, and I think that you have valuable information to contribute to my study. If you prefer to only complete the survey and not participate in the video recording, you may do so. These sessions will be held here at M-TEC.

I’m going to pass around a sign-up sheet. If you would like to be part of this research on what I consider to be a very important topic, please include your name, a phone number and your student ID number.

Thank you, and I’m looking forward to learning more about your thoughts of what it takes to succeed in college!
APPENDIX J

INTERVIEW QUESTIONS
Interview Questions

1. What is your main reason for enrolling in Job Training?
2. How important is it to you to complete your program of study?
3. How did you decide to attend this particular college?
4. How does a person know if they’re ready for college?
5. What do you do when you have trouble learning something in your training?
6. What circumstances might make you drop out of school?
7. What helps students to stay in school?
8. What does it mean to you to finish school?
9. In your personal situation, does finishing school have more to do with finding meaningful work…with helping others…or with survival?
10. What could the college do to help students finish their program of study?
11. Is there anything more that you think students should be doing to make sure they finish college?
12. Is there anything else you want to tell me about what helps students to be successful in college?